

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE BENCH, CHENNAI
ORIGINAL APPLICATION NO.14 OF 2024(SZ)
[Earlier Original Application No. 685 of 2023 (PB)]**

IN THE MATTER OF:

Tribunal on its own motion SUO MOTU on News item appearing in One India dated 25.10.2023 titled "Vegetables Across Bengaluru Contaminated with Heavy Metals, Warns Study"

Versus

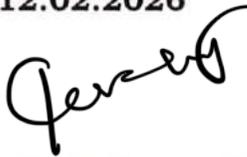
CPCB through its Member Secretary & Others... **RESPONDENTS**

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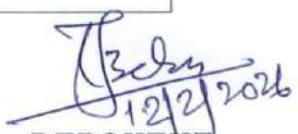
Place: BENGALURU

Date: 12.02.2026



**COUNSEL FOR RESPONDENT NO.1
REVATHI MANIVANNAN**




DEPONENT

J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
(MIN.OF ENV,FOREST & CC, GOVT OF INDIA)
BENGALURU - 560 079. MOB: 9868278903

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE BENCH, CHENNAI
ORIGINAL APPLICATION NO.14 OF 2024(SZ)
[Earlier Original Application No. 685 of 2023 (PB)]**

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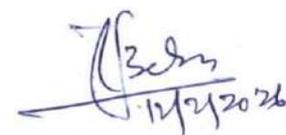
CPCB through its Member Secretary & Others...

RESPONDENTS

**AFFIDAVIT ON BEHALF OF THE RESPONDENT NO.1: CENTRAL
POLLUTION CONTROL BOARD (CPCB) FOR SUBMITTING THE STUDY
REPORT**

1. That, Hon'ble National Green Tribunal (NGT), Southern Zonal Bench, Chennai (hereinafter referred as, 'NGT(SZ)') vide order dated 15.09.2025 in the instant case has sought compliance report from Answering Respondent No.1 i.e., Central Pollution Control Board (hereinafter referred as, 'CPCB') over the instant matter. Accordingly, a comprehensive study conducted in the matter is hereby presented in the succeeding paragraphs.





J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
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2. That, CPCB is a statutory Board constituted under Section 3 of The Water (Prevention and Control of Pollution) Act, 1974. It performs the functions under The Water (Prevention and Control of Pollution) Act, 1974, The Air (Prevention and Control of Pollution) Act, 1981 and The Environment (Protection) Act, 1986.

3. That, Hon'ble National Green Tribunal at Principal Bench, (hereinafter called as, '(PB)') had Suo-Motu registered Original Application No. 685/2023(PB) on the basis of news item published in 'One India' on 25.10.2023, titled 'Vegetables Across Bengaluru Contaminated with Heavy Metals, Warns Study'. The news item referred to the study carried out by the Researchers from Environmental Management and Policy Research Institute (hereinafter referred as, 'EMPRI'), wherein 400 samples of 10 different vegetables were analysed and reported the level of contamination by heavy metals exceeding the permissible limits set by the Food and Agricultural Organization (hereinafter referred as, 'FAO'). As per the news article, vegetables cultivated with wastewater showed presence of heavy metals. It has also been reported in the aforesaid study that the concentration of Iron and Cadmium in coriander and spinach, and Nickel in vegetables exceeded the permissible limits set by FAO.



J. Chandra Babu
12/12/2023

J. Chandra Babu
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REGIONAL DIRECTORATE - BENGALURU
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BENGALURU - 560 079. MOB: 9868278903

4. That, in the aforesaid matter, Hon'ble NGT vide order dated 21.11.2023 impleaded the following organizations as respondents;
- CPCB through its Member Secretary.
 - Karnataka State Pollution Control Board (hereinafter referred as, 'KSPCB') through its Member Secretary.
 - Environmental Management and Policy Research Institute (herein after referred as, 'EMPRI') through its Director General.
5. That, Hon'ble NGT (PB) vide order dated 21.11.2023 gave directions to the Answering Respondent herein i.e., CPCB (Respondent No.1) and the same is reproduced as below:

“to ascertain the correct ground situation and also duly examine the report of EMPRI and submit the factual status as also factual action taken report before the Southern Zone Bench of the Tribunal. Let the samples of vegetables be collected and analysed for the individual heavy metals and pesticides parameter in the Central Laboratory of CPCB, Delhi as per standard methods and let their report be furnished....”

That, it is humbly submitted that OA No. 685/2023(PB) was subsequently transferred to the NGT Southern Zone Bench, Chennai, and the aforesaid matter was renumbered as OA No. 14 of 2024(SZ).



J. Chandra Babu
12/21/2026

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REGIONAL DIRECTORATE - BENGALURU
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BENGALURU - 560 079. MOB: 9868278903

6. That, pursuant to the Hon'ble NGT (PB) order dated 21.11.2023, this Answering Respondent herein i.e., CPCB (Respondent No.1) submitted a status report dated 19.03.2024 before the Hon'ble NGT (SZ) on the action taken, wherein the actions initiated by CPCB including the comments based on the examination of study report of EMPRI and the proposed approach/methodology for ascertaining the ground reality based on the discussions held during the meeting conducted on 26.12.2023 with the officials of EMPRI, KSPCB, Food Safety and Standards Authority of India (herein referred as, 'FSSAI'), and CPCB Delhi were submitted. In view of a comprehensive study to ascertain the correct ground situation with regard to heavy metals and pesticides in vegetables, a committee comprising members from the following organizations was constituted by CPCB:
- CPCB, Regional Director, Bengaluru.
 - Member of KSPCB.
 - Member of Central Licensing Authority, FSSAI, Chennai.
 - Member of Indian Institute of Soil Science (IISS), Bhopal.
 - Member of University of Agricultural Sciences (UAS), GKVK, Bengaluru.
7. That, the matter was subsequently heard on 15.10.2024 by Hon'ble NGT (SZ) and Hon'ble NGT (SZ), Chennai, vide order dated 15.10.2024 sought



J. Chandra Babu
15/10/2024

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CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
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BENGALURU - 560 079. MOB: 9868278903

report from CPCB before the next date of hearing. CPCB filed a detailed Status Report dated 17.02.2025 regarding the actions initiated by CPCB and sought time of four months for completion and submission of the comprehensive study report as per the proposed approach/methodology to ascertain the ground situation of contamination of vegetables with heavy metals and pesticides, in and around Bengaluru. Accordingly, an additional time of four months was granted by the Hon'ble NGT (SZ) vide order dated 18.02.2025.

8. That, pursuant to the said Hon'ble NGT (SZ), Chennai order, the Committee constituted by CPCB carried out sampling of vegetable from the selected locations from the study areas viz., agricultural fields in Nelamangala, Kolar, Chikkaballapura, and few vegetable markets in Bengaluru during February 27-28, 2025.
9. That, during 12th to 13th March, 2025 a team comprising of Joint Committee members from CPCB and University of Agricultural Sciences (UAS), Bengaluru along with officials of Karnataka State Pollution Control Board (KSPCB) revisited the agricultural fields identified during the field survey conducted during 27-28th February, 2025 and collected soil samples from



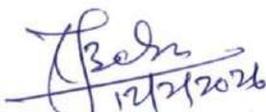
J. Chandra Babu
12/2/2025

J. Chandra Babu
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REGIONAL DIRECTORATE - BENGALURU
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agricultural fields and groundwater & treated wastewater samples used in the agricultural fields.

10. That, the collected vegetable samples were analysed for heavy metals and pesticides through FSSAI approved laboratory viz., M/s Shiva Analytical (India) Private Limited, Bengaluru whereas the surface and groundwater samples were analysed for general parameters by Laboratory at CPCB, Regional Directorate, Bengaluru and heavy metals as well as pesticides in soils were analysed at Central Environmental Laboratory-1, KSPCB, Bengaluru.
11. That, the Joint Committee held multiple meetings on 13.05.2025, 30.06.2025, and 24.07.2025 to deliberate on the findings. Upon discussions on the analysis results and final inputs from the Joint Committee members during the meeting held on 24.07.2025, the committee observed that the results of analysis of heavy metals/pesticide residues in vegetables, heavy metals in soil, and groundwater/treated wastewater were inconclusive. Consequently, the Joint Committee decided to carry out re-assessment including re-sampling of groundwater and vegetable samples from selected study areas as recommended by the Committee and for carrying out ambient air quality monitoring in selected study areas as recommended by




 J. Chandra Babu
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the committee. That, Hon'ble NGT (SZ) heard the matter on 25.07.2025 and posted the matter for hearing next on 15.09.2025. A copy of the Hon'ble NGT order dated 25.07.2025 is enclosed as **Annexure-1**.

12. That, pursuant to Hon'ble NGT order dated 25.07.2025, the Joint Committee meeting was held on 30.07.2025. Subsequently, committee carried out field visit during 1st to 3rd September, 2025 and the aforesaid re-sampling of vegetables, groundwater samples from selected agricultural fields at Chikkaballapura and Kolar areas on 1st September, 2025 and also carried out ambient air quality monitoring during 2nd and 3rd, September, 2025. The vegetables grown in the selected agricultural fields during re-sampling by the committee were collected for analysis. The vegetable samples (collected on 1st September, 2025) were handed over to FSSAI approved laboratory viz., M/s Shiva Analyticals (India) Private Limited, Bengaluru for analysis, whereas air samples collected during re-sampling (during 1st to 3rd September, 2025) were analysed for relevant parameters at the laboratory at CPCB, Regional Directorate, Bengaluru.
13. That, the Hon'ble NGT (SZ), Chennai heard the matter and vide order dated 15.09.2025, directed CPCB for completion of ongoing analysis, compilation of results, and for in-turn submission of final comprehensive report. and



J. Chandra Babu
15/09/2025

J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
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BENGALURU - 560 079. MOB: 9868278903

relevant paragraphs of Hon'ble NGT order dated 15.09.2025 are reproduced below;

"..2. The CPCB is directed to either collate the individual reports received from the above-mentioned members or ensure that the members of the Committee submit their individual reports, in view of the seriousness of the issue involved.

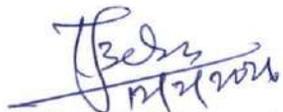
3. The learned counsel for the CPCB submitted that testing could not be conducted due to heavy rainfall.

4. It appears that fruits, leafy vegetables, legumes, and root and tuber vegetables available for human consumption are contaminated with heavy metals and pesticides. Accordingly, the authorities are directed to expedite the investigation, identify the root cause, and submit remedial measures to mitigate the contamination at the earliest..."

A copy of the Hon'ble NGT order dated 15.09.2025 is enclosed as **Annexure-2**.

14. That, consequent to completion of analysis of vegetable, air, and water samples collected during re-sampling, this Answering Respondent i.e., CPCB compiled the results and the same was shared with the Joint




 J. Chandra Babu
 REGIONAL DIRECTOR
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Committee members vide email dated 01.12.2025. A Joint Committee meeting was also held through video conference on 01.12.2025 at 3:00 PM, wherein discussion on the analysis results was held. Based on the decisions taken during the meeting, a detailed report was prepared on the comprehensive study conducted to ascertain the ground situation of contamination of vegetables with heavy metals and pesticides, in and around Bengaluru. The comprehensive report is enclosed as **Annexure-3**.

Prayer

The report on the comprehensive study conducted to ascertain the ground situation of contamination of vegetables with heavy metals and pesticides, in and around Bengaluru is submitted for kind consideration of the Hon'ble NGT.

It is respectfully submitted that this answering Respondent No.1 i.e. CPCB, shall abide by any order(s) or direction(s) passed by this Hon'ble tribunal in the instant OA and render justice.

Revathi

**COUNSEL FOR RESPONDENT No. 1
REVATHI MANIVANNAN**



J. Chandra Babu
12/21/2026

DEPONENT

J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
(MIN. OF ENV, FOREST & CC, GOVT OF INDIA)
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**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE BENCH, CHENNAI
ORIGINAL APPLICATION NO.14 OF 2024(SZ)
[Earlier Original Application No. 685 of 2023 (PB)]**

IN THE MATTER OF:

Tribunal on its own motion SUO MOTU on News item appearing in One India dated 25.10.2023 titled "Vegetables Across Bengaluru Contaminated with Heavy Metals, Warns Study"

Versus

CPCB through its Member Secretary & Others...

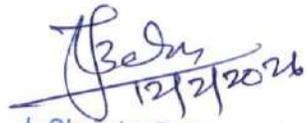
RESPONDENTS

AFFIDAVIT

I, Jathikartha Chandra Babu, Son of (Late) Sh. J Balaramaiah, aged about 57 years, having office at the Regional Directorate - Bengaluru, Central Pollution Control Board, 1st and 2nd Floors, Nisarga Bhavan, A-Block, Thimmaiah Main Road, 7th D Cross, Shivanagar, Bengaluru, Karnataka - 560 079, do hereby solemnly affirm, declare on oath and state as under:-

1. That, the accompanying report may be read part and parcel of the present affidavit as I am competent to swear this affidavit.




12/11/2024
J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
(MIN. OF ENV, FOREST & CC, GOVT OF INDIA)
BENGALURU - 560 079. MOB: 9868278903

2. That, the accompanying report has been drafted and filed under my instructions and authority, the contents thereof are true and correct on the basis of the record maintained during ordinary course of business of CPCB and available records and the contents of the same are read over and explained to me and are not repeated herein for the sake of brevity.



VERIFICATION

I, Jathikartha Chandra Babu, working as Scientist 'F' and presently posted as Regional Director (Bengaluru), CPCB, Regional Directorate, Bengaluru, the respondent herein do hereby verify that the contents of the above paragraphs are true and correct to the best of my knowledge, information and belief.

Verified at Bengaluru on this the 12th February, 2026.

**COUNSEL FOR RESPONDENT No. 1
REVATHI MANIVANNAN**

DEPONENT

J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
(MIN. OF ENV, FOREST & CC, GOVT OF INDIA)
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DEPONENT

J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
(MIN. OF ENV, FOREST & CC, GOVT OF INDIA)
BENGALURU - 560 079. MOB: 9868278903

**BEFORE THE NATIONAL GREEN TRIBUNAL
(SOUTHERN ZONE) CHENNAI**

**Original Application No. 14 of 2024(SZ)
SUO Motu & Ors.**

Versus

CPCB through its Member Secretary & Others

.....Respondents

**COMPREHENSIVE STUDY REPORT ON BEHALF OF THE
RESPONDENT NO. 1: CENTRAL POLLUTION CONTROL BOARD
(CPCB)**

ADVOCATE REVATHI

MANIVANNAN

COUNSEL FOR CPCB

Mob.7448350555

Item No.07:-

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

[Through Physical Hearing (Hybrid Option)]

Original Application No.14 of 2024 (SZ)

Earlier O.A. No. 685/2023 (PB)

IN THE MATTER OF:

Tribunal on its own motion SUO MOTU
based on the news item in One India Dt.
25.10.2023 titled "**Vegetables Across
Bengaluru Contaminated with Heavy
Metal, Warns Study**".

Central Pollution Control Board
Through its Member Secretary
New Delhi and Ors.



With

...Respondent(s)

Date of hearing: 25.07.2025.

CORAM:

HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER

HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER

For Applicant(s): Suo Motu.

For Respondent(s): Mrs. Revathi Manivannan for R1.
Mr. Devraj Ashok for R2.
Mr. Mukesh Kumar for R3.
Mr. Durgha Prakash represented
Mr. K.M. Darpan for R4 to R6.

ORDER

1. It is stated by the learned counsel appearing for the State of Karnataka that the Department of Horticulture represented by its Secretary and the Food Safety Standards Authority of India (FSSAI) - Karnataka are necessary parties to this proceeding. Accordingly, they are Suo Motu impleaded as additional Respondents No.5 and 6 respectively.

2. Let notice be issued to the newly added respondents through the Tribunal as well as privately.

3. The learned counsel Mr. Durgha Prakash representing Mr. K.M. Darpan accepts notice on behalf of Respondents No.5 and 6.

4. Post the matter on **15.09.2025**. In the meantime, the newly impleaded respondents are also directed to file their respective reports/replies.

Sd/-

Smt. Justice Pushpa Sathyanarayana, JM

Sd/-

Dr. Satyagopal Korlapati, EM

O.A. No.14/2024 (SZ),
25th July, 2025. AD.

Item No.07:-

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

[Through Physical Hearing (Hybrid Option)]

Original Application No.14 of 2024 (SZ)

Earlier O.A. No. 685/2023 (PB)

IN THE MATTER OF:

Tribunal on its own motion SUO MOTU
based on the news item in One India Dt.
25.10.2023 titled "**Vegetables Across
Bengaluru Contaminated with Heavy
Metal, Warns Study**".

Central Pollution Control Board
Through its Member Secretary
New Delhi and Ors.



With

...Respondent(s)

Date of hearing: 15.09.2025.

CORAM:

HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER

HON'BLE DR. PRASHANT GARGAVA, EXPERT MEMBER

For Applicant(s): Suo Motu.

For Respondent(s): Mrs. Revathi Manivannan for R1.
Mr. Devraj Ashok for R2.
Mr. Mukesh Kumar for R3.
Mr. Durgha Prakash represented
Mr. K.M. Darpan for R4 to R6.

ORDER

1. It is noted that the Central Pollution Control Board (CPCB) had constituted a Committee consisting of the Regional Director, CPCB; a member of the Karnataka State Pollution Control Board; a member of FSSAI, Chennai; a member of the Indian Institute of Soil Science, Bhopal; and a member of the University of Agricultural Sciences, Bengaluru.

2. The CPCB is directed to either collate the individual reports received from the above-mentioned members or ensure that the members of the Committee submit their individual reports, in view of the seriousness of the issue involved.

3. The learned counsel for the CPCB submitted that testing could not be conducted due to heavy rainfall.

4. It appears that fruits, leafy vegetables, legumes, and root and tuber vegetables available for human consumption are contaminated with heavy metals and pesticides. Accordingly, the authorities are directed to expedite the investigation, identify the

root cause, and submit remedial measures to mitigate the contamination at the earliest.

5. Post the matter on 10.12.2025.

Sd/-
Smt. Justice Pushpa Sathyanarayana, JM

Sd/-
Dr. Prashant Gargava, EM

O.A. No.14/2024 (SZ),
15th September, 2025. AD.



REPORT ON COMPREHENSIVE STUDY CONDUCTED TO ASCERTAIN THE GROUND SITUATION OF CONTAMINATION OF VEGETABLES WITH HEAVY METALS AND PESTICIDES, IN AND AROUND BENGALURU IN COMPLIANCE TO HON'BLE NATIONAL GREEN TRIBUNAL (NGT) ORDERS IN ORIGINAL APPLICATION NO. 14/2024(SZ) (EARLIER O.A. NO. 685/2023(PB)) TITLED 'VEGETABLES ACROSS BENGALURU CONTAMINATED WITH HEAVY METALS, WARNS STUDY'

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REPORT ON COMPREHENSIVE STUDY CONDUCTED TO ASCERTAIN THE GROUND SITUATION OF CONTAMINATION OF VEGETABLES WITH HEAVY METALS AND PESTICIDES, IN AND AROUND BENGALURU IN COMPLIANCE TO HON'BLE NATIONAL GREEN TRIBUNAL (NGT) ORDERS IN ORIGINAL APPLICATION NO. 14/2024(SZ) (EARLIER O.A. NO. 685/2023(PB)) TITLED 'VEGETABLES ACROSS BENGALURU CONTAMINATED WITH HEAVY METALS, WARNS STUDY'

1. Background

Hon'ble National Green Tribunal (PB) New Delhi registered Original Application No. 685/2023 as *Suo Motu* on the basis of news item published in 'One India' on 25.10.2023, titled 'Vegetables Across Bengaluru Contaminated with Heavy Metals, Warns Study'. The news item referred to the study carried out by the Researchers from 'Environmental Management and Policy Research Institute' (hereinafter referred as, 'EMPRI'), wherein 400 samples of 10 different vegetables were analysed and the level of contamination by heavy metals exceeding the permissible limits set by the Food and Agricultural Organization (hereinafter referred as, 'FAO') reported. As per the news article, vegetables cultivated with wastewater showed presence of heavy metals. It has also been reported in the aforesaid study that the concentration of Iron and Cadmium in coriander and spinach, and Nickel in vegetables exceeded the permissible limits set by FAO.

In the aforesaid matter, Hon'ble NGT vide order dated 21.11.2023 impleaded the following organizations as respondents;

- a. CPCB through its Member Secretary.
- b. Karnataka State Pollution Control Board (hereinafter referred as, 'KSPCB') through its Member Secretary.
- c. Environmental Management and Policy Research Institute (herein after referred as, 'EMPRI') through its Director General.

Hon'ble NGT (PB) vide order dated 21.11.2023 gave directions to the Answering Respondent herein i.e., CPCB (Respondent No.1) to ascertain the correct ground situation and also duly examine the report of EMPRI and submit the factual status as also action taken report before the Southern Zone Bench of the Tribunal.

The Original Application No. 685/2023(PB) was subsequently transferred to the NGT Southern Zone Bench, Chennai, and the aforesaid matter was renumbered as OA No. 14 of 2024(SZ). In pursuant to the Hon'ble NGT (PB) order dated 21.11.2023, this Answering Respondent herein i.e., CPCB (Respondent No.1) submitted a status report dated 19.03.2024 before the Hon'ble NGT (SZ) on the action taken, wherein the actions initiated by CPCB including the comments based on the examination of study report of EMPRI and the proposed approach/methodology for ascertaining the ground reality based on the discussions during the meeting held on 26.12.2023 with the officials of EMPRI, KSPCB, 'Food Safety and Standards Authority of India' (herein referred as, 'FSSAI'), and CPCB Delhi were submitted. The proposed approach/methodology for carrying out the comprehensive study for ascertaining the ground reality included following action points;

- a. *"....A committee comprising members from the following organizations may be constituted by CPCB (i) Regional Director, Central Pollution Control Board, Bengaluru. (ii) Member of Karnataka State Pollution Control Board. (iii) Member of Central Licensing Authority, Food Safety and Standards Association of India, Chennai. (iv) Member of Indian Institute of Soil Science, Bhopal. and (v) Member of University of Agricultural Sciences, Bengaluru.*
- b. *EMPRI shall explore feasibility of analysis of vegetable samples preserved with EMPRI since March 2022 at FSSAI approved laboratory and to share the analysis results with CPCB.'*

- c. *To conduct a survey, for deciding the sampling locations, sampling size, FSSAI approved laboratory to be chosen for analysis of collected samples (vegetables, water/groundwater and soil) to be decided by the Committee to be constituted by CPCB.*
- d. *Analysis of the collected vegetable samples from the selected locations through FSSAI approved laboratory to be carried out following the due procedures under the overall supervision of the Committee.*
- e. *Collation of analysis results, preparation, and finalization of the report to be filed before the Hon'ble NGT, shall be completed by CPCB within a period of four months."*

Subsequently, CPCB initiated the study as per the proposed approach/methodology. For constitution of a Joint Committee to conduct a comprehensive study to ascertain the ground situation of contamination of vegetables with heavy metals and pesticides, in and around Bengaluru, CPCB sought nominations from KSPCB, FSSAI-Regional Office (RO), Chennai, ICAR-Indian Institute of Soil Science (IISS)-Bhopal, and the University of Agricultural Sciences (UAS)-Bengaluru vide letter dated 20.12.2024. Consequent to receipt of nominations, a committee comprising members from the following organizations was constituted by CPCB, along with special invitees from EMPRI, and CPCB-Delhi:

- a. CPCB, Regional Director, Bengaluru.
- b. Member of KSPCB.
- c. Member of Central Licensing Authority, FSSAI, Chennai.
- d. Member of Indian Institute of Soil Science (IISS), Bhopal.
- e. Member of University of Agricultural Sciences (UAS), GKVK, Bengaluru.

The study carried out by the Joint Committee to ascertain the ground situation of contamination of vegetables with heavy metals and pesticides, in and around Bengaluru is presented in the subsequent sections.

2. Field survey and vegetables sampling:

The Joint Committee conducted field survey in Nelamangala region on 27th February, 2025 and in Kolar & Chikkaballapura region on 28th February, 2025. The agricultural fields near Nelamangala were selected as control samples locations where ground water is used for agricultural activities, whereas agricultural fields near Kolar and Chikkaballapura were considered as test samples locations as the ground water used for agricultural activities in these regions is recharged with treated sewage from KC valley and Hebbal valley. Vegetable, soil, groundwater, and treated sewage water samples were collected from these regions.

2.1 Vegetable sampling carried out during February 27th to 28th, 2025 from the selected agricultural fields at Nelamangala, Kolar and Chikkaballapura, as well as selected markets in Bengaluru:

Based on the information provided by the Joint Committee member representing University of Agriculture, Gandhi Krishi Vigyana Kendra (GKVK), Bengaluru, the agricultural fields where vegetables are grown using groundwater alone were selected for sampling of vegetables in Nelamangala. The agricultural fields in Kolar and Chikkaballapura regions were randomly selected where ground water is used for cultivation based on field survey and information provided by the local farmers. Vegetables grown in the selected fields at the time of visit by the Joint Committee were collected as samples.

2.2 Vegetable sampling carried out during February 27th to 28th, 2025 in Nelamangala, Bengaluru, and Kolar from the local market in Bengaluru, Agricultural Produce Marketing Corporation (APMC) markets both in Nelamangala and Kolar, Horticultural Producers' Cooperative Marketing and Processing Society (HOPCOMS) in Bengaluru:

Vegetable samples were randomly collected from the local market/APMC market/HOPCOMS during the field survey, comprising 20 number of

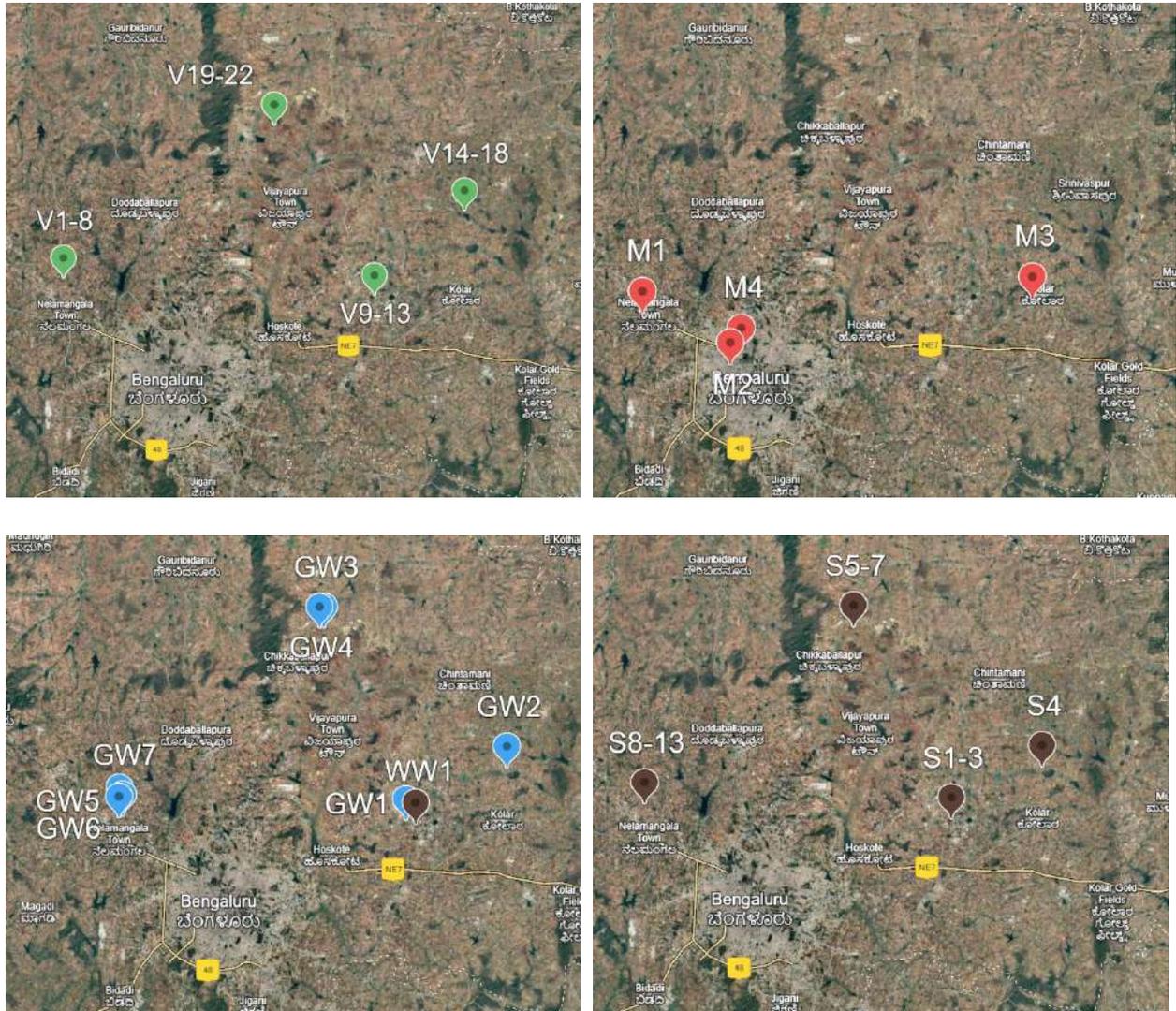
vegetable samples collected from M/s Shivaganga Farmers Producers Market, Nelamangala and 13 number of samples collected from local retail market in Rajajinagara, Bengaluru on 27th February, 2025; 17 number of vegetable samples collected from the Agricultural Produce Marketing Corporation (APMC) markets in Malur Road, Kolar, and 03 number of vegetable samples collected from HOPCOMS at Mahalakshmi Layout, Bengaluru on 28th February, 2025.

2.3 Soil and water samples collection from the study areas:

During 12-13th March, 2025 a team comprising of Joint Committee members from CPCB and University of Agricultural Sciences (UAS), Bengaluru along with the officials of Karnataka State Pollution Control Board (KSPCB) revisited the agricultural fields which were identified during the field survey conducted during 27-28th February, 2025 and collected 26 nos. of soil samples from the agricultural fields at 13 nos. of different locations at two different depths of ~15 cm and ~30 cm below the surface level at each location to determine the soil characteristics in terms of heavy metal content.

Along with the soil samples, 07 nos. of groundwater samples were collected from the same agricultural fields where vegetables were sampled, wherein the groundwater was used for growing vegetables. Apart from the above, 01 no. of sample of treated sewage at the entry point of Koramangala-Challaghatta Valley (KC Valley) tank filling project near Uddappanahalli was also collected to assess treated sewage quality. This treated wastewater enters the Lakshmisagara lake (Near Kolar) and the groundwater is used for agricultural activities.

The geographical locations of collection of vegetable samples, groundwater/treated wastewater samples, and soil samples are marked on the maps using Google Map are given in **Graph 1**.



Graph. 1: Locations of sampling carried out by the Joint Committee. A: Vegetable samples collected from agriculture fields, V1-8 - near Nelamangala; V9-13 - Chakarasanahalli, Kolar; V14-18 - Thurandahalli, Kolar; V19-22 - Soppahalli, Chikkaballapura. B: Vegetable samples collected from Markets, M1 - M/s Shivaganga Farmers Producers Market, Nelamangala; M2 - M/s Farmers Market, Rajajiniagara, Bengaluru; M3 - APMC Market, Kolar; M4 - HOPCOMS, Mahalaxmi layout, Bengaluru. Groundwater/treated wastewater samples, C: GW1 – agricultural field in Chakarasanahalli; GW2 – agricultural field in Thurandahalli; GW3 & 4 - agricultural fields in Soppahalli; GW5 - agricultural field in Machanayakanahalli; GW6 & 7 – agricultural field in Gollahalli main road, near vajraghattapalya; WW1 – Entry point of secondary treated wastewater pumped from Bengaluru to Koramangala-Challaghatta Valley tank filling project near Uddappanahalli, Kolar. Soil samples collected from the agricultural fields at two different depths of ~15 cm and ~30 cm, S1-3 – Chakarasanahalli; S4 - Thurandahalli, Kolar; S5-7 – Rayappanahalli & Soppahalli, Chikkaballapura; S8-13 - Machanayakanahalli, Vajraghattapalya, Nelamangala.

3. Sampling of ambient air, water, soil, manure, and vegetable during 1st to 3rd September, 2025:

The analysis of collected vegetable, soil, and water samples were carried out as detailed below:

The vegetable samples were analysed for heavy metals and pesticide residue parameters by FSSAI approved laboratory; the analysis of groundwater and treated wastewater samples, and soil samples for heavy metal parameters were carried out by Central Environmental Laboratory-1, KSPCB, Bengaluru; and analysis of groundwater/treated wastewater samples for general parameters was carried out by the Regional Laboratory, CPCB, RD Bengaluru.

The results of analysis were circulated among the joint committee members seeking inferences from respective committee member and discussions were held on 13.05.2025 on the reports by the Joint Committee members and also on the way forward for finalization of the comprehensive study report.

Subsequently, the observations of Joint Committee members were compiled in the form of a draft report and further deliberated in a joint committee meeting held on 30.06.2025 for finalization of the report.

Upon discussions on the analysis results and final inputs from Joint Committee members on 24.07.2025, the joint committee constituted by CPCB observed that the results of analysis of vegetables, soil, and groundwater/treated wastewater were inconclusive in terms of concentration of heavy metals. Consequently, the Joint Committee decided to carry out re-assessment including, re-sampling of water, and vegetable samples from selected study areas, and ambient air quality monitoring in selected study areas (the agricultural fields at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar).

A meeting of the Joint Committee was held on 30.07.2025 and it was decided to carry out re-assessment during August, 2025. However, field visit for re-assessment scheduled for 11th-14th August, 2025 could not be carried out due to heavy rains in the study areas. The committee re-scheduled the re-assessment sampling at selected agricultural fields in Chikkaballapura and Kolar regions and carried out sampling during 1st to 3rd September, 2025.

During the re-sampling, 2 no. of vegetables (Ridge Gourd and Snake Gourd vegetables grown in the fields of Soppahalli, Chikkaballapura were collected on 1st September, 2025. However, vegetables were not available at the agricultural field of Thurandahalli, Kolar as the plants were only in the initial growth stage. 04 nos. of groundwater samples from the agricultural fields at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar were collected on 1st September, 2025. The ambient air quality monitoring was carried out during 2nd and 3rd September, 2025.

The Joint Committee considered the sampling conducted during re-assessment and totally **19** number of vegetable samples were collected from the agricultural fields and **53** number of vegetable samples were collected from local markets, including HOPCOMS in Bengaluru as well as APMC markets located in Nelamanagala, Kolar, and Chikkaballapura regions, during 27th-28th February, 2025 and 1st September, 2025.

The details of the vegetable samples collected from the agricultural fields such as the type of vegetable, name of the location, and GPS coordinates are as given in **Appendix-1** along with analysis results. The number of vegetable samples collected from the agricultural fields in Nelamangala, Kolar, and Chikkaballapura regions were 08 nos., 08 nos., and 03 nos., respectively. Number of vegetable samples of each type collected from the agricultural fields is given in **Table 1**.

Table.1: Number of vegetable samples of each type collected from the agricultural fields at Nelamangala, Kolar, and Chikkaballapura regions during 27th to 28th February, 2025 and 1st September, 2025.

S. No.	Vegetable	No. of samples	S. No.	Vegetable	No. of samples
1.	Beans	03	8.	Beetroot	01
2.	Brinjal	02	9.	Radish	01
3.	Bottle Gourd	01	10.	Carrot	01
4.	Snake Gourd	01	11.	Ladies Finger	01
5.	Bitter Gourd	01	12.	Sambar Onion	01
6.	Chilli Bajji	02	13.	Ridge Gourd	01
7.	Capsicum	01	14.	White Long Brinjal	01
			15.	Tomato Raw	01
Total: 19					

Total 53 nos. of vegetable samples were collected from the local markets/APMC markets/HOPCOMS in Nelamangala, Bengaluru and Kolar. Number of vegetable samples of each type collected from the local markets/APMC markets/HOPCOMS is given in **Table 2**.

Table.2: Number of vegetable samples of each type collected from the markets in Bengaluru/APMC markets in Nelamangala and Kolar during February 27th to 28th, 2025.

S. No.	Vegetable	No. of Samples	S. No.	Vegetable	No. of Samples
1.	Potato	04	16.	Leafy Green Veg	01
2.	Sambar Onion / Onion	04	17.	Flat Bean	01
3.	Ginger	02	18.	Beans	03
4.	Bitter Gourd	03	19.	Cauliflower	02
5.	Sambar Cucumber	02	20.	Cabbage	02
6.	Squash	02	21.	Cucumber	02
7.	Tomato	02	22.	Capsicum	02
8.	Little Gourd	02	23.	White Long Brinjal	01
9.	Carrot	03	24.	Radish	01

S. No.	Vegetable	No. of Samples	S. No.	Vegetable	No. of Samples
10.	Brinjal	03	25.	Chilli Bajji	02
11.	White Long Brinjal	01	26.	Knol Khol (turnip)	01
12.	Red Radish	01	27.	Ridge Gourd	01
13.	Spinach	01	28.	Beetroot	01
14.	Long Beans	01	29.	Snake Gourd	01
15.	Fenugreek/Methi	01			
	Total: 53				

The ambient air monitoring was carried out for PM₁₀ parameter using standard protocol to detect the presence of heavy metals, if any, in the ambient air. CPCB, Regional Directorate-Bengaluru, carried out the ambient air monitoring at Soppahalli, Chikkaballapura on 2nd September, 2025 and at Thurandahalli, Kolar on 03rd September, 2025 for 8 hours duration.

Location-wise photographs taken during the sampling of vegetables, soil, and groundwater/treated wastewater during 27th – 28th February, 12th – 13th March, and 1st – 3rd September, 2025 at the selected areas (Nelamangala, Kolar, and Chikkaballapura) are given in **Annexure-I**.

Summary of samples collected:

- 1) Number of vegetable samples collected from agricultural fields, including vegetable samples collected during re-assessment: **19** [08 from Nelamangala, 08 from Kolar, and 03 from Chikkaballapura].
- 2) Number of vegetable samples collected from local markets including HOPCOMS in Bengaluru, Farmers produce market in Nelamangala, and APMC in Kolar: **53** [Nelamangala (Shivaganga Market) - 20 samples; Bengaluru (Rajajinagara Retail Market) - 13 samples; Kolar (APMC Market) - 17 samples; Bengaluru (HOPCOMS) - 3 samples].

- 3) Thus, total **72** vegetable samples were collected, and these were analysed at FSSAI-approved laboratory for 11 heavy metals, 3 minerals, and 230 pesticide residues as per Food Safety and Standards (Contaminants, Toxins and Residues) Regulation, 2011 and amendments thereof.
- 4) **07** nos. of groundwater samples were collected from the same agricultural fields where vegetables were sampled and **01** no. of treated wastewater sample was collected at KC valley entry point, Uddappanahalli. During re-assessment, **02** nos. of groundwater samples were collected from the agricultural fields at Soppahalli, Chikkaballapura, and **02** nos. of groundwater samples were collected from the agricultural fields at Thurandahalli, Kolar.
- 5) **26** nos. of soil samples were collected from the agricultural fields at 13 nos. of different locations from the depth of 15 cm & 30 cm below the surface level.
- 6) The collected vegetable samples were categorized into following groups: Brassica (05 nos.), Bulb (05 nos.), Fruiting vegetables (18 nos.), Cucurbits (17 nos.), Leafy vegetables (03 nos.), Legumes (08 nos.), and Root & Tuber vegetables (16 nos.).
- 7) **02** nos. of ambient air particulate matter (PM₁₀) samples were collected - one at Soppahalli, Chikkaballapura on 2nd September, 2025 and another at Thurandahalli, Kolar on 03rd September, 2025.

4. Analysis of heavy metals & pesticide residues in vegetable samples

The vegetable samples collected during 27th to 28th February, 2025 from the selected **agricultural fields** in Nelamangala, Kolar, and Chikkaballapura regions as well as **local market/APMC market/HOPCOMS** in Nelamangala,

Bengaluru, and Kolar region and samples collected from agricultural fields at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar during re-assessment on 1st September, 2025 got analysed through FSSAI approved laboratory in Bengaluru. Each vegetable sample was analysed for 11 nos. of heavy metal parameters (i.e., Antimony, Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Methyl Mercury, Nickel, Selenium, Tin), 03 nos. of minerals (i.e., Iron, Zinc, Manganese), and 230 numbers of pesticide residues, in a FSSAI notified laboratory. The compiled analysis results of the vegetable samples for **heavy metals** and **pesticide residues** by FSSAI notified laboratory i.e., M/s. Shiva Analyticals (India) Pvt. Ltd. are provided in **Appendix-1** and **Appendix-2**, respectively.

4.1 Heavy metals in vegetable samples:

The 'limit of quantification' (LOQ) of analysis, number of samples wherein heavy metals were detected, and number of samples with heavy metal concentration exceeding the FSSAI standard limit among the 72 nos. of analysed vegetable samples are tabulated in **Table 3**. The limits for concentration of each heavy metal in each type of vegetable as prescribed in the Food Safety and Standards (Contaminants, Toxins, and Residues) Regulations (FSSR), 2011 and amendments thereof (**Annexure-II**) are also given in the **Table 3**.

On comparing the concentration of heavy metals in vegetables with the FSSR, 2011 limits and amendments thereof, the concentration of only one heavy metal, viz., **lead (Pb)** was found to be exceeding the FSSR-2011 limit in **19** nos. vegetable samples collected from the **local markets** in and around Bengaluru. The exceedance of Pb limit was found to be highest in Brinjal, followed by Gourds.

The number of vegetable samples of each type with concentration of Pb exceeding the FSSR-2011 limit, out of total number of the vegetable samples

collected of the same type, are as follows; Capsicum - 02 out of 03, Brinjal - 02 out of 07, Bitter Gourd/Ridge Gourd/Little Gourd/Snake Gourd - 04 out of 11, Squash - 02 out of 02, Cucumber-(small/table) - 02 out of 02, Beans/Long Beans-(organic)/Flat Beans - 02 out of 08, Cabbage - 01 out of 02, Leafy Green Vegetable - 01 out of 01, Chilli Bajji - 01 out of 04, Knol Khol (Turnip) - 01 out of 01, Beetroot - 01 out of 02.

The details of vegetable samples wherein heavy metal (lead) concentration exceeded the FSSAI limit, along with the sampling location, GPS coordinates, observed concentration, corresponding prescribed standard limit in FSSR, 2011, are given in **Table 4**.

Table.3: Heavy metal concentrations in vegetable samples in comparison with the Food Safety and Standards (Contaminants, Toxins, and Residues) Regulations, 2011 and amendments thereof.

Analysis results of 72 no. of different vegetable samples for heavy metal parameters	Concentration of heavy metals and minerals analysed in vegetable samples (mg/kg)										
	Sb	As	Cd	Cr	Cu	Pb	Hg	CH ₃ -Hg*	Ni	Se	Sn
Limit of Quantification (LOQ)	0.020	0.020	0.020	0.020	0.040	0.020	0.020	0.020	0.04	0.04	0.02
No. of samples with concentration exceeding standard limit	0	0	0	0	0	19	0	0	0	0	0

	Vegetable Type	Total No. of samples	No. of samples exceeding in Pb standard limit	Standard limits of heavy metals and minerals in vegetables as per FSSR, 2011 in mg/kg										
				Sb	As	Cd	Cr	Cu	Pb	Hg	CH ₃ -Hg*	Ni	Se	Sn
1.	Beans/ Long Beans/ Flat Beans	08	02	1.0	1.1	0.10	1.0	30	0.2	1.0	0.25	1.0	-	250
2.	Beetroot	02	01	1.0	1.1	0.10	1.0	30	0.1	1.0	0.25	1.0	-	250
3.	Bitter Gourd/ Bottle Gourd/ Ridge Gourd/ Snake Gourd/ Little Gourd	11	04	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
4.	Brinjal/ Brinjal (Organic)/ BT Brinjal/ White long Brinjal	07	02	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
5.	Cabbage	02	01	1.0	1.1	0.05	1.0	30	0.3	1.0	0.25	1.0	-	250
6.	Capsicum	03	02	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
7.	Carrot	04	-	1.0	1.1	0.10	1.0	30	0.1	1.0	0.25	1.0	-	250
8.	Cauliflower	02	-	1.0	1.1	0.05	1.0	30	0.3	1.0	0.25	1.0	-	250
9.	Chilli Bajji/ Mirchi Bajji	04	01	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
10.	Cucumber (small)	02	02	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
11.	Methi/Fenugreek	01	-	1.0	1.1	0.20	1.0	30	0.3	1.0	0.25	1.0	-	250
12.	Ginger	02	-	1.0	1.1	0.10	1.0	30	0.1	1.0	0.25	1.0	-	250
13.	Lady's Finger (Okra)	01	-	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
14.	Leafy green veg/ Saluyot leaves	01	01	1.0	1.1	0.20	1.0	30	0.3	1.0	0.25	1.0	-	250
15.	Knol Khol (Turnip)	01	01	1.0	1.1	0.05	1.0	30	0.3	1.0	0.25	1.0	-	250
16.	Onion	02	-	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
17.	Potato	04	-	1.0	1.1	0.10	1.0	30	0.1	1.0	0.25	1.0	-	250
18.	Radish / Red Radish	04	-	1.0	1.1	0.10	1.0	30	0.1	1.0	0.25	1.0	-	250
19.	Sambar Cucumber	02	-	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
20.	Sambar Onion	03	-	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
21.	Spinach	01	-	1.0	1.1	0.20	1.0	30	2.5	1.0	0.25	1.0	-	250
22.	Squash	02	02	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
23.	Tomato/ Tomato Raw	03	-	1.0	1.1	0.05	1.0	30	0.1	1.0	0.25	1.0	-	250
	Total	72	19											

*CH₃-Hg Methyl Mercury as Hg.

Table.4: Details of 19 vegetable samples and sampling location wherein heavy metal (lead) concentrations were exceeding the limits prescribed in FSSR, 2011 and amendments thereof.

S. No.	Sample Code	Vegetable Sample wherein heavy metal (lead) is exceeding the standard limit	Sampling Location	Observed lead concentration in mg/kg	FSSR, 2011 limit for Pb, mg/kg	GPS coordinates
1.	27SQ14M	Squash	M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalingana halli, Nelamangala Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.	0.441	0.1	N13.093331 E77.374488
2.	27LG16M	Little Gourd		1.759	0.1	
3.	27BRO18M	Brinjal (organic)		1.953	0.1	
4.	27LBO21M	Long Beans (organic)		0.666	0.2	
5.	27LF36M	Leafy Green Veg		1.680	0.3	
6.	27FB37M	Flat bean		1.825	0.2	
7.	27CB40M	Cabbage		1.764	0.3	
8.	27CC41M	Cucumber small		0.515	0.1	
9.	27CM22RM	Capsicum		0.659	0.1	
10.	27LG26RM	Little Gourd	M/s Farmers Market, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.	1.781	0.1	N12.999179 E77.541220
11.	27Q31RM	Squash		0.433	0.1	
12.	27CB34RM	Chilli Bajji		0.542	0.1	
13.	28CAP06KM	Capsicum		1.014	0.1	
14.	28NLO7KM	Knol Khol (Turnip)	APMC Market, No.12, Malur Road, Kolar.	1.118	0.3	N13.121987 E78.111618 N13.122150 E78.111774 N13.121780 E78.111109
15.	28RG10KM	Ridge Gourd		0.346	0.1	
16.	28BIG11KM	Bitter Gourd		1.886	0.1	
17.	28BR14KM	Beetroot		0.129	0.1	
18.	28BR17KM	Round Brinjal		0.794	0.1	
19.	28CC32HC	Cucumber small		HOPCOMS, Siddaiah Puranik Road, Near Shanaramath Circle, Mahalaxmi layout, Bengaluru.	0.403	

4.2 Pesticide residues in vegetable samples:

The vegetable samples were analysed to determine the potential contamination with pesticide residues. According to FSSR, 2011, food articles shall not contain insecticide residues exceeding the prescribed 'Maximum Residue Limits' (MRL). The results of analysis of vegetable samples (**70** Nos.) for 230 nos. of pesticide residue parameters are given in **Appendix-2**. The limit of quantification (LOQ) of analysis for each pesticide as provided by FSSAI notified laboratory i.e. M/s. Shiva Analyticals (India) Pvt Ltd is given in **Appendix-2A**. The presence of pesticides residues was detected in **10** nos. different vegetable samples. The pesticide residue concentrations in the remaining **60** vegetable samples were below LOQ.

The 18 types of pesticides residues detected were as follows; 1) Acephate (expressed as mixture of Methamidophos and acephate), 2) Tolfenpyrad, 3) Clothianidin [Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymet Hylurea (TZMU), Methylnitroguanidine (MNG), TMG], 4) Dinotefuran, 5) Ethion (residues to be determined as Ethion and its oxygen analogue and expressed as Ethion), 6) Fenazaquin, 7) Fipronil, 8) Fluxapyroxad, 9) Imidacloprid, 10) Monocrotophos, 11) Profenofos, 12) Thiomethoxam, 13) Acetamiprid, 14) Copper Hydroxide (as Cu), 15) Copper Oxychloride (as Cu), 16) Copper Sulphate (as Cu), 17) Cuprous Oxide (as Cu), 18) Pyraclostrobin.

Only the first 12 types of pesticides residues amongst the aforementioned 18 type of pesticide residues detected, exceeded the 'Maximum Residue Limits'.

The concentrations of detected pesticides residues in the **10** nos. of vegetable samples are compared with MRLs specified in FSSR, 2011 in **Table 5**.

Table.5: Comparison of pesticide residue concentration in vegetables with the Food Safety and Standards (Contaminants, Toxins, and Residues) Regulations, 2011 and amendments thereof. Only the pesticide residues with concentrations greater than the LOQ are considered.

Total number of vegetable samples analysed for pesticide residues = 70
 Total number of pesticide residue parameters analysed = 230
 Number of pesticides residues detected in different vegetable samples = 18
 No. of vegetable samples with concentration of pesticide residues exceeding the standard limit = 10
 Total no. of pesticide residues found to be exceeding the FSSR, 2011 standard limit = 12

Concentration of pesticide residues exceeding the standard limit (Pesticide residues with concentration above LOQ are considered)						
S. No.	Pesticide Residue	Vegetable samples wherein pesticide residue is exceeding the standard limit	Sampling location	GPS location	Observed concentration mg/kg	FSSR, 2011 standard limit mg/kg
1.	Acephthate ¹	Chilli Bajji 27MB05	Vajraghattapalya, Nelamangala	N13.157011, E77.377519	0.276	0.01
		Chilli Bajji 27CB34RM	M/s Farmers Market, Bengaluru.	N12.999179, E77.541220	0.970	0.01
		Chilli Bajji 28MB15KM	APMC market, Kolar.	N13.121987, E78.111618	1.026	0.01
		Capsicum 28CAPO6KM			0.710	0.01
		Chilli Bajji 28MB24TH	Thurandahalli, Kolar	N13.228339, E78.139329	1.091	0.01
2.	Clothianidin ²	Capsicum 27C07	Vajraghattapalya, Nelamangala	N13.161745, E77.381536	0.069	0.01
		Chilli Bajji 27CB34RM	M/s Farmers Market, Bengaluru	N12.999179, E77.541220	0.425	0.01
		Capsicum 27CM22RM			0.068	0.01
		Chilli Bajji 28MB15KM	APMC market, Kolar	N13.121987, E78.111618 N13.122150, E78.111774	0.446	0.01
		Capsicum 28CAPO6KM			0.072	0.01
Chilli Bajji 28MB24TH	Thurandahalli, Kolar	N13.228339, E78.139329	0.467	0.01		
3.	Dinotefuran	Capsicum 27C07	Vajraghattapalya, Nelamangala	N13.161745, E77.381536	0.044	0.01
		Capsicum 27CM22RM	M/s Farmers Market, Bengaluru	N12.999179, E77.541220	0.043	0.01
4.	Ethion ³	Capsicum 28CAPO6KM	APMC market, Kolar	N13.121987, E78.111618	0.492	0.01
5.	Fenazaquin	Ginger 27G11M	M/s Shivaganga Farmers Producers Market, Nelamangala, Bengaluru.	N13.093331, E77.374488	0.091	0.01
6.	Fipronil	Capsicum 27C07	Vajraghattapalya, Nelamangals	N13.161745, E77.381536	0.018	0.01
		Capsicum 28CAPO6KM	APMC market, Kolar	N13.121987, E78.111618	0.019	0.01
7.	Fluxapyroxad	Chilli Bajji 28MB15KM	APMC market, Kolar	N13.121987, E78.111618	0.017	0.01
8.	Imidacloprid	Chilli Bajji 27CB34RM	M/s Farmers Market, Bengaluru	N12.999179, E77.541220	0.325	0.30
		Chilli Bajji 28MB15KM	APMC market, Kolar	N13.121987, E78.111618	0.389	0.30
		Chilli Bajji 28MB24TH	Thurandahalli, Kolar	N13.228339, E78.139329	0.311	0.30
9.	Monocrotophos	Chilli Bajji 27CB34RM	M/s Farmers Market, Bengaluru	N12.999179, E77.541220	0.495	0.20
		Chilli Bajji 28MB15KM	APMC market, Kolar	N13.121987, E78.111618	0.477	0.20
		Chilli Bajji 28MB24TH	Thurandahalli, Kolar	N13.228339, E78.139329	0.496	0.20

Concentration of pesticide residues exceeding the standard limit (Pesticide residues with concentration above LOQ are considered)						
S. No.	Pesticide Residue	Vegetable samples wherein pesticide residue is exceeding the standard limit	Sampling location	GPS location	Observed concentration mg/kg	FSSR, 2011 standard limit mg/kg
10.	Profenofos	Sambar Cucumber 28SC16KM	APMC market, Kolar	N13.121987, E78.111618	0.042	0.01
11.	Thiomethoxam	Capsicum 27C07	Vajraghattapalya, Nelamangala	N13.161745, E77.381536	0.523	0.50
		Capsicum 27CM22RM	M/s Farmers Market, Bengaluru	N12.999179, E77.541220	0.522	0.50
		Chilli Bajji 27CB34RM		N12.999179, E77.541220	0.955	0.50
		Chilli Bajji 28MB15KM	APMC market, Kolar	N13.121987, E78.111618	0.978	0.50
		Chilli Bajji 28MB24TH	Thurandahalli, Kolar	N13.228339, E78.139329	0.943	0.50
		Cucumber 28CC32HC	HOPCOMS, Mahalakshmi layout, Bengaluru	N12.999884, E77.541371	0.022	0.01
12.	Tolfenpyrad	Capsicum 28CAPO6KM	APMC market, Kolar	N13.121987, E78.111618	0.059	0.01

¹Expressed as mixture of Methamidophos and acephate

²Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymet hylurea (TZMU), Methylnitroguanidine (MNG), TMG.

³Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion.

Acephate, Clothianidin, Dinotefuran, Ethion, Imidacloprid, Monocrotophos, Thiomethoxam are insecticides, whereas Fluxapyroxad is a fungicide and their mode of action is systemic (absorbed and transported through plants). Fipronil, Tolfenpyrad, Profenofos, and Fenazaquin are acaricides, and they kill pests on direct contact. These insecticides, fungicides, and acaricides were detected mainly in four types of vegetables viz., Capsicum, Chilli Bajji, Cucumber, and Ginger.

The 10 nos. of vegetable samples wherein pesticides residues exceeded the prescribed MRL in FSSR, 2011 are 04 (out of 04) nos. of Chilli Bajji samples, 03 (out of 03) nos. of Capsicum samples, 01 (out of 02) nos. of Sambar Cucumber samples, 01 (out of 02) Cucumber (small/table) samples, and 01 (out of 02) no. of Ginger samples collected in this study.

The most common pests that are noticed in these vegetables are aphids, thrips, mites, whiteflies (sucking pests). The farmers were observed to be using different pesticides alternatively in every ten days interval. It was also informed by the farmers that the crops were harvested only after 3-4 days of application of pesticides. The schedule of pesticides used is as given in **Table 6**.

The following commercially available pesticides and plant growth promoters were observed to be used by the farmers in the agricultural fields; Vedik Agro (Plant growth promoter) Glofosinate Ammonium (non-selective, post-emergence herbicide), UPL Lancer Acephate 75% soluble powder (organophosphate insecticide), JU-Weedout (Paraquat dichloride 24% SL – non-selective contact herbicide), Topper 77 (Glyphosate ammonium salt 71%, non-selective herbicide), Aandhi 7 (non-selective post-emergence herbicide), Simodis (Isocycloseram - Insecticide), NeemAzal-T/S (organic insecticide), Bumper (Micronutrient fertilizer mixture), Movento (2-way systemic insecticide), Ronfen (systemic and contact insecticide), Pregasus (Insecticide). The chemical composition of these pesticides is mostly organo-phosphates and the containers of these pesticides were made of plastic. The pesticides used by

the farmers, correlated with the pesticide residues found in the analyzed vegetable samples.

Table.6: The schedule of pesticides used in the agricultural fields in Nelamangala.

S. No	Crop	Major Pests	Pesticides residues	Practice followed by farmers - I
1	Capsicum, Chilli Baji, Mirchi, Bajji Sambar Cucumber, Cucumber, Ginger	Thrips (Vegetative stage to Harvesting stage)	Acephate 95 % SG (2gm/l) Clothianidin 50 % WDG (0.01gm/l)	Broflanilide 300 g/1 SC (0.16ml/l) and Spinetoram 11.7 % SC (1ml/l) (7-10 days)
		Whitefly (Vegetative stage to Harvesting stage)	Dinotefuran 70 % WG (0.18gm/l) Thiamethoxam 25 % WG (0.2gm/l)	Pyrifluquinazon 20% WG (1gm/l) and Thiamethoxam 25% WG (0.3gm/l) (7-10 days)
		Aphids (Vegetative stage to Harvesting stage)	Ethion 50 % EC (3ml/l) Fipronil 05 % SC (2ml/l)	Afidopyropen 50 g/L DC (2ml/l) and Fipronil 10% + Diafenthiuron 30% WG (1.5gm/l) (7-10 days)
		Mites (Vegetative stage to Harvesting stage)	Tolfenpyrad 15 % EC (2ml/l)	Hexythiazox 5.45% EC (0.8ml/l) and Fenazaquin 10%EC (2ml/l) (7-10 days)
				Practice followed by farmers - II
				Benevia (Cyantraniliprole 10.26% w/w OD @ (1ml/l), Super confider (Imidacloprid 30.5% SC @ 0.5ml/l), Admire (Imidacloprid 70% WG @0.3ml/l), Plesiva (Cyantraniliprole 7.3% + Diafenthiuron 36.4% SC @ 1.5ml/l), Expous (Broflanilide 300 g/1 SC @ 0.16ml/l), Gracia (Fluxametamide 10% w/w EC @0.8ml/l), Rangoli (chlorpyrifos + alphamethrin 20% E.C @ 3ml/l)

5. Analysis of heavy metals in soil samples collected from the agricultural fields at Nelamangala, Kolar, and Chikkaballapura

Soil samples were collected from the identified agricultural fields at Nelamangala, Kolar, and Chikkaballapura areas by the Joint Committee. Total 26 nos. of soil samples were collected from 13 different locations, two samples at each location at two different depths viz., ~15 cm and ~30 cm below the surface level and analysed for total metal content at Central Environmental Laboratory, KSPCB, Bengaluru. The heavy metal concentrations in the analysed soil samples and the normal concentration range of heavy metals in uncontaminated soils as per literature are presented in **Table 7**. The soil samples were analysed for total metal concentration following standard protocol and the results are presented in **Table 8**.

The analysis results indicate that average contents of heavy metals in the soil samples of varying soil depths collected from agricultural land at Nelamangala, Chikkaballapur, and Kolar area are 14.80 mg/kg Cu (range 3.20 to 28.60 mg/kg), 10.35 mg/kg Pb (range 6.40 to 14.50 mg/kg), 30.48 mg/kg Zn (range 9.00 to 76.00 mg/kg), 10.27 mg/kg Ni (range 3.90 to 19.00 mg/kg), 15984.12 mg/kg Fe (range BDL to 31069.0 mg/kg), 278.46 mg/kg Mn (range BDL to 527.00 mg/kg), 23.27 mg/kg Cr (range 0.01 to 39.50 mg/kg), 1.69 mg/kg As (range BDL to 2.40 mg/kg) and 9.0 mg/kg Se (range BDL to 21.70 mg/kg).

On comparing the concentration of heavy metals in the soil samples collected from the agricultural fields of Kolar, Chikkaballapura, and Nelamangala with the normal concentration range of heavy metal in uncontaminated soils as per literature, it is evident that except **Se**, the concentration of other heavy metals viz., Cu, Pb, Zn, Ni, Fe, Mn, Cd, Cr, As, and Hg in the soil samples are within the range normally observed in case of soils of unpolluted area.

Table.7. Average heavy metal concentration in soil samples collected from agricultural fields (Kolar, Chikkaballapura, and Nelamangala area) and normal concentration of heavy metals in uncontaminated soils as reported in literature.

Element	Min mg/kg	Max mg/kg	Mean mg/kg	Range in normal uncontaminat ed soil	References
Copper as Cu	3.20	28.60	14.80	6 to 80	McBride, 1994
Lead as Pb	6.40	14.50	10.35	10 to 84	McBride, 1994
Zinc as Zn	9.00	76.00	30.48	17 to 125	McBride, 1994
Nickel as Ni	3.90	19.00	10.27	4 to 55	McBride, 1994
Iron as Fe	BDL	31069.00	15984.12	20,000 to 550,000	Bodek et al. (1988)
Manganese as Mn	BDL	527.00	278.46	7-9200	Kabata-Pendias (2001)
Cadmium as Cd	BDL	BDL	BDL	0.06 to 1.1	McBride, 1994
Total Chromium	0.01	39.50	23.27	7 to 221	McBride, 1994
Arsenic as As	BDL	2.40	1.69	0.1 to 40	Greaves, 1913
Selenium as Se	BDL	21.70	9.00	0.1 to 2	Swaine, 1955
Mercury as Hg	BDL	BDL	BDL	0.008 to 1.11	Kabata-Pendias (2001)

Table.8. Heavy metal concentration in soil samples collected during 12th – 13th March, 2025 from the agricultural fields (Kolar, Chikkaballapura, and Nelamangala areas).

S. No	Sample Code	Sampling depth	Sampling Location	Cu	Pb	Zn	Ni	Fe	Mn	Cd	Total Cr	As	Se	Sb	Hg	GPS Coordinates
Heavy metal concentration in soil samples collected from the agricultural fields in Kolar in mg/kg																
1.	AGKB-1	15 cm	Chakarasanahalli	11	11	52.6	8.8	BDL	BDL	BDL	0.006	BDL	BDL	BDL	BDL	N13.129457, E77.965663
2.	AGKB-2	30 cm	Chakarasanahalli	11.3	12.9	55.3	10.1	13682	527	BDL	20.3	2.2	2.3	BDL	BDL	N13.129457, E77.965663
3.	AGKC-1	15 cm	Chakarasanahalli	3.4	9.3	40.4	4.9	5976	187	BDL	13	1.2	BDL	BDL	BDL	N13.130278, E77.966273
4.	AGKC-2	30 cm	Chakarasanahalli	3.2	9.6	16.9	4.7	5328	198	BDL	12	1.1	3.4	BDL	BDL	N13.130278, E77.966273
5.	AGKL-1	15 cm	Chakarasanahalli	3.5	9.8	9.1	3.9	4508	170	BDL	11	1	2.5	BDL	BDL	N13.130146, E77.966019
6.	AGKL-2	30 cm	Chakarasanahalli	3.7	7.9	9	4.5	5355	161	BDL	12	1.1	BDL	BDL	BDL	N13.130146, E77.966019
7.	AGKCP-1	15 cm	Thurandahalli	20.2	14.5	55.6	12.3	13917	321	BDL	25	2.4	6.2	BDL	BDL	N13.228713, E78.139436
8.	AGKCP-2	30 cm	Thurandahalli	15.8	12.8	44.7	11.7	13557	265	BDL	23.6	1.9	5	BDL	BDL	N13.228713, E78.139436
Heavy metal concentration in soil samples collected from the agricultural fields in Chikkaballapur in mg/kg																
9.	AGCB-1	15 cm	Rayappanahalli	12.5	11.3	14.8	9.8	16113	163	BDL	22.6	1.8	5.4	BDL	BDL	N13.494739, E77.784632
10.	AGCB-2	30 cm	Rayappanahalli	13.6	12.5	15	11.1	17745	189	BDL	24.7	1.8	6.2	BDL	BDL	N13.494739, E77.784632
11.	AGCBT-1	15 cm	Rayappanahalli	28.6	14.3	76	11.2	16782	250	BDL	23	2.3	7.5	BDL	BDL	N13.494971, E77.784447
12.	AGCBT-2	30 cm	Rayappanahalli	22.6	12.2	57.7	10.4	15494	207	BDL	20	2.3	5.2	BDL	BDL	N13.494971, E77.784447
13.	AGCR-1	15 cm	Soppahalli	16.3	10.6	16.6	10.8	18038	252	BDL	22.3	1.5	5.8	BDL	BDL	N13.495730, E77.778139
14.	AGCR-2	30 cm	Soppahalli	17	12.3	12.5	11.3	19698	273	BDL	23.6	1.7	7.4	BDL	BDL	N13.495730, E77.778139
Heavy metal concentration in soil samples collected from the agricultural fields in Nelamangala in mg/kg																
15.	MARNMAG-1	15 cm	Machanayakanahalli	15	9.7	35.5	11.4	17135	383	BDL	27	1.7	10.8	BDL	BDL	N13.138477, E77.380466
16.	MARNMAG-2	30 cm	Machanayakanahalli	16.6	10.2	40.5	11.8	18155	393	BDL	28.5	1.9	11.6	BDL	BDL	N13.138477, E77.380466
17.	MARVGPAG-1	15 cm	Near Vajragatte palya	13.5	11.9	22.5	13	20592	319	BDL	33.5	2.2	11.8	BDL	BDL	N13.161679, E77.381435
18.	MARVGPAG-2	30 cm	Near Vajragatte palya	11.3	10.7	15.5	13	19643	268	BDL	32.1	2.1	11.3	BDL	BDL	N13.161679, E77.381435

S. No	Sample Code	Sampling depth	Sampling Location	Cu	Pb	Zn	Ni	Fe	Mn	Cd	Total Cr	As	Se	Sb	Hg	GPS Coordinates
19.	MARVGPAG-1BT	15 cm	Near Vajragatte palya	13.5	8.9	16.5	11	18067	256	BDL	24.3	1.3	9.1	BDL	BDL	N13.161528, E77.381619
20.	MARVGPAG-2BT	30 cm	Near Vajragatte palya	23.7	11.9	17.3	19	31069	306	BDL	39.5	2.2	10.1	BDL	BDL	N13.161528, E77.381619
21.	MARVGPAGB-1	15 cm	Near Vajragatte palya	16.5	8.6	40.4	11.8	18381	315	BDL	33.4	2.2	13.4	BDL	BDL	N13.156715, E77.376793
22.	MARVGPAGB-2	30 cm	Near Vajragatte palya	11.2	7.1	18.3	9.4	17444	254	BDL	32.2	1.6	15.4	BDL	BDL	N13.156715, E77.376793
23.	MARVGPAGLB-1	15 cm	Near Vajragatte palya	22.3	8.5	26.8	9.5	19930	411	BDL	23.1	1.2	12.5	BDL	BDL	N13.156622, E77.377040
24.	MARVGPAGLB-2	30 cm	Near Vajragatte palya	26.2	7.1	17.8	11.8	28977	475	BDL	31.5	1.4	16.6	BDL	BDL	N13.156622, E77.377040
25.	MARVGPAGMB-1	15 cm	Near Vajragatte palya	14.8	6.4	36.5	8.9	16929	313	BDL	21.5	1.6	14.7	BDL	BDL	N13.157037, E77.376931
26.	MARVGPAGMB-2	30 cm	Near Vajragatte palya	17.6	7.1	28.8	11	23072	384	BDL	25.3	2.3	21.7	BDL	BDL	N13.157037, E77.376931

BDL – Below Detection Limit in mg/kg. Detection limit: Cu:0.3; Pb:0.6; Fe:1.7; Mn:0.3; Cd:0.3; As:0.3; Se:1.8; Sb:0.3; Hg:0.15.

6. Analysis of heavy metals, pesticides and general parameters in groundwater and treated wastewater samples collected from the agricultural fields in Kolar, Chikkaballapura, and Nelamangala.

6.1 Analysis of Heavy metals in 07 groundwater and 01 treated wastewater samples

The results of analysis of 07 groundwater and 01 treated wastewater samples collected from agricultural fields in Kolar, Chikkaballapura, and Nelamangala for 12 nos. of heavy metal parameters viz., Cu, Pb, Zn, Ni, Fe, Mn, Cd, Cr, As, Se, Sb, and Hg, are compiled in **Table 9**.

The analysis results indicate that Cu, Pb, Cd, As, Se, Sb and Hg were 'below the detection limit' of analysis in all water samples whereas, Zn, Fe, Mn, Ni, and Cr (total), were detected in some of the samples.

The detected heavy metal concentrations were compared with the drinking water specifications - IS 10500:2012 (**Annexure-III**).

The analysis results indicate that the concentrations of Zn, Fe, Ni, and Cr (total), in all 08 nos. of water samples were either 'below the detection limit' of analysis or within the 'Acceptable limits' whereas, the concentration of Mn was 'below the detection limit' of analysis in 05 water samples, within the 'Acceptable limit' in 02 water samples, and within the 'Permissible limit' in 01 water sample.

Table.9: Analysis results of Groundwater and treated wastewater samples collected from agricultural fields in Kolar, Chikkaballapura, Nelamangala for heavy metal parameters during 12th – 13th March, 2025.

S. No.	Test Parameter (in mg/L)	Standard limit as per IS 10500:2012 (RA 2018, RA 2023)		All results expressed as mg/L								
		Requirement (Acceptable limit) (mg/L)	Permissible limit* (mg/L)	Sample Code								
				Kolar region			Chikkaballapura region		Nelamangala region			
				AGKB (GW)	AGKCP (GW)	KSTP (WW)	AGC-1 (GW)	AGC-2 (GW)	MARNMGW-1 (GW)	MARVGPGW-2 (GW)	MARVGPGW-3 (GW)	
				Chakarasa nahalli	Thurandah alli	Uddappana halli	Soppahalli	Soppahalli	Machanaya kanahalli	Near Vajraghattap alya	Near Vajraghattapal ya	
				13.129457 77.965663	13.229350 78.139631	13.122075 77.962298	13.494963 77.784443	13.494843 77.775472	13.138764 77.380673	13.162048 77.381800	13.157037 77.376931	
1.	Copper, as Cu	0.05	1.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
2.	Lead, as Pb	0.01	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3.	Zinc, as Zn	5.00	15.00	0.051	BDL	BDL	BDL	0.004	BDL	0.709	BDL	
4.	Nickel, as Ni	0.02	0.02	0.004	BDL	0.005	0.004	0.003	0.005	0.012	0.005	
5.	Iron, as Fe	0.30	0.30	BDL	BDL	BDL	0.025	BDL	BDL	BDL	BDL	
6.	Manganese, as Mn	0.10	0.30	BDL	BDL	0.054	BDL	0.029	BDL	0.228	BDL	
7.	Cadmium as Cd	0.003	0.003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
8.	Total Chromium	0.05	0.05	0.006	BDL	0.007	0.005	BDL	0.005	BDL	BDL	
9.	Arsenic, as As	0.01	0.05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
10.	Selenium as Se	0.01	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
11.	Antimony as Sb	-	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
12.	Mercury as Hg	0.001	0.001	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	

BDL – Below Detection Limit;

Detection limit – Cu:0.003; Pb:0.006; Zn:0.003; Fe:0.017; Cd:0.003; As:0.003; Se:0.018; Sb: 0.003; Hg:0.0015; Ni:0.002; Mn:0.003; Total Cr:0.004;

*in the absence of alternative source.

6.2 Analysis of pesticides in 07 groundwater and 01 treated wastewater samples

The results of analysis of 07 groundwater and 01 treated wastewater samples collected from agricultural fields in Nelamangala, Chikkaballapura, and Kolar for 17 nos. of pesticide residue parameters viz., Alpha-BHC, Gamma-BHC, Beta-BHC, Heptachlor, Delta-BHC, Aldrin, Heptachlorepoide Isomer B, Endosulfan I, 4,4'-DDE, Dieldrin, Endrin, 4,4'-DDD, Endosulfan II, 4,4'-DDT, Endrin Aldehyde, Lindosulfan sulphate, and Methoxychlor, are compiled in **Table 10**. The concentrations of all 17 nos. of pesticide residues were found to be 'below the detection limit' of analysis.

Table.10: Analysis results of Groundwater and treated wastewater samples collected from agricultural fields in Nelamangala, Chikkaballapura, Kolar for pesticide residue parameters during 12th – 13th March, 2025.

S. No.	Test Parameter (All units in µg/L)	Limit as per IS 10500:2012 (RA 2018, RA 2023) (µg/L)	Results							
			Sample Code							
			Kolar region			Chikkaballapura region		Nelamangala region		
			AGKB (GW)	AGKCP (GW)	KSTP (WW)	AGC-1 (GW)	AGC-2 (GW)	MARNMGW-1 (GW)	MARVGPGW-2 (GW)	MARVGPGW-3 (GW)
			Chakarasa nahalli	Thuranda halli	Uddappan ahalli	Soppahalli	Soppahalli	Machanayakanahalli	Near Vajraghattapalya	Near Vajraghattapalya
			13.129457 77.965663	13.22935 78.139631	13.122075 77.962298	13.494963 77.784443	13.494843 77.775472	13.138764 77.380673	13.162048 77.381800	13.157037 77.376931
1.	Alpha-BHC	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
2.	Gamma-BHC	2.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3.	Beta-BHC	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4.	Heptachlor	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5.	Delta-BHC	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6.	Aldrin	0.03	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
7.	Heptachlorepoxyde Isomer B	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
8.	Endosulfan I	0.40	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
9.	4,4'-DDE	1.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
10.	Dieldrin	0.03	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
11.	Endrin	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
12.	4,4'-DDD	1.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
13.	Endosulfan II	0.40	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
14.	4,4'-DDT	1.00	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
15.	Endrin Aldehyde	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
16.	Lindosulfan sulphate	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
17.	Methoxychlor	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

BDL – Below Detection Limit;

Detection limit for above mentioned 17 parameters was **5µg/L**.

6.3 Analysis of general parameters in groundwater and treated wastewater sample

The results of analysis of groundwater and treated wastewater samples collected from agricultural fields in Kolar, Chikkaballapura, and Nelamangala for general parameters collected during 12th to 13th March, 2025 and during re-assessment on 1st September, 2025 at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar regions are compiled in **Table 11** and **Table 12**, respectively. A comparison of analysis results of the collected water samples with the drinking water specifications - IS 10500:2012 (RA 2018, RA 2023) is also given in the said table. Each of 07 samples of groundwater was analysed for 19 nos. of parameters and 01 wastewater sample was analysed for 24 nos. of parameters.

Kolar region

In the groundwater sample collected from the agricultural fields in **Chakarasanahalli, Kolar**, the concentration of **Nitrate** (as NO₃) (75.3 mg/L) exceeded the 'Permissible' limit of the Drinking water specifications - IS 10500: 2012.

In the groundwater sample collected from agricultural field in **Thurandahalli, Kolar**, the concentration of **Nitrate** (97.4 mg/L), and **TDS** (2067 mg/L) and related parameter **Total Hardness** (906 mg/L), exceeded the 'Permissible limits' of the Drinking water specifications - IS 10500: 2012.

Chikkaballapura region

In the groundwater sample collected from an agricultural field in **Soppahalli, Chikkaballapura** the concentration of **Nitrate** (111.6 mg/L) exceeded the 'Permissible' limits of drinking water specifications - IS 10500: 2012.

Nelamangala region

In the treated wastewater sample, the concentration of Ammonical Nitrogen **NH₃-N** (9 mg/L) exceeded the 'Permissible' limit of Drinking water specifications - IS 10500: 2012.

In the four groundwater samples collected on 1st September, 2025 the concentration of all heavy metals except Fe and Mn were 'below detection limit'. In one groundwater sample at Soppahalli, Chikkaballapura, only **Fe** was detected whereas, in two groundwater samples collected from the agricultural fields at Soppahalli, Chikkaballapura region and the agricultural field at Thurandahalli, Kolar region, **Mn** was detected. However, the concentrations of Fe and Mn were found to be within the limit prescribed in Drinking water specifications - IS 10500: 2012.

Table.11: Analysis results of Groundwater and secondary treated wastewater samples collected from agricultural fields in Nelamangala, Chikkaballapura, Kolar during 12th – 13th March, 2025.

S. No.	Test Parameter	Limit as per IS 10500:2012 (RA 2018, RA 2023)		Result								
		Acceptable limit	Permissible limit	Sample Code								
				Kolar region			Chikkaballapura region		Nelamangala region			
				AGKB (GW)	AGKCP (GW)	KSTP (WW)	AGC-1 (GW)	AGC-2 (GW)	MARNMGW-1 (GW)	MARVGPGW-2 (GW)	MARVGPGW-3 (GW)	
				Chakarasanahalli	Thurandahalli	Uddappanahalli	Soppahalli	Soppahalli	Machanayakanahalli	Near Vajraghattapalya	Near Vajraghattapalya	
				13.129457 77.965663	13.22935 78.139631	13.122075 77.962298	13.494963 77.784443	13.494843 77.775472	13.138764 77.380673	13.162048 77.381800	13.157037 77.376931	
1.	pH at 25°C	6.5-8.5	6.5-8.5	7.21	7.05	7.67	6.48	7.16	6.96	7.13	7	
2.	EC at 25°C µs/cm	-	-	876.5	3252	937.8	675.2	882.2	744	890	754.9	
3.	TDS at 180°C, mg/L	500	2000	538	2067	597.3	496	576	525	522	442	
4.	Calcium as Ca, mg/L	75	200	22.4	211.2	59.2	28.8	58.4	46.4	52	38.4	
5.	Magnesium as Mg, mg/L	30	100	32.1	91.8	21.4	12.1	24.8	29.1	31.6	29.6	
6.	Nitrate mg/L (as NO ₃)	45	45	75.3	97.4	26.13	111.6	39.4	28.3	7.1	17.7	
7.	Nitrite mg/L as N	-	-	BDL	BDL	0.2	BDL	BDL	BDL	BDL	BDL	
8.	Phosphate mg/L as P	-	-	BDL	BDL	1.37	BDL	BDL	BDL	BDL	BDL	
9.	Total Hardness, mg CaCO ₃ /L	200	600	188	906	236	122	248	236	260	218	
10.	Ammonia mg/L as N	0.5	0.5	BDL	BDL	9	BDL	BDL	BDL	BDL	BDL	
11.	Chloride mg/L	250	1000	120.8	743.6	165.24	89.9	94	85.7	98.1	79.5	
12.	Fluoride mg/L	1	1.5	0.64	0.8	0.55	0.32	0.73	0.69	0.56	0.55	
13.	Potassium mg/L	-	-	4.97	6.37	20.57	2.67	3.73	4.88	13.26	7.29	
14.	Sodium mg/L	-	-	93.42	228.1	107.78	74.52	68.83	50.22	56.27	55.92	
15.	Sulphate mg/L as SO ₄	200	400	40.2	111.4	37.81	20.7	129.7	38.3	38.8	26.8	

S. No.	Test Parameter	Limit as per IS 10500:2012 (RA 2018, RA 2023)		Result								
		Acceptable limit	Permissible limit	Sample Code								
				Kolar region			Chikkaballapura region		Nelamangala region			
				AGKB (GW)	AGKCP (GW)	KSTP (WW)	AGC-1 (GW)	AGC-2 (GW)	MARNMGW-1 (GW)	MARVGPGW-2 (GW)	MARVGPGW-3 (GW)	
				Chakarasanahalli	Thurandahalli	Uddappanahalli	Soppahalli	Soppahalli	Machanayakanahalli	Near Vajraghattapalya	Near Vajraghattapalya	
				13.129457 77.965663	13.22935 78.139631	13.122075 77.962298	13.494963 77.784443	13.494843 77.775472	13.138764 77.380673	13.162048 77.381800	13.157037 77.376931	
16.	Percent Sodium, %	-	-	51.1	35.2	47.2	56.4	37.2	31.1	30.7	34.9	
17.	SAR, meq/L	-	-	2.96	3.3	3.05	2.94	1.90	1.42	1.52	1.65	
18.	TKN mg/L	-	-	BDL	BDL	11.6	BDL	BDL	BDL	BDL	BDL	
19.	Total Alkalinity mg/L as CaCO ₃	200	600	143.5	142.1	214	167	42.2	147.1	181.8	180.4	
20.	Turbidity NTU	-	-	-	-	15.7	-	-	-	-	-	
21.	TSS mg/L at 103-105°C	-	-	-	-	20.2	-	-	-	-	-	
22.	BOD mg/L at 27 3 days	-	-	-	-	12.4	-	-	-	-	-	
23.	COD mg/L	-	-	-	-	20.5	-	-	-	-	-	
24.	Hexavalent Chromium mg/L	-	-	-	-	BDL	-	-	-	-	-	

BDL – Below Detection Limit. Detection Limit - Nitrite: 0.02; Phosphate-P: 0.01; Ammonia-N: 1; TKN: 5.

Table.12: Analysis results of Groundwater samples collected from agricultural fields at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar regions on 1st September, 2025.

S. No.	Test Parameter	Standard limit as per IS 10500:2012 (RA 2018, RA 2023)		All results expressed as mg/L			
		Acceptable limit (mg/L)	Permissible limit** (mg/L)	Sample Code			
				Chikkaballapura region		Kolar region	
				1-SP-W	2-SP-W	3-KL-W	3A-KL-W
				Soppahalli	Soppahalli	Thurandahalli	Thurandahalli
N13.494963 E77.784443	N13.494843 E77.775472	N13.229350 E78.139631	N13.229691 E78.139580				
1.	Copper	0.05	1.5	BDL	BDL	BDL	BDL
2.	Lead	0.01	0.01	BDL	BDL	BDL	BDL
3.	Zinc	5.00	15.00	BDL	BDL	BDL	BDL
4.	Nickel	0.02	0.02	BDL	BDL	BDL	BDL
5.	Iron	0.30	0.30	0.14	BDL	BDL	BDL
6.	Manganese	0.10	0.30	BDL	0.03	BDL	0.01
7.	Cadmium	0.003	0.003	BDL	BDL	BDL	BDL
8.	Chromium	0.05	0.05	BDL	BDL	BDL	BDL
9.	Arsenic	0.01	0.05	BDL	BDL	BDL	BDL
10.	Selenium	0.01	0.01	BDL	BDL	BDL	BDL
11.	Cobalt	-	-	BDL	BDL	BDL	BDL
12.	Vanadium	-	-	BDL	BDL	BDL	BDL

*BDL – Below Detection Limit in µg/L; Detection limit – Zn:120; Pb:32; Ba:0.003; As: 25; Cd:5; Co:15; Cr: 12; Cu: 10 Fe: 34; Mn: 4 Se: 156; Ni:14. **In the absence of alternative source.

7. Analysis of heavy metals in ambient air particulate matter samples collected from at the agricultural fields at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar, during re-assessment (2nd to 3rd September 2025):

The analysis of particulate matter (PM₁₀) in ambient air samples collected at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar, are presented in **Table.13**. The results indicated that the particulate matter (PM₁₀) concentration for 8 hours ambient air sampling was 34.6 µg/m³ and 26.5 µg/m³ at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar, respectively. The particulate matter samples collected from the ambient air were analysed to determine the heavy metal concentration. As, Ba, Cd, Cu, Ni, and Pb were analysed in the particulate matter.

Table.13: Analysis results of ambient air samples collected near the agricultural fields at Soppahalli, Chikkaballapura and Thurandahalli, Kolar for heavy metal parameters.

S. No.	Parameters	Unit	Sample Details			
			Chikkaballapura region		Kolar region	
			Soppahalli		Thurandahalli	
			N13.494911, E77.784385		N13.134340, E78.082190	
1.	Particulate Matter - PM ₁₀	µg/m ³	34.6	26.5		
Heavy metals in PM₁₀						
2.	Arsenic	ng/m ³	BDL	BDL		
3.	Barium	µg/m ³	BDL	BDL		
4.	Cadmium	ng/m ³	BDL	BDL		
5.	Copper	ng/m ³	13.25	17.7		
6.	Nickel	ng/m ³	BDL	29.2		
7.	Lead	ng/m ³	BDL	13.1		

BDL – Below Detection Limit. Detection Limit in ng/m³ - Ba: 0.7; As: 5.5; Cd: 1.1; Cu: 2.2; Pb: 7.0; Ni: 3.1.

The concentration of Cu was 13.25 ng/m³ in the particulate matter sample collected at Soppahalli, Chikkaballapura, whereas all other analysed heavy metals were found to be 'below detection limit'. At Thurandahalli, Kolar, the concentration of Cu, Ni, and Pb were found to be 17.7 ng/m³, 29.2 ng/m³,

and 13.1 ng/m³ in the collected particulate matter sample, whereas all other analysed heavy metals were found to be 'below detection limit'.

8. Conclusions:

The Joint Committee constituted by CPCB carried out the comprehensive study for ascertaining the ground reality as detailed in the above sections. In this study samples of vegetable, groundwater & treated wastewater, soil, and ambient air particulate matter were collected from agricultural fields (Nelamanga, Kolar and Chikkaballapura regions) and local markets in and around Bengaluru. These samples were got analysed for various relevant parameters and based on the analysis results, following conclusions are drawn by the committee:

- 1) The vegetable samples collected during February 27th to 28th, 2025 and 1st September, 2025 from the selected agricultural fields in Nelamangala, Kolar, and Chikkaballapur regions as well as local market/APMC market/HOPCOMS in Nelamangala, Bengaluru, and Kolar region got analysed through FSSAI notified laboratory in Bengaluru for 11 heavy metals (viz., Antimony, Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Methyl Mercury, Nickel, Selenium, Tin), 3 minerals (i.e., Iron, Zinc, Manganese), and 230 pesticide residues listed in Food Safety and Standards (Contaminants, Toxins, and Residues) Regulations, 2011 and amendments thereof. Only one element - lead (Pb) was found to be exceeding the FSSR, 2011 standard limits in **19** nos. vegetable samples (collected from local markets in and around Bengaluru) out of **72** nos. of total collected samples from selected agricultural fields (in Nelamangala, Kolar and Chikkaballapur) and local markets in and around Bengaluru (**Table 4**).

- 2) The vegetable samples (**70** Nos) were tested for 230 nos. of pesticide residues, out of which 18 nos. of pesticide residues were detected only in **10** nos. of different vegetable samples collected from the agricultural fields and local markets. Out of 18 nos. of pesticide residues detected, 12 nos. of pesticides were found to be exceeding the (MRL) prescribed in FSSR, 2011 (**Table 5**). The pesticide residue concentrations in the remaining **60** vegetable samples were below LOQ.
- 3) The Soil samples (**26** nos.) were collected from the agricultural fields of Kolar, Chikkaballapura, and Nelamangala and subjected to analysis for 11 nos. of heavy metal parameters (i.e., Copper, Lead, Zinc, Nickel, Iron, Manganese, Cadmium, Total Chromium, Arsenic, Selenium, Mercury). Except **Se**, the concentration of other heavy metals viz., Cu, Pb, Zn, Ni, Fe, Mn, Cd, Cr, As, and Hg in the soil samples were within the range normally observed in case of soils of unpolluted area. The concentration of lead in soil samples collected from Kolar and Chikkaballapura regions are higher than that observed in Nelamangala region.
- 4) The groundwater/treated wastewater samples were subjected to analysis for 12 nos. of heavy metal parameters and 17 nos. of pesticide residues at the Central Environmental Laboratory, KSPCB, Bengaluru, whereas general parameters in groundwater/treated wastewater samples were analysed at the Regional Laboratory, CPCB, RD Bengaluru.

The analysis results indicate that Cu, Pb, Cd, As, Se, Sb and Hg were 'below the detection limit' of analysis in all water samples whereas Zn, Fe, Mn, Ni, and Cr (total), were detected in some of the samples. The concentrations of Zn, Fe, Ni, and Cr (total) in all 08 nos. of water samples were either 'below the detection limit' of analysis or within the 'Acceptable

limits' whereas, the concentration of Mn was 'below the detection limit' of analysis in 05 water samples, within the 'Acceptable limit' in 02 water samples, and within the 'Permissible limit' in 01 water sample (**Table 09**).

The 07 groundwater and 01 treated wastewater samples collected from agricultural fields in Kolar, Chikkaballapura, and Nelamangala were analysed for 17 nos. of pesticide residue parameters. The concentrations of all 17 nos. of pesticide residues were found to be 'below the detection limit' of analysis i.e., 5µg/L (**Table 10**).

In the four groundwater samples collected on 1st September, 2025 the concentration of all heavy metals except Fe and Mn were 'below detection limit'. In one groundwater sample at Soppahalli, Chikkaballapura, only **Fe** was detected whereas in two groundwater samples collected from the agricultural fields at Soppahalli, Chikkaballapura region and the agricultural field at Thurandahalli, Kolar region, **Mn** was detected. However, the concentrations of Fe and Mn were found to be within the limit prescribed in Drinking water specifications - IS 10500: 2012 (**Table 12**).

- 5) Particulate matter (PM₁₀) in ambient air samples were also collected during re-assessment at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar. The particulate matter collected from the ambient air was analysed to determine the heavy metal concentration. The results indicated that the particulate matter (PM₁₀) concentration for 8 hour ambient air sampling was 34.6 µg/m³ and 26.5 µg/m³ at Soppahalli, Chikkaballapura, and Thurandahalli, Kolar, respectively. As, Ba, Cd, Cu, Ni, and Pb were analysed in the particulate matter. The concentration of Cu was 13.25 ng/m³ in the particulate matter sample collected at

Soppahalli, Chikkaballapura, whereas all other analysed heavy metals were found to be 'below detection limit'. At Thurandahalli, Kolar, the concentration of Cu, Ni, and Pb were found to be 17.7 ng/m³, 29.2 ng/m³, and 13.1 ng/m³ in the collected particulate matter sample, whereas all other analysed heavy metals were found to be 'below detection limit'.

9. Recommendations:

Based on the observations made during the comprehensive study and analysis of vegetables, groundwater/treated wastewater, soil, and ambient air samples, following points are recommended;

- To find out possible source of presence of lead (Pb) in 19 nos. of vegetable samples collected from the local markets in and around Bangaluru, further investigation may be carried out by the Department of Agriculture and FSSAI.
- The pesticides used by the farmers, correlated with pesticide residues found in concentrations higher than the prescribed limits in Capsicum, Chilli Bajji, Cucumber, and Ginger. Action may be taken by concerned authority to stop unscientific and high dosage application of pesticides by the farmers, particularly to vegetables.
- Awareness/training should be organized by the Department of Agriculture, to the farmers on the following aspects;

- a. Appropriate and controlled usage/application of pesticides in agricultural fields for growing agricultural products including vegetables.
 - b. Use of environmentally friendly pesticides
 - c. Controlling pests using sustainable, and green techniques.
 - d. Post-harvest methods to be adopted for cleaning/washing of agricultural produce before sending it to the market/end consumers.
- Awareness/training should be organized by the Department of Agriculture, to the end-consumers about the health effects due to long-term consumption of agricultural produce, especially vegetables contaminated with pesticide residues and heavy metals and importance of cleaning/washing of agricultural produce before consumption.

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J. Chandra Babu
12/2/2026

J. Chandra Babu
REGIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD
REGIONAL DIRECTORATE - BENGALURU
(MIN. OF ENV, FOREST & CC, GOVT OF INDIA)
BENGALURU - 560 079. MOB: 9868278903

Photographs taken during vegetable sample collection during 27.02.2025 and 28.02.2025

Photographs taken during sampling of vegetables at Nelamangala region.



Photograph.1&2: Vajraghattapalya, Kachanahalli, Nelamangala



Photograph.3: Vajraghattapalya, Kachanahalli, Nelamangala



Photograph.4: M/s Shivaganga Farmers Producers Market, Nelamangala.

Photographs taken during sampling of vegetable at Kolar region.



Photograph.1: Agricultural field at Chakarasahalli, Kolar



Photograph.2: Agricultural field at Thurandahalli, Kolar

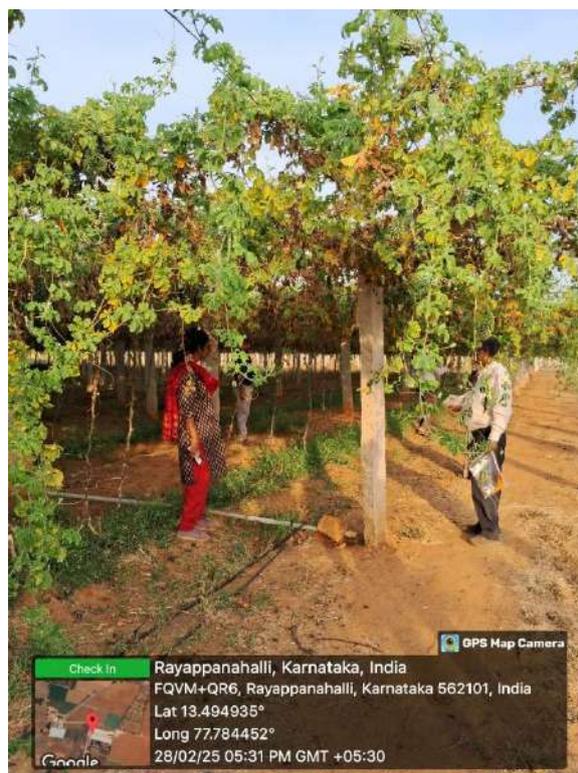
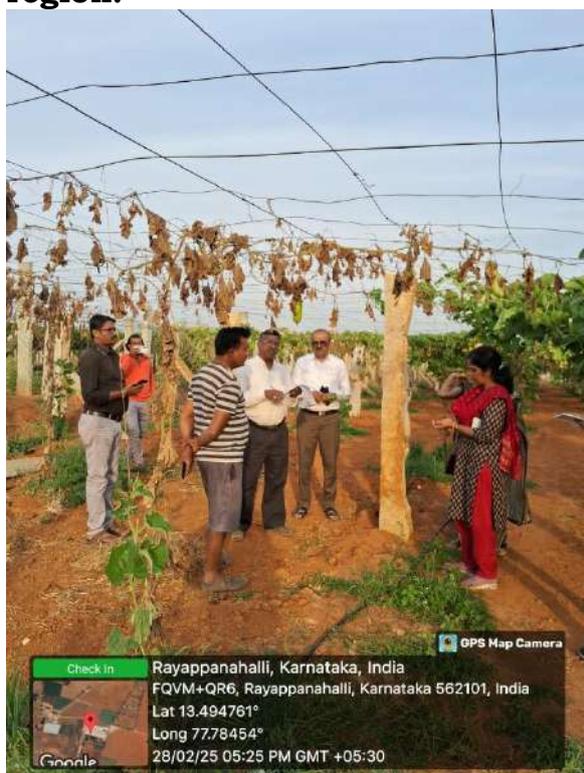


Photograph.3: Near agricultural field at Thurandahalli, Kolar



Photograph.4: APMC market, Kolar

Photographs taken during sampling of vegetable at Chikkaballapura region.



Photograph.1 & 2: Agricultural field at Rayappanahalli, Chikkaballapura

Photographs taken during groundwater and soil sample collection during 12.03.2025 and 13.03.2025

Photographs taken during sampling of soil and groundwater at Kolar region.



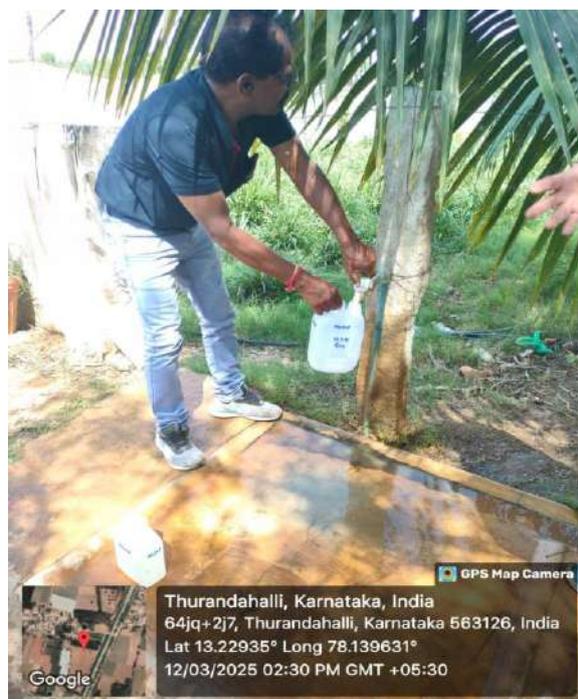
Photograph.1: Soil sample collected from Agricultural field at Chakarasanahalli, Kolar.



Photograph.2: Soil sample collected from agricultural field at Thurandahalli, Kolar.



Photograph.3: Groundwater sample collected from agricultural field at Chakarasanahalli, Kolar.



Photograph.4: Groundwater sample collected from agricultural field at Thurndahalli, Kolar.

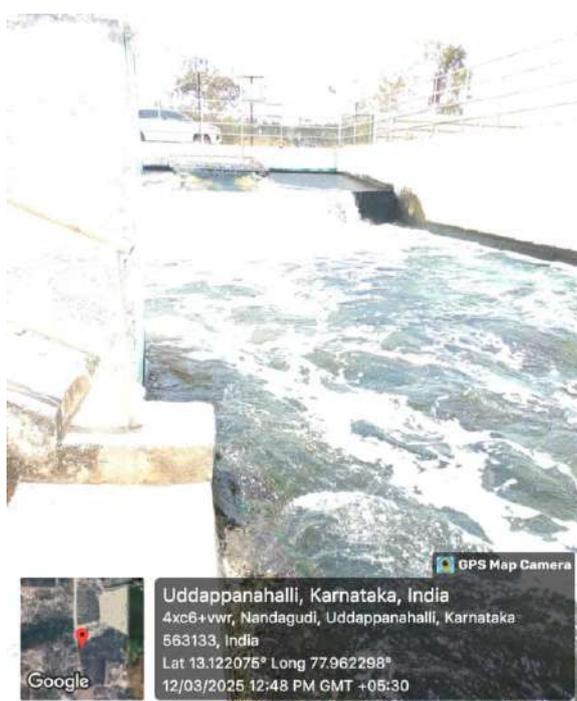
Photographs taken during sampling of soil and groundwater at Chikkaballapura region.



Photograph.1: Soil sample collected from agricultural field at Soppahalli, Chikkaballapura.



Photograph.2: Soil sample collected from agricultural field at Rayappanahalli, Chikkaballapura.

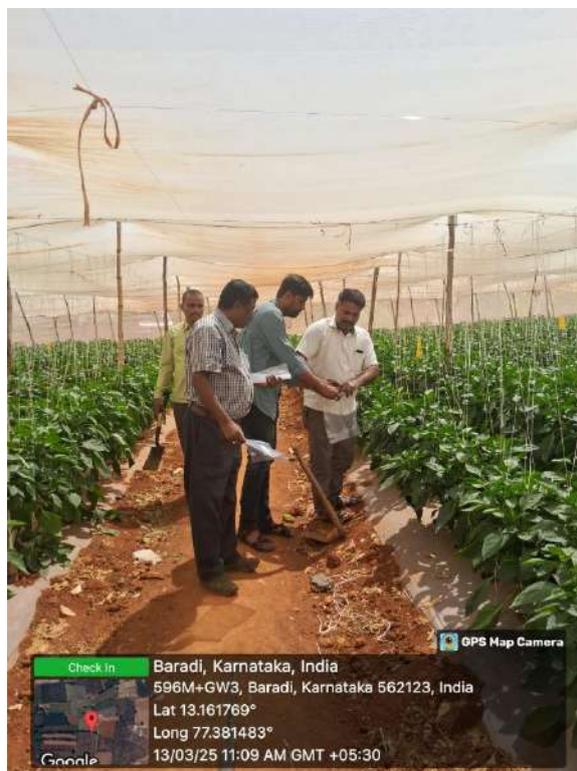


Photograph.3: Treated wastewater sample collected at Uddappanahalli, Kolar.

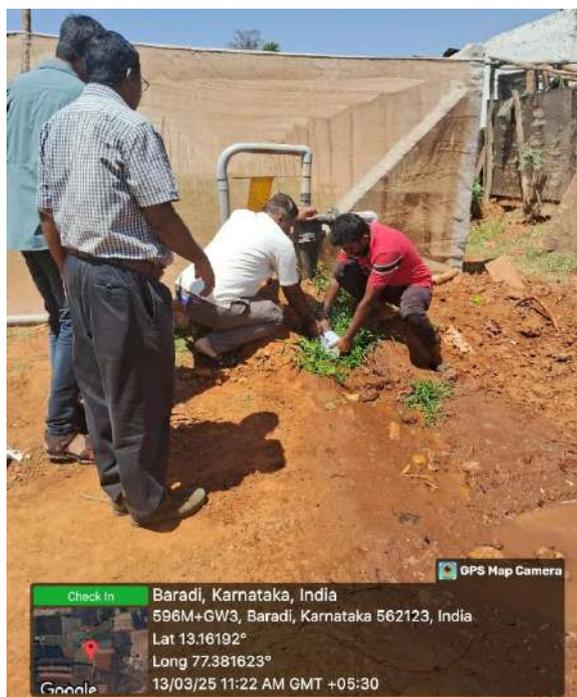
Photographs taken during sampling of soil and groundwater at Nelamangala region.



Photograph.1: Soil sample collected from agricultural field at Machanayakanahalli, Nelamangala.



Photograph.2: Soil sample collected from agricultural field at near Vajraghattapalya, Nelamangala.



Photograph.3: Groundwater sample collected from agricultural field at near Vajraghattapalya, Nelamangala.

Photographs taken during vegetable, soil, and water sample collection on 01.09.2025



Photograph.1: Members of the Joint Committee, Farmers, and other officials.



Photograph.2: Soil sampling at one of the agricultural fields in Soppahalli, Chikkaballapura.



Photograph.3: Soil sampling at one of the agricultural fields in Soppahalli, Chikkaballapura.

Photographs taken during ambient air quality monitoring during 02.09.2025 and 03.09.2025.



Photograph.4: Ambient air quality monitoring at Soppahalli, Chikkballapura on 2nd September, 2025.



Photograph.5: Ambient air quality monitoring at Thurandahalli, Kolar on 3rd September, 2025.

रजिस्ट्री सं० डी० एल०-33004/99

REGD. NO. D.L.-33004/99



भारत का राजपत्र The Gazette of India

असाधारण
EXTRAORDINARY
भाग III—खण्ड 4
PART III—Section 4
प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY



सं. 156]
No. 156]

नई दिल्ली, सोमवार, अगस्त 1, 2011/श्रावण 10, 1933
NEW DELHI, MONDAY, AUGUST 1, 2011/SRAVANA 10, 1933

स्वास्थ्य और परिवार कल्याण मंत्रालय
(भारतीय खाद्य सुरक्षा और मानक प्राधिकरण)
अधिसूचना

नई दिल्ली, 1 अगस्त, 2011

फा.सं. 2-15015/30/2010 (अ) भारतीय खाद्य सुरक्षा और मानक प्राधिकरण, खाद्य सुरक्षा एवं मानक अधिनियम, 2006 (2006 का 34) की धारा 20 के साथ पठित धारा 92 की उप-धारा (2) के खण्ड (झ) के अधीन प्रदत्त शक्तियों का प्रयोग करते हुए, खाद्य सुरक्षा और मानक विनियम, जहां तक वे खाद्य सुरक्षा और मानक (संदूषक, आविष और अवशिष्ट) विनियम, 2011 से संबंधित हैं, बनाने का प्रस्ताव करता है, और;

विनियमों का प्रारूप, भारत के राजपत्र, असाधारण, भाग 3, खण्ड 4 में तारीख 20 अक्टूबर, 2010 को पृष्ठ 1 से 776 में समेकित रूप में प्रकाशित किया गया था, जिसमें उस तारीख, जिसको उक्त अधिसूचना वाले राजपत्र की प्रतियां जनता को उपलब्ध कराई गई थीं, से तीन दिन की अवधि समाप्त होने से पहले, उससे प्रभावित होने की संभावना वाले सभी व्यक्तियों से आपत्तियां और सुझाव आमंत्रित किए गए थे;

और राजपत्र की प्रतियां 21 अक्टूबर, 2010 को जनता को उपलब्ध कराई गई थीं;

और उक्त प्रारूप विनियमों पर विनिर्दिष्ट अवधि के भीतर पणधारियों से प्राप्त आक्षेप और सुझावों पर खाद्य सुरक्षा और मानक प्राधिकरण द्वारा विचार कर लिया गया है और उन्हें अंतिम रूप दे दिया गया है।

अतः, अब भारतीय खाद्य सुरक्षा और मानक प्राधिकरण निम्नलिखित विनियम बनाता है, अर्थात्,-

खाद्य सुरक्षा और मानक (संदूषक, आविष और अवशिष्ट)

विनियम, 2011

अध्याय 1

साम्भारण

1.1 : संक्षिप्त नाम और प्रारंभ

1.1.1 : इन विनियमों का संक्षिप्त नाम खाद्य सुरक्षा और मानक (संदूषक, आविष और अवशिष्ट) विनियम, 2011 है।

1.1.2 : ये विनियम, 5 अगस्त, 2011 को या इसके प्रस्ताव प्रवृत्त होने:

1.2 : परिभाषाएं—

1. "फसल संदूषक" से ऐसा पदार्थ अभिप्रेत है जो खाद्य पदार्थ में बानबूझ कर मिश्रित नहीं किया जा सकता बल्कि जो उनके उत्पादन (फसल पालन, पशुपालन और पशु औषधि में किए गए प्रचालनों सहित), विनिर्माण, प्रसंस्करण, तैयारी, उपचार, पैकेजिंग, पैकेजिंग, परिवहन या पर्यावरणोपय संदूषण के परिणामस्वरूप ऐसे खाद्य पदार्थ संचालने की प्रक्रिया में खाद्य पदार्थों में मिश्रित हो जाता है।

अध्याय 2

संदूषक, आविष और अवशिष्ट

2.1 : धातु संदूषक

2.1.1

(1) भारतीय भेषज कोष के मोनोग्राफ में वर्णित रसायनों में जब उनका खाद्य में उपयोग किया जाए, तबसमय प्रत्येक भारतीय भेषज कोष के समुचित मोनोग्राफों में विनिर्दिष्ट सीमा के परे धातु संदूषक अवशिष्ट नहीं होंगे।

(2) विनियम 2.1.1(1) के उपबंधों के होते हुए भी, नीचे की सारणी के स्तंभ (2) में विनिर्दिष्ट खाद्य की किसी सामग्री में धातु संदूषक के स्तंभ (3) में विनिर्दिष्ट मात्रा से अधिक कोई विनिर्दिष्ट धातु नहीं होगी :

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संदूषक धातु का नाम	खाद्य पदार्थ	भारतानुसार मात्रा प्रति दस लक्ष
(1)	(2)	(3)
2. सीसा	(i) पेय : सांद्रित मृदु पेय (किंतु इसके अंतर्गत मृदु पेयों के विनिर्माण में, प्रयुक्त सांद्र नहीं है)	0.5
	फल और सब्जी रस (जिनके अंतर्गत टमाटर रस भी है किंतु इसके अंतर्गत लहसुन जूस और नीम्बू का रस नहीं है)	1.0
	मृदु पेयों, लाइम जूस, और नीम्बू रस के विनिर्माण में प्रयुक्त सांद्र	2.0
	(i-क) बेकिंग पाउडर	10
	(i-ख) खाद्य तेल और वसा	0.5
	(i-ग) शिशु दुग्ध अनुकल्प और शिशु आहार	0.2
	(i-घ) हल्दी सांद्रित और चूर्ण	10.0
	(ii) अन्य खाद्य	
	एनहाइड्रल डेकट्रॉस मोनोहाइड्रेट खाद्य तेल और वसा, परिष्कृत सीसा चूर्ण संतृप्त वसा तत्व (0.3 प्रतिशत से अधिक न हो)	0.5
	आइसक्रीम, आर्जस लोली और ऐसे ही जमाए हुए कच्चे क्रीम	1.0

(1)	(2)	(3)
	डिब्बाबंद मछली, डिब्बाबंद मांस, खाद्य जिलेटिन, मांस सारतत्व और हाइडालीकृत प्रोटीन खुला या निर्जलित सब्जी (प्याज से भिन्न)	5.0
	सभी प्रकार की चीनी, चीनी का सिरप, इन्वर्ट चीनी और सीधे उपयोग की रजित चीनी जिसमें सल्फेटोक्त भस्म तत्व 1.0 प्रतिशत से अधिक है।	5.0
	कच्ची चीनी, उसको छोड़कर जो सीधे उपयोग के लिए बेची जाती है या परिष्कृत चीनी के विनिर्माण से भिन्न विनिर्माण प्रयोजनों के लिए उपयोग की जाती है।	5.0
	खाद्य सिरा, करोमेल, द्रव और ठोस ग्लूकोस और स्टार्च कन्वर्जन उत्पाद जिसमें 1.0 प्रतिशत से अधिक सल्फेटोक्त भस्म तत्व है	5.0
	कोको पाउडर	5.0 शुष्क वसा मुक्त पदार्थ पर
	खमीर और खमीर उत्पाद	5.0 शुष्क पदार्थ पर
	चाय, निर्जलित प्याज, सूखी हर्ब और मसाले, सुरचिकारक, अल्जीनोिक अम्ल, एल्डीनेट्स, अगर, केरागिन और अन्य उत्पाद जो समुद्री शैवाल से प्राप्त किए गए हैं।	10.0 सूखे पदार्थ पर
	द्रव पैक्टिन, रसायन जो अन्यथा विनिर्दिष्ट नहीं है, किंतु खाद्य के संघटक के रूप में या उसकी निर्मित में या उसके प्रसंस्करण में प्रयोग किए जाते हैं।	10.0
	करोमेल से भिन्न खाद्य रंजक	10.0 सूखी रंजक सूक्ष्म पर
	ठोस पैक्टिन	5.0
	हार्ड बयॉलड शुगर कन्फैक्शनरी	2.0
	लौह प्रबलित सामान्य नमक	2.0
	कार्नेड बीफ, लंचन मीट, कुकड हैम, चोपड मीट, डिब्बाबंद चिकन, डिब्बाबंद मटन और गोट मीट तथा अन्य संबन्धित मीट उत्पाद।	2.5
	किण्वित विनेगार और सरिलिष्ट विनेगार	5.0
	(iii) खाद्य जो विनिर्दिष्ट नहीं है	2.5
2	छांदा	
	(i) पेय :	
	शुद्ध पेय, सांद्र और कार्बोनिक्ृत जल को छोड़कर	7.0
	कार्बोनिक्ृत जल	1.5
	ताड़ी	5.0
	शुद्ध पेयों के लिए सांद्र	20.0
	(ii) अन्य खाद्य	
	सूखी और भूनी हुई कासनी, काफी की फली, सुरचिकारक/पैक्टिन द्रव	30.0
	द्रव रंजक	30.0 सूखे रंजक पदार्थ पर

(1)	(2)	(3)
	खाद्य चिलेटिन	30.0
	टमाटर केचअप	50.0 सूखे पदार्थ पर
	खमीर और खमीर उत्पाद	60.0 सूखे पदार्थ पर
	कोका चूर्ण	70.0 वसा मुक्त पदार्थ
	टमाटर प्यूरी, पेस्ट, चूर्ण, रस तथा कोकटेल	100.0 सूखे टमाटर ठोस पर
	चाय	150.0
	पैक्टिन ठोस	300.0
	हार्ड बोर्डेड शुगर कन्फैक्शनरी	5.0
	लौह प्रबलित सामान्य नमक	2.0
	हल्दी साबुत और चूर्ण	5.0
	संतरे, अंगूर, सेब, टमाटर, अनानास और नींबू का रस	5.0
	किसी फल का गूदा और गूदा उत्पाद	5.0
	शिशु दुग्ध अनुकल्प और शिशु आहार	15.0 (कित्तु 2.8 से कम नहीं)
	फिण्डित विनेगार और सॉरिलिष्ट विनेगार	शून्य
	मुनी शक्कर	20
	(iii) खाद्य जो विनिर्दिष्ट नहीं है	30.0
3. आरसेनिक	(i) दूध	0.1
	(ii) पेय :	
	कार्बनिकृत जल को छोड़कर तनुकरण के पश्चात् उपभोग के लिए आशयित मुद्दु पेय	0.5
	कार्बनिकृत जल	0.25
	शिशु दुग्ध अनुकल्प और शिशु आहार	0.05
	हल्दी साबुत और चूर्ण	0.1
	संतरे, अंगूर, सेब, टमाटर, अनानास और नींबू का रस	0.2
	किसी फल का गूदा और गूदा उत्पाद	0.2
	परिष्करी प्रति आक्सीकारक, पायसीकारक और स्थायीकारक और कृत्रिम खाद्य रंग	3.0 सूखी सामग्री पर
	आईसक्रोम, आईस लोली और ऐसे ही जमाए हुए कन्फैक्शन	0.5
	निर्बलीकृत प्याज, खाद्य चिलेटिन, द्रव पैक्टिन	2.0
	कासनी सूखी या भूनी हुई	4.0
	सूखी हर्ब, फाईनिंग और स्वच्छलाकारक अधिकमंक और सभी ग्रेड के ठोस पैक्टिन, अधिकमंक, भसाले	5.0

(1)	(2)	(3)
	कृत्रिम रंजक से भिन्न खाद्य रंग	5.0 सूखे रंजक पदार्थ पर
	हार्ड वॉइल्ड शुगर कन्फेक्शनरी	1.0
	लौह प्रबलित सामान्य नमक	1.0
	किण्वित विनेगार और सखिलष्ट विनेगार	0.1
	(iii) खाद्य जो विनिर्दिष्ट नहीं है	1.1
4 टिन	(i) प्रसंस्कृत और डिब्बाबंद उत्पाद	250.0
	(i-क) हार्ड वॉइल्ड शुगर कन्फेक्शनरी	5.0
	(i-कक) जैम, जैली और मारमलाड	250
	संतरे, सेब, टमाटर, अनानास और नींबू का रस	250
	किसी फल का गूदा और गूदे का उत्पाद	250
	(i-ख) शिशु दुग्ध अनुकल्प और शिशु आहार	5.0
	(i-ग) हल्दी साबुत और चूर्ण	शून्य
	(i-घ) कार्नाडबीफ, लंचन मीट, कुकड हैम, चोप मीट, डिब्बाबंद चिकन, डिब्बाबंद मटन और बकरे का मीट तथा अन्य संबंधित मीट उत्पाद	250
	(ii) खाद्य जो विनिर्दिष्ट नहीं है	250
5 जस्ता	(i) पीने के लिए तैयार पेय	5.0
	संतरे, अंगूर, टमाटर, अनानास और नींबू का रस	5.0
	किसी फल का गूदा और गूदे का उत्पाद	5.0
	(i-क) शिशु दुग्ध अनुकल्प और शिशु आहार	50.0 (कितु 25.0 से कम नहीं)
	(ii) खाद्य जिलेटिन	100.0
	(ii-क) हल्दी साबुत और चूर्ण	25.0
	(iii) फल और शाक उत्पाद	50.0
	(iii-क) हार्ड वॉइल्ड शुगर कन्फेक्शनरी	5.0
	(iv) खाद्य जो विनिर्दिष्ट नहीं है	50.0
6 केडमियम	(i) शिशु दुग्ध अनुकल्प और शिशु आहार	0.1
	(iii) हल्दी साबुत और चूर्ण	0.1
	(iii) अन्य खाद्य	1.5
7 पारद	मछली	0.5
	अन्य खाद्य	1.0

(1)	(2)	(3)
8.	मैथिल पारद सनी खाद्य (मूल वस्त्र रूप में प्रकल्पित)	0.25
9.	क्रोमियम रिफाईंड चीनी	20 प्रति दस लाख भाग
10.	निकल सभी हाइड्रोजनीकृत आंशिक रूप से हाइड्रोजनीकृत, इटस्ट्रीफाईड वनस्पति तेल और वस्त्र जैसे वनस्पति, टेबल मार्गरीन, बेकरी और औद्योगिक मार्गरीन, बेकरी - अचकुचन, फ़ैट प्रेड और आंशिक रूप से हाइड्रोजनीकृत सोयाबीन का तेल	1.5

2.2 : फसल संदूषक और प्राकृतिक रूप से आने वाले विषैले पदार्थ

2.2.1

(1) नीचे दी गई सारणी के स्तम्भ (2) में विनिर्दिष्ट किसी भी खाद्य पदार्थ में कोई ऐसा फसल संदूषक, जो स्तम्भ (1) में उल्लिखित प्रविष्टि में विनिर्दिष्ट है, उन मात्रों से अधिक नहीं होगा जो उक्त सारणी के स्तम्भ (3) में उल्लिखित प्रविष्टि में विनिर्दिष्ट हैं :

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क्र.सं.	संदूषकों का नाम	खाद्य पदार्थ	ग्राम/कि.ग्रा.सोना
1.	एफ्लाटोक्सिन	सभी खाद्य पदार्थ	30
2.	एफ्लाटोक्सिन एम	दूध	0.5
3.	पटुलिन	सेब का जूस और अन्य पेयों में सेब के जूस के संघटक	50
4.	ओक्राटोक्सिन ए	गेहूँ, जौ और राई	20

(2) प्राकृतिक रूप से आने वाले विषैले पदार्थ :

नीचे दी गई सारणी के स्तम्भ (1) में विनिर्दिष्ट विषैले पदार्थ जो किसी खाद्य पदार्थ में प्राकृतिक रूप से आएँ, उस सीमा से अधिक नहीं होंगे जो उक्त सारणी के स्तम्भ (2) में उल्लिखित प्रविष्टि में विनिर्दिष्ट हैं :

क्र.सं.	पदार्थ का नाम	अधिकतम सीमा
(1)	(2)	(3)
1.	अपेरिक अम्ल	100 भाग प्रति दस लाख
2.	हाइड्रोसाइनिक अम्ल	5 भाग प्रति दस लाख
3.	हाइपेरॉसिन	1 भाग प्रति दस लाख
4.	सोफरोल	10 भाग प्रति दस लाख

2.3 : अवशिष्ट

2.3.1 : कीटनाशकों के उपयोग पर निर्बंधन :

(1) विधिवत 2.3.1 (ii) के उपबंधों के अधीन रहते हुए, खाद्य पदार्थों पर किसी कीटनाशी का सीधे प्रयोग नहीं किया जाएगा :

परंतु यह विनियम तब कोई भी बात उन घुमकों को लागू नहीं होगी जो कीटनाशी अधिनियम, 1968 (1968 का 45) की धारा 5 के अधीन, राष्ट्रीय रजिस्ट्रिकरण समिति द्वारा खाद्य पदार्थों पर उस रूप में प्रयोग के लिए रजिस्ट्रीकृत हैं और जिनकी सिफारिश की गई है।

(2) नीचे दी गई सारणी के स्तम्भ (3) में उल्लिखित खाद्यों में स्तम्भ (2) में उल्लिखित कीटनाशकों की मात्रा, स्तम्भ (4) में उल्लिखित अंशों से अधिक नहीं होगी।

क्र.सं.	कीटनाशी का नाम	खाद्य	सह्यता सीमा मि.ग्र./ कि.ग्र. (भा.प्र.द.ला)
(1)	(2)	(3)	(4)
1.	पेट्टिडिन, डील्टिडिन (यह सीमा डील्टिडिन और डील्टिडिन पर अकेले या संयुक्त रूप से लागू होती है तथा उन्हें डील्टिडिन के रूप में अभिव्यक्त किया जाता है)	खाद्यान्न	0.01
		खाद्यान्न क्यूटे-पीसे	शून्य
		दूध और दूध उत्पाद	0.15 (बसा के आधार पर)
		फल और शाक	0.1
		यदि	0.2
		अंडे	0.1 (छिलका रहित आधार पर)
2.	कारबोरिल	मछली	0.2
		खाद्यान्न	1.5
		खाद्यान्न क्यूटे-पीसे	शून्य
		भिण्डो और पत्तो वाले शाक	10.0
		आलू	0.2
		अन्य शाक	5.0
		खिलेला (पुष्प)	1.0
		दिल	1.0
		मछली	0.00
		बाजरा	2.50
		जिरे	5.00
3.	क्वैथेन (अवशिष्ट सिमिथेन और हायड्रोक्वैथेन के रूप में मिला जाएगा)	खाद्यान्न	0.02
		खाद्यान्न क्यूटे-पीसे	शून्य
		दूध और दूध उत्पाद	0.05 (बसा के आधार पर)
		शाक	0.2
		फल	0.1
		दूध उत्पाद	0.3
4.	डी.डी.टी. (सिंथेटिक डी.डी.टी., डी.डी.टी. और डी.डी.टी. पर अकेले या संयुक्त रूप से लागू होती है)	दूध और दूध उत्पाद	1.25 (बसा के आधार पर)
		फल और शाक, आलू सहित	3.5

(1)	(2)	(3)	(4)
		मांस कुक्कुट और मछली	7.0 (कुल उत्पाद के आधार पर)
		अंडे	0.5 (छिलका रहित आधार पर)
5.	डी.डी.टी. (एकल)	कार्बनिकृत जल	0.001
6.	डी.डी.डी. (एकल)	कार्बनिकृत जल	0.001
7.	डी.डी.ई. (एकल)	कार्बनिकृत जल	0.001
8.	डायोजिनान	खाद्यान्न	0.05
		खाद्यान्न कुट-पीसे	शून्य
		शाक	0.5
9.	डाइक्लोरस (जहां सीव हो डाइक्लोरो-एसेटेएलडिहाइड (डी.सी.ए.) अंश भी दिया जाएगा)	खाद्यान्न	1.0
		कुटा पिसा खाद्यान्न	0.25
		शाक	0.15
		फल	0.1
10.	डाइकोफोल	फल और शाक	5.0
		चाय (सूखी त्रिनिमित)	5.0
		मिर्च	1.0
11.	डाइमथेएट (अवशिष्ट को डाइमथेएट के रूप में अवधारित किया जाएगा और उसे डाइमथेएट के रूप में व्यक्त किया जाएगा)	फल और शाक	2.0
		मिर्च	0.5
12.	एंडोसल्फेन (अवशिष्टों को एंडोसल्फेन ए और बी तथा एंडोसल्फेन सल्फेट के कुल योग के रूप में मापा और व्यक्त किया जाएगा)	फल और शाक	2.0
		बिनौला	0.5
		बिनौला तेल(अपरिष्कृत)	0.2
		बंगाल चना	0.20
		हरा मटर	0.10
		मछली	0.20
		मिर्च	1.0
		इलायची	1.0
13.	एंडोसल्फेन ए	कार्बनिकृत जल	0.001
14.	एंडोसल्फेन बी	कार्बनिकृत जल	0.001

(1)	(2)	(3)	(4)
15.	एंडोसल्फेन -सल्फेट	कार्बनिकृत	0.001
16.	फेनिट्रोथियान	खाद्यान्न	0.02
		कुटे-पिसे खाद्यान्न	0.005
		दूध और दुग्ध उत्पाद	0.05 (वसा के आधार पर)
		फल	0.5
		शाक	0.3
		मांस	0.03
17.	हैप्टाक्लोर (हैप्टाक्लोर और उसके इपाक्साइड की सम्मिलित अवशिष्टियों को हैप्टाक्लोर के रूप में अवधारित और व्यक्त किया जाएगा)	खाद्यान्न	0.01
		कुटे-पिसे खाद्यान्न	0.002
		दूध और दुग्ध उत्पाद	0.15 (वसा के आधार पर)
		शाक	0.05
18.	हाइड्रोजन साइनाइड	खाद्यान्न	37.5
		कुटे-पिसे खाद्यान्न	3.0
19.	हाइड्रोजन फासफाइड	खाद्यान्न	शून्य
		कुटे-पिसे खाद्यान्न	शून्य
20.	अकार्बनिक ब्रोमाइड (सभी स्रोतों से कुल ब्रोमाइड के रूप में अवधारित और व्यक्त)	खाद्यान्न	25.0
		कुटे-पिसे खाद्यान्न	25.0
		फल	30.0
		सूखे फल	30.0
		मसाले	400.00
21.	हेक्साक्लोरोसाइक्लोहेक्सेन और आइसोमर		
	(क) अल्फा (α) आइसोमर	चावल दाना बिना पालिश किया हुआ	0.10
		चावल दाना पालिश किया हुआ	0.05
		दूध (पूर्ण)	0.025
		फल और शाक	1.00
		मछली	0.25
		कार्बनिकृत जल	0.001
	(ख) बीटा (β) आइसोमर	चावल दाना बिना पालिश किया हुआ	0.10
		चावल दाना पालिश किया हुआ	0.05

(1)	(2)	(3)	(4)
		दूध (पूर्ण)	0.02
		फल और शाक	1.00
		मछली	0.25
		कार्बनिकृत जल	0.001
	(ग) गामा (γ) आइसोमर लिंडेन के रूप में जाना जाता है	चावल को छोड़कर खाद्यान्न	0.10
		खाद्यान्न कुटे-पीसे	शून्य
		चावल दाना बिना पालिश किया हुआ	0.10
		चावल दाना पालिश किया हुआ	0.05
		दूध	0.01 (पूर्ण आधार पर)
		दुग्ध उत्पाद	0.20
		दुग्ध उत्पाद (दो प्रतिशत से कम वसा)	0.20 (पूर्ण आधार पर)
		फल और शाक	1.00
		मछली	0.25
		अंडे	0.10 (छिलका रहित आधार पर)
		मांस और कुक्कुट	2.00 (पूर्ण आधार पर)
		कार्बनिकृत जल	0.001
	(घ) डेल्टा (δ) आइसोमर	चावल दाना बिना पालिश किया हुआ	0.10
		चावल दाना पालिश किया हुआ	0.05
		दूध (पूर्ण)	0.02
		फल और शाक	1.00
		मछली	0.25
		कार्बनिकृत जल	0.001
22.	मेलाथियान (मेलाथियान को मेलाथियान और मेल आक्सान की सम्मिलित अवशिष्टियों के रूप में अवधारित और व्यक्त किया जाएगा)	खाद्यान्न	4.0
		कुटे-पीसे खाद्यान्न	1.0
		फल	4.0
		शाक	3.0
		सूखे फल	8.0
		कार्बनिकृत जल	0.001

(1) (2)	(3)	(4)
23. पैराथियान (पैराथियान और पैरा आक्सान की सम्मिलित अवशिष्टियों को पैराथियान के रूप में अवधारित और व्यक्त किया जाएगा)	फल और शाक	0.5
24. पैराथियान मैथिल (पैराथियान मैथिल और उसके आक्सीजन अनुरूप की सम्मिलित अवशिष्टियों को पैराथियान मैथिल के रूप में अवधारित और व्यक्त किया जाएगा)	फल	0.2
	शाक	1.0
25. फास्फ एमाइडन अवशेष (फास्फ एमाइडन और उसके डिसेथाइल व्युत्पन्नों के योग के रूप में अभिव्यक्त)	खाद्यान्न	0.05
	कुटे-पीसे खाद्यान्न	शून्य
26. पाइरेथिन (पाइरेथिन I और II तथा पाइरेथिन के अन्य संरचनात्मक रूप से संब) कीटनाशीय संघटकों का योग)	फल और शाक	0.2
	खाद्यान्न	शून्य
	कुटे-पीसे खाद्यान्न	शून्य
27. क्लोरीएनविनफोस (अवशिष्टों को क्लोरीएन-विनफोस के अल्फा और बिटा आइसोमर के रूप में मापा जाएगा)	फल और शाक	1.0
	खाद्यान्न	0.025
	कुटे-पीसे खाद्यान्न	0.006
	दूध और दुग्ध उत्पाद	0.2 (वसा के आधार पर)
	मांस और कुक्कुट	0.2 (कार्कस वसा)
	शाक	0.05
	मूंगफली	0.05 (छिलका रहित आधार पर)
बिनौला	0.05	
28. क्लोरो बैंजीलेट	फल	1.0
29. क्लोरपाइरिफोस	सूखे फल, बादाम और अखरोट	0.2 (छिलका रहित आधार पर)
	खाद्यान्न	0.05
	कुटे-पीसे खाद्यान्न	0.01
	फल	0.5
	आलू और प्याज	0.01
	फूल गोभी और पत्ता गोभी	0.01
	अन्य शाक	0.2

(1)	(2)	(3)	(4)
		मांस और कुक्कुट	0.1 (कार्कस वसा)
		दूध और दुग्ध उत्पाद	0.01 (वसा के आधार पर)
		बिनौला	0.05
		बिनौला तेल (अपरिष्कृत)	0.025
		कार्बनिकृत जल	0.001
30.	2, 4डी	खाद्यान्न	0.01
		कुटे-पीसे खाद्यान्न	0.003
		आलू	0.2
		*दूध और दुग्ध उत्पाद	0.05
		*मांस और कुक्कुट	0.05
		अंडे	0.05 (छिलका रहित आधार पर)
		फल	2.0
31.	इथिओन (अवशिष्टों का इथिओन और इसके आक्सीजन अनुरूप के रूप में अवधारित और इथिओन के रूप में व्यक्त किया जाएगा)	चाय (सूखी विनिर्मित)	5.0
		खीरा और स्कैश	0.5
		अन्य शाक	1.0
		बिनौला	0.5
		दूध और दुग्ध उत्पाद	0.5 (वसा के आधार पर)
		मांस और कुक्कुट	0.2 (कार्कस वसा के आधार पर)
		अंडे	0.2 (छिलका के आधार पर)
		खाद्यान्न	0.025
		कुटे-पीसे खाद्यान्न	0.006
		आड़ू	1.0
		अन्य फल	2.0
		सूखे फल	0.1 (छिलके रहित के आधार पर)
32.	फार्मोथिओन (डाइमथेएटो और इसके आक्सीजन अनुरूप के रूप में अवधारित और डाइमथेएटो के रूप में व्यक्त किया जाएगा सिवाय इसके कि सिट्रस फल के मामले में जहां इसे फार्मोथिओन के रूप में अवधारित किया जाएगा)	सिट्रस फल	0.2
		अन्य फल	1.0
		शाक	2.0

(1)	(2)	(3)	(4)
		काली मिर्च और टमाटर	1.0
33.	मोनोक्रोमेटोफोस	खाद्यान्न	0.025
		कुटे पीसे खाद्यान्न	0.006
		सिट्रस फल	0.2
		अन्य फल	1.0
		गांजर, शलगम आलू और चुकन्दर	0.05
		प्याज और मटर	0.1
		अन्य शाक	0.2
		बिनीला	0.1
		बिनीला तेल (कच्चा)	0.05
		मांस और कुक्कुट	0.02
		दूध और दुग्ध उत्पाद	0.02
		अंडा	0.02 (छिलका रहित आधार पर)
		काफी (कच्ची फलियां)	0.1
		मिर्च	0.2
		इलायची	0.5
34.	पैराक्वेट डाइक्लोराइड (पैराक्वेट धनायन के धनायन पर अवधारित)	खाद्यान्न	0.1
		कुटे पीसे खाद्यान्न	0.025
		आलू	0.2
		अन्य शाक	0.05
		बिनीला	0.2
		बिनीला तेल (खाद्य परिष्कृत)	0.05
		दूध (पूर्ण)	0.01
		फल	0.05
35.	फोसालोन	नाशपाती	2.0
		सिट्रस फल	1.0
		अन्य फल	5.0
		आलू	0.1
		अन्य शाक	1.0
		रेपसीड तेल/सरसों तेल (अपरिष्कृत)	0.05

(1) (2)	(3)	(4)
36. ट्राइक्लोरोफोन	खाद्यान्न	0.05
	कुटे पीसे खाद्यान्न	0.0125
	चुकन्दर	0.05
	फल और शाक	0.1
	तिलहन	0.1
	खाद्य तेल (परिष्कृत)	0.05
	मांस और कुक्कुट	0.1
	दूध (पूर्ण)	0.05
37. थियोमेटन (अवशिष्टों को थियोमेटन सल्फाक्साइड और सल्फोन के रूप में अवधारित और थियोमेटन के रूप में व्यक्त किया जाएगा)	खाद्यान्न	0.025
	कुटे पीसे खाद्यान्न	0.006
	फल	0.5
	आलू, गाजर और चुकन्दर	0.05
38. ऐसिफेट	अन्य शाक	0.5
	कुसुम्भ	2.0
39. मेथीमाडोफोल (ऐसिफेट का चयापचित)	बिनीला	2.0
	कुसुम्भ	0.1
40. एल्डीकार्ब (एल्डीकार्ब, उसके सल्फोक्साइड और सल्फोन का योग, जो एल्डीकार्ब के रूप में अभिव्यक्त हो)	बिनीला	0.1
	आलू	0.5
41. ऐट्रेजाइन	चबाने का तम्बाकू	0.1
	भुट्टा	शून्य
42. कार्बेण्डेजिम	गन्ना	0.25
	खाद्यान्न	0.50
	कुटे पीसे खाद्यान्न	0.12
	सब्जियां	0.50
	आम	2.00
	केला (संपूर्ण)	1.00
	अन्य फल	5.00
	बिनीला	0.10
मूंगफली	0.10	

(1)	(2)	(3)	(4)
		चुकन्दर	0.10
		मेवे (सूखे फल)	0.10
		अंडे	0.10 (छिलकारहित आधार पर)
		मांस और कुक्कुट	0.10 (कार्कस वसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.10 (वसा के आधार पर)
43.	बेनोमिल	खाद्यान्न	0.50
		कुटे पीसे खाद्यान्न	0.12
		सब्जियां	0.50
		आम	2.00
		केला (संपूर्ण)	1.00
		अन्य फल	5.00
		किनीला	0.10
		मूंगफली	0.10
		चुकन्दर	0.10
		सूखे फल	0.10
		अंडे	0.10 (छिलकारहित आधार पर)
		मांस और कुक्कुट	0.10 (कार्कस वसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.10 (वसा के आधार पर)
44.	कैपटेन	फल और सब्जियां	15.00
45.	कार्बोफूरन (कार्बोफूरन और 3-हाइड्रोक्सी कार्बोफूरन का योग जिसे कार्बोफूरन के रूप में व्यक्त किया गया है)	खाद्यान्न	0.10
		कुटे पीसे खाद्यान्न	0.03
		फल और सब्जियां	0.10
		तिलहन	0.10
		गन्ना	0.10
		मांस और कुक्कुट	0.10 (कार्कस वसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.05 (वसा के आधार पर)
46.	ताम्र अक्सीक्लोराइड (ताम्र के रूप में अवधारित) फल		20.00
		आलू	1.00
		अन्य सब्जियां	20.00

(1)	(2)	(3)	(4)
47.	साइपरमैथिरिन (आइसोमर का योग) (बसा विलेय अवशिष्ट)	गेहूँ के दाने	0.05
		कूटे पिसे गेहूँ के दाने	0.01
		बैंगन	0.20
		बंद गोभी	2.00
		पिंडी	0.20
		नूंगफली को छोड़कर तिलहन	0.20
		मांस और कुक्कुट	0.20 (कार्कस बसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.01 (बसा के आधार पर)
48.	डेकामेथ्रिन/डेल्टामेथ्रिन	बिनौला	0.10
		खाद्यान्न	0.50
		कूटे पिसे खाद्यान्न	0.20
		चावल	0.05
49.	एडीफेनफोस	चावल	0.02
		चावल भूसी	1.00
		अंडे	0.01 (छिलका रहित के आधार पर)
		मांस और कुक्कुट	0.02 (कार्कस बसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.01 (बसा के आधार पर)
50.	फेनथिऑन (फेनथिऑन, उसके आक्सीजन अनुषंगी उनके सल्फोक्साइडों और सल्फोनें का योग, जिन्हें फेनथिऑन के रूप में व्यक्त किया गया है)	खाद्यान्न	0.10
		कूटे पिसे खाद्यान्न	0.03
		प्याज	0.10
		आलू	0.05
		फलियाँ	0.10
		मटर	0.50
		टमाटर	0.50
		अन्य सब्जियाँ	1.00
		खरबूजा	2.00
		मांस और कुक्कुट	2.00 (कार्कस बसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.05 (बसा के आधार पर)

(1)	(2)	(3)	(4)
51.	फैनबैलरेट (वसा विलेय अवशिष्ट)	फूल गोभी	2.00
		बैंगन	2.00
		भिंडी	2.00
		बिनौला	0.20
		बिनौला तेल	0.10
		मांस और कुक्कुट	1.00 (कार्कस वसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.01 (वसा के आधार पर)
52.	डाइथायोकार्बोमेट (अवशिष्ट सह्यता सीमाएं अवधारित की जाती हैं और मि.ग्रा./सीएस2/कि.ग्रा. के रूप में व्यक्त की जाती हैं और डाइथायोकार्बोमेट के किन्हीं या प्रत्येक समूहों से व्युत्पन्न अवशिष्टों को पृथक्-पृथक् निर्दिष्ट करके)	खाद्यान्न	0.20
	(क) फेरबैम या जीरम के उपयोग से परिणामी डाइमेथिल डाइथायोकार्बोमेट अवशिष्ट और	कूटे पिसे खाद्यान्न	0.05
		आलू	0.10
		टमाटर	3.00
		चेरी	1.00
	(ख) मनकोजेब, मैनोब या जिनेब (जिसके अंतर्गत जो नाबेम थन ब्रिक सलफेट से व्युत्पन्न जिनेब भी है) के उपयोग से परिणामी ऐथिलोन द्वितसडाइथायो कार्बोमेट	अन्य फल	3.00
	(ग) मैनकोजेब	भिर्च	1.0
53.	फेनथेपट	खाद्यान्न	0.05
		कूटे पिसे खाद्यान्न	0.01
		तिलहन	0.03
		खाद्य तेल	0.01
		अंडे	0.05 (छिलका रहित के आधार पर)
		मांस और कुक्कुट	0.05 (कार्कस वसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.01 (वसा के आधार पर)
54.	फोरेट (फोरेट उसके आक्सीजन अनुष्णगी और उनके सल्फाइड तथा सल्फोन का योग जिन्हें फोरेट के रूप में व्यक्त किया गया है)	खाद्यान्न	0.05
		कूटे पिसे खाद्यान्न	0.01
		टमाटर	0.10
		अन्य सब्जियां	0.05
		फल	0.05
		तिलहन	0.05

(1)	(2)	(3)	(4)
		खाद्य तेल	0.03
		गन्ना	0.05
		अंडे	0.05 (छिलका सहित के आधार पर)
		मांस और कुक्कुट	0.05 (कार्कस वसा के आधार)
		दूध और दुग्ध उत्पाद	0.05 (वसा के आधार पर)
55.	सिमाबाइन	मक्का	शून्य
		गन्ना	0.25
56.	पिरिमिफोस - मेथिल	चावल	0.50
		चावल को छोड़कर खाद्यान्न	5.00
		चावल को छोड़कर कूटे पिसे खाद्यान्न	1.00
		अंडे	0.05 (छिलका सहित के आधार पर)
		मांस और कुक्कुट	0.05 (कार्कस वसा के आधार पर)
		दूध और दुग्ध उत्पाद	0.05 (वसा के आधार)
57.	अलकलोर	बिनीला	0.05
		मूंगफली	0.05
		मक्का	0.10
		सोयाबीन	0.10
58.	अल्फानेफथाइल एसिटिक अम्ल (एएनए)	अनानास	0.50
59.	बाइटरगोनोल	गेहूँ	0.05
		मूंगफली	0.10
60.	केप्टाफोल	टमाटर	5.00
61.	कार्टाफाइड्रोक्लोराइड	चावल	0.50
62.	क्लोस्मेक्वेटक्लोराइड	अंगूर	1.00
		बिनीला	1.00
63.	क्लोरोथालोनिल	मूंगफली	0.10
		आलू	0.10
64.	डाईफ्लूबेंजूरान	बिनीला	0.20
65.	डोडाइन	सेब	5.00
66.	डाईयूरेन	बिनीला	1.00
		केला	0.10
		मक्का	0.50

(1) (2)	(3)	(4)
	सिटरस (मीठा संतरा)	1.00
	अमूर	1.00
67. एथिफोन	अनानस	2.00
	कॉफी	0.10
	टमाटर	2.00
	आम	2.00
68. फ्लूक्लोरासिन	बिनौला	0.05
	सोयाबीन	0.05
69. मैलिक हाइड्राजाइड	प्याज	15.00
	आलू	50.00
70. मेटालाइक्सिल	बाजरा	0.05
	मक्का	0.05
	सोर्गम	0.05
71. मिथोमाइल	बिनौला	0.10
72. मिथाइल क्लोरो-फिनीक्सी-एसेटिक अम्ल (एम.सी.पी.ए.)	चावल	0.05
	गेहूँ	0.05
73. ओक्साडायाजोन	चावल	0.03
74. ओक्सिडिमेटोन मिथाइल	खाद्यान्न	0.02
75. पर्मिथ्रिन	खीरा	0.50
	बिनौला	0.50
	सोयाबीन	0.05
	सूरजमुखी का बीज	1.00
76. क्यूनोलाफोस	चावल	0.01
	अरहर	0.01
	ईलाइची	0.01
	चाय	0.01
	मछली	0.01
	मिर्च	0.2
77. थियोफेनाटेमिथाइल	सेब	5.00
	पपीता	7.00
78. ट्राथाजोफोस	मिर्च	0.2
	चावल	0.05

(1)	(2)	(3)	(4)
		बिनौले का तेल	0.1
		सोयाबीन का तेल	0.05
79.	प्रोफेनोफोस	बिनौले का तेल	0.05
80.	फेनप्रोपेथरीन	बिनौले का तेल	0.05
81.	फेनारिमोल	सेब	5.0
82.	हेक्साकोन्जाजोल	सेब	0.1
83.	आइप्रोडायोन	रेप सीड	0.5
		सरसों के बीज	0.5
		चावल	10.0
		टमाटर	5.0
		अंगूर	10.0
84.	ट्राइडिमोर्फ	गेहूँ	0.1
		अंगूर	0.5
		आम	0.05
85.	पेन्कोनाजोल	अंगूर	0.2
86.	प्रोपिकोनाजोल	गेहूँ	0.05
87.	माइक्लोबूटानिल	मूंगफली के बीज	0.1
		अंगूर	1.0
88.	सल्फोसल्फ्यूरोन	गेहूँ	0.02
89.	ट्राइफ्लुरालिन	गेहूँ	0.05
90.	इथोक्सीसल्फ्यूरोन	चावल	0.01
91.	मेटेलाक्लोर	सोयाबीन का तेल	0.05
92.	ग्लाइफासफेट	चाय	1.0
93.	लिनूरोन	मटर	0.05
94.	ऑक्सिफ्लूआर्फेन	चावल	0.05
		मूंगफली का तेल	0.05
95.	कार्बोसल्फान	चावल	0.2
96.	ट्राइसाइक्लाजोल	चावल	0.02
97.	इमिडाक्लोप्रिड	बिनौले का तेल	0.05
		चावल	0.05
98.	ब्यूटाक्लोर	चावल	0.05

(1)	(2)	(3)	(4)
99.	क्लोरिन्यूरोन-ईथाइल	गेहूँ	0.05
100.	डिक्लोफोप मिथाइल	गेहूँ	0.1
101.	मेट्रिब्यूजिन	सोयाबीन का तेल	0.1
102.	लेम्बडासाईहलोरिनिन	बिनौले का तेल	0.05
103.	फेनाजाब्यूरन	चाय	3.0
104.	पेन्डिमैथिलिन	गेहूँ	0.05
		चावल	0.05
		सोयाबीन तेल	0.05
		बिनौले का तेल	0.05
105.	प्रिटिलाक्लोरे	चावल	0.05
106.	फ्लूवालिनेट	बिनौले का तेल	0.05
107.	मेटासल्फ्यूरोन मिथाइल	गेहूँ	0.1
108.	मेथाबीत्रिथियाजूरोन	गेहूँ	0.5
109.	इमाजिथापायर	सोयाबीन का तेल	0.1
		भूंगफली का तेल	0.1
110.	साइहलोफोप व्यूटाइल	चावल	0.5
111.	ट्रायलैट	गेहूँ	0.05
112.	स्पिनोसाड	बिनौले का तेल	0.02
		पत्तागोभी	0.02
		फूलगोभी	0.02
113.	थियामेथॉक्सम	चावल	0.02
114.	फेनोब्यूकार्ब	चावल	0.01
115.	थियांडायाकार्ब	बिनौले का तेल	0.02
116.	एनिलोफोस	चावल	0.1
117.	फिनोक्सी-प्रोप-पीथाइल	गेहूँ	0.02
		सोयाबीन का तेल	0.02
118.	ग्लुफोसिनाटे-अमोनियम	चाय	0.01
119.	क्लोडिनाफोप-प्रोपानायल	गेहूँ	0.1
120.	डाइथियानोन	सेब	0.1
121.	कियाजिन	चावल	0.2
122.	आइसोप्रोथियोलिन	चावल	0.1

(1)	(2)	(3)	(4)
123.	एसिटामाइप्रिड	बिनौले का तेल	0.1
124.	साइमोक्सानिल	अंगूर	0.1
125.	ट्रायाडाइमिफोन	गेहूँ	0.5
		मटर	0.1
		अंगूर	2.0
126.	फोसिटाइल-ए।	अंगूर	10
		ईलाइची	0.2
127.	आइसोप्रोट्यूरोन	गेहूँ	0.1
128.	प्रोपरजाईट	चाय	10.0
129.	डाईफिनोकॉनाजोल	सेब	0.01
130.	बी-साइफ्लूथिन	बिनौला	0.02
131.	इथोफेनप्रोक्स	चावल	0.01
132.	बाईफेनथिन	बिनौला	0.05
133.	बेनफ्युराकार्ब	लाल चना	0.05
		चावल	0.05
134.	क्यूजालोफोप-ईथाइल	सोयाबीन का बीज	0.05
135.	फ्लूफेनासेट	चावल	0.05
136.	ज्यूप्रोफेजिंग	चावल	0.05
137.	डाईमेथोमोर्फ	अंगूर	0.05
		आलू	0.05
138.	क्लोरोफिनोपायर	फूलगोभी	0.05
139.	इंडोक्साकार्ब	बिनौला	0.1
		बिनौले का तेल	0.1
		फूलगोभी	0.1
140.	मेटाइरम	टमाटर	5.0
		मूंगफली के बीज	0.1
		मूंगफली के बीज का तेल	0.1
141.	ल्यूसेंटुरोन	फूलगोभी	0.3
142.	कारप्रोपाभिड	चावल	1.0
143.	नेवालुरोन	बिनौला	0.01
		बिनौले का तेल	0.01

1	2	3	4
		टमाटर	0.01
		फूलगोभी	0.01
144.	ओक्साइयाक्विल	चावल	0.1
145.	फाइराजोसल्फयूरोन ईथाइल	चावल	0.01
146.	क्लोमाजॉन	चावल	0.01
		सोयाबीन के बीज	0.01
		सोयाबीन के बीज का तेल	0.01
147.	टेबूकोनाज्जेल	गेहूँ	0.05
148.	प्रोपाइनेव	ज्वार	1.0
		अनार	0.5
		आलू	0.5
		हरी मिर्च	2.0
		अंगूर	0.5
149.	थियोक्लोप्रिड	बिनौला	0.05
		बिनौले का तेल	0.05
		चावल	0.01

* जल में घुलनशील है, इसलिए वसा आधार पर उल्लेख करना आवश्यक नहीं है।

स्पष्टीकरण - इस विनियम के प्रयोजन के लिए -

(क) "कीटनाशी" पद का वही अर्थ होगा जो कीटनाशी अधिनियम, 1968 (1968 का 46) में है;

(ख) जब तक अन्यथा कथित न किया गया हो-

(i) अधिकतम संपूर्ण उत्पाद के आधार पर मि.ग्रा./कि.ग्रा. में अभिव्यक्त किए गए हैं;

(ii) सभी खाद्य वाणिज्यगामी कृषि उत्पादों के प्रति निर्देश करते हैं।

2.3.2 : प्रतिजीवाणु और अन्य औषधीय रूप से सक्रिय तत्व :

(1) समुद्री खाद्य, जिसमें समुद्री केकड़ा, झींगा या अन्य किस्म की मछली और मछली उत्पाद सम्मिलित हैं, पर नीचे दी गई सारणी के स्तम्भ (2) में वर्णित प्रतिजीवाणु की मात्रा की सहाय सीमा स्तम्भ (3) में विहित सीमा से अधिक नहीं होगी -

सारणी

क्र.सं.	प्रतिजीवाणु का नाम	सहाय सीमा मि.ग्रा./ कि.ग्रा. (पीपीएम)
1.	टेट्रासाइक्लिन	0.1
2.	आक्सी टेट्रासाइक्लिन	0.1
3.	ट्राइमेथोप्रिम	0.05
4.	आक्सोलिनिक अम्ल	0.3

(2) किसी समुद्री खाद्य इकाई में, जिसमें समुद्री केकड़ा, झोंगा या अन्य किस्म की मछली और मछली उत्पाद भी सम्मिलित है, प्रसंस्करण में निम्नलिखित प्रतिजैविकों और अन्य औषधीय रूप से सक्रिय तत्वों में से किसी के उपयोग पर प्रतिषेध होगा -

- (i) सभी नाइट्रोफ्यूरोन, जिसमें सम्मिलित हैं
- (ii) फ्यूरोलटाडोन
- (iii) फ्यूराजोलिडोन
- (iv) फ्यूराइलफ्यूरामाइड
- (v) नाइफ्यूराटेल
- (vi) नाइफ्यूरोजाइम
- (vii) नाइफर पराजाइन
- (viii) नाइट्रोफरनेटोन
- (ix) नाइट्रोफ्यूराजोन
- (x) क्लोरामफेनिकाल
- (xi) निथोमाइसिन
- (xii) नालीडाइक्सिक अम्ल
- (xiii) सल्फा मेथेकसाजोल
- (xiv) अरिस्टोलोचिया एसपीपी और उसकी विनिर्मितियां
- (xv) क्लोरोफार्म
- (xvi) क्लोरोप्रोमेथाइन
- (xvii) कोलचिन्साइन
- (xviii) डेपसाने
- (xix) डाइनेट्रुइमजोल
- (xx) मीट्रोनाइडाजोल
- (xxi) रोनाइडाजोल
- (xxii) इपरनाइडाजोल
- (xxiii) अन्य नाइट्रोमाइडाजोल
- (xxiv) क्लेनब्यूटिपोल
- (xxv) डाइथिलसिक्लेस्ट्रोस (जोडिफर)
- (xxvi) सल्फानोयड ड्रग्स (सिमाव अतुवोथिल सल्फाइड, इमिथोपेन, सल्फा त्रिथायथाजोन, सल्फा फेइथेक्सीथाइराइडाजाइन)
- (xxvii) फ्लूओरोक्विनोलोन्स
- (xxviii) ग्लाइकोपेप्टाइड्स

जी. एन. गौड़, मुख्य कार्यकारी अधिकारी

[विशेषण III/4/187-ओ/11/अन.]

FOOD SAFETY AND STANDARDS (CONTAMINANTS, TOXINS AND RESIDUES)
REGULATIONS, 2011

CHAPTER 1
GENERAL

1.1: Short title and commencement-

1.1.1: These regulations may be called the Food Safety and Standards (Contaminants, toxins and Residues) Regulations, 2011.

1.1.2: These regulations shall come into force on or after 5th August, 2011.

1.2: Definitions-

1.2.1: In these regulations unless the context otherwise requires:

1. "Crop contaminant" means any substance not intentionally added to food, but which gets added to articles of food in the process of their production (including operations carried out in crop husbandry, animal husbandry and veterinary medicine), manufacture, processing, preparation, treatment, packing, packaging transport or holding of articles of such food as a result of environmental contamination

CHAPTER 2
CONTAMINANTS, TOXINS AND RESIDUES

2.1 : METAL CONTAMINANTS

¹⁵[2.1.1

1. Chemicals described in monographs of the Indian Pharmacopoeia when used in foods, shall not contain metal contaminants beyond the limits specified in the appropriate monographs of the Indian Pharmacopoeia for the time being in force.

2. Notwithstanding anything contained in clause (1) above, no article of food specified in column (2) of the table below shall contain any metal specified in excess of the quantity specified in column (3) of the said table:

Table

Name of metal contaminant	Article of food	Parts per Million (mg/kg or mg/L)
(1)	(2)	(3)
1. Lead	Agar	5.0
	Alginic acid	5.0

All types of sugars, sugar syrup, invert sugar and direct consumption coloured sugars with sulphated ash content exceeding 1.0 percent	5.0
Alumina used in preparation of lake colour	10
Aluminium lake of Sunset Yellow FCF	10
Ammonium hydrogen carbonate	2.0
Anhydrous dextrose and dextrose monohydrate, refined white sugar (sulphated ash content not exceeding 0.03 per cent)	0.5
Annatto	10
Ascorbic acid	2.0
Ascorbyl palmitate	2.0
Aspartame (Aspartyl phenyl alanine methyl ester)	10
Assorted subtropical fruits, edible peel	0.1
Assorted subtropical fruits, inedible peel	0.1
Baking powder	10
Benzoic acid	2.0
Berries and other small fruits	0.2
Beta-apo-8'-carotenal	2.0
Beta-carotene	10
Bivalve molluscs	1.5
Brassica vegetables excluding Kale	0.3
Brewed vinegar and synthetic vinegar	0.01
Brilliant blue FCF	10
Bulb vegetables	0.1
Butylated hydroxyanisole	2.0
Calcium alginate	5.0
Calcium propionate	5.0
Canned carrots	1.0
Canned green beans and canned wax beans	1.0
Canned green peas	1.0
Canned mushrooms	1.0
Canned palmito	1.0
Canned sweetcorn	1.0
Canned tomatoes	1.0
Canned asparagus	1.0
Canned chestnuts and canned chestnut purée	1.0

Canned fish, canned meats, edible gelatin, meat extracts and hydrolysed protein, dried or dehydrated vegetables (other than onions)	5.0
Canned fruit cocktail	1.0
Canned grapefruit	1.0
Canned mandarin oranges	1.0
Canned mangoes	1.0
Canned mature processed peas	1.0
Canned pineapple	1.0
Canned raspberries	1.0
Canned strawberries	1.0
Canned tropical fruit salad	1.0
Caramel	5.0
Carbonated water , expressed in mg/L	10
Carmoisine	10
Carrageenan	5.0
Cattle, edible offal of	0.5
Cephalopods	1.0
Cereal grains, except buckwheat, canihua and quinoa	0.2
Chlorophyll	10
Citric acid	0.5
Citrus fruits	0.1
Cocoa powder	5.0 on dry fat free substance basis
Concentrated soft drinks (but not including concentrates used in the manufacture of soft drinks)	0.5
Concentrates used in the manufacture of soft drinks, lime juice and lemon juice	2.0
Corned beef, Luncheon meat, Cooked ham, Chopped meat, Canned chicken, Canned mutton and Goat meat and other related meat products	2.5
Crustaceans	0.5
Dehydrated onions, dried herbs and spices, curry powder and mix masalas, flavourings, alginic acid, alignates, agar, carrageen and similar products derived from seaweed	10 on dry matter basis
Dicalcium phosphate	4.0
Dodecyl gallate	2.0
Edible fats and oils (edible fats and oils not covered by individual standards)	0.1

Edible molasses, caramel liquid, solid glucose and starch conversion products with a sulphated ash content exceeding 1.0 per cent	5.0
Edible oils and fats	0.5
Erythrosine	10
Ethylester of Beta-apo-8'-carotenoic acid	2.0
Fast green FCF	10
Fish	0.3
Food colours other than caramel	10 on dry colouring matter basis
Foods not specified	2.5
Fruit and vegetable juice (including tomato juice, but not including lime juice and lemon juice)	1.0
Fruit Juices (including nectars; ready to drink)	0.05
Fruiting vegetables other than cucurbits(excluding mushrooms)	0.1
Fruiting vegetables, cucurbits	0.1
Fumaric acid	2.0
Gaur gum	2.0
Glycerol esters of Wood rosin	1.0
Gum Arabic or Acacia gum	3.0
Gum ghatti	5.0
Gum karaya	2.0
Hard boiled sugar confectionery	2.0
Ice-cream, iced lollies and similar frozen confections	1.0
Indigo carmine	10
Infant formula (ready to use)	0.02
Infant milk substitutes and Infant foods	0.2
Iron fortified common salt	2.0
Jam (fruit preserves) and jellies	1.0
L (+) -Tartaric acid	2.0
Lactic acid	2.0
Leafy vegetables (including brassica leafy vegetables but excluding spinach)	0.3
Legume vegetables	0.2
Liquid pectin, chemicals not otherwise specified, used as ingredients or in the preparation or processing of food	10
Malic acid	2.0
Mango chutney	1.0

Margarine	0.1
Meat of cattle, sheep and pig (also applies to fat from meat)	0.1
Milks (Concentration factor shall be applied to partially or wholly dehydrated milks)	0.02
Minarine (Low Fat Spread)	0.1
Mineral Oil (High viscosity)	1.0
Mineral Oil (Low viscosity)	1.0
Monosodium L-glutamate	1.0
Named Animal fats (lard, rendered pork fat, premier jus (suet) and edible tallow)	0.1
Natural mineral water, expressed in mg/L	0.01
Octyl gallate	2.0
Olive oil, Virgin olive oil, Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
Other vegetables	2.5
Packaged drinking water (other than mineral water), expressed in mg/L	0.01
Pectin	2.0
Phosphoric acid	4.0
Pickled cucumbers (Cucumber pickles)	1.0
Pig, edible offal of	0.5
Polyglycerol esters of fatty acids	2.0
Polyglycerol esters of interesterified ricinoleic acid	2.0
Pome fruits	0.1
Ponceau 4R	10
Potassium iodate	10
Potassium metabisulphite	2.0
Potassium nitrate	2.0
Potassium nitrite	2.0
Poultry fats	0.1
Poultry meat	0.1
Poultry, edible offal of	0.5
Processed tomato concentrates	1.5
Propyl gallate	2.0
Propylene glycol	2.0
Pulses	0.2
Raw sugars except those sold for direct consumption or used for manufacturing purpose other than the manufacture of refined sugar	5.0
Riboflavin	20
Root and tuber vegetables	0.1

Saccharin sodium	10
Salt, food grade	2.0
Secondary milk products (as consumed)	0.02
Sodium alginate	5.0
Sodium ascorbate	2.0
Sodium benzoate	2.0
Sodium carboxymethyl cellulose	2.0
Sodium carboxymethyl cellulose, enzyme hydrolysed	3.0
Sodium hydroxide	2.0
Sodium metabisulphite	2.0
Sodium propionate	5.0
Solid pectin	50
Sorbic acid	2.0
Sorbitol	1.0
Steviol glycoside	1.0
Stone fruits	0.1
Sucralose	10
Sulphur dioxide	5.0
Sunset yellow	10
Sunset yellow dye used in preparation of lake colour	10
Synthetic food colour-preparation and mixtures	10
Table olives	1.0
Tartrazine	10
Tea	5.0 on dry matter basis
Titanium dioxide	2.0
Tragacanth gum	2.0
Trisodium citrate	2.0
Turmeric whole and powder	10
Vegetable Oils, crude (oils of arachis (Groundnut), babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rape seed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein and other oils but excluding cocoa butter)	0.1
Vegetable Oils, edible (oils of arachis (Groundnut), babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rape seed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein and other oils but	0.1

	excluding cocoa butter)	
	Wine	0.2
	Yeast and yeast products	5.0 on dry matter basis
2. Copper	Ammonium hydrogen carbonate	5.0
	Annatto	30
	Brewed vinegar and synthetic vinegar	0.01
	Caramel	20
	Carbonated water , expressed in mg/L	1.5
	Chicory-dried or roasted, coffee beans, flavourings/pectin liquid	30
	Chlorophyll	30
	Cocoa powder	70 on fat free substance basis
	Colouring matter	30 on dry colouring matter basis
	Concentrates for soft drinks	20
	Edible gelatin	30
	Foods not specified	30
	Hard boiled sugar confectionery	5.0
	Infant milk substitute and Infant foods	15 (But not less than 2.8)
	Iron fortified common salt	2.0
	Juice of orange, grape, apple, tomato, pineapple and lemon	5.0
	Mineral water , expressed in mg/L	1.0
	Olive oil, Virgin olive oil ,Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
	Packaged drinking water (other than mineral water), expressed in mg/L	0.05
	Solid Pectin	300
	Polyglycerol esters of fatty acids	25
	Polyglycerol esters of Interesterified ricinoleic acid	25
	Pulp and pulp products of any fruit	5.0
	Soft drinks excluding concentrates and Carbonated Water , expressed in mg/L	7.0
	Tea	150
	Toddy	5.0

	Tomato ketchup	50 on dried total solids basis
	Tomato puree, paste, powder, and cocktails	100 on dried tomato solids
	Turmeric whole and powder	5.0
	Vegetables	30
	Yeast and yeast products	60 on dry matter basis
3. Arsenic	Agar	3.0
	Alginic acid	3.0
	Alumina used in preparation of lake colour	1.0
	Aluminium lake of Sunset Yellow FCF	1.0
	Ammonium hydrogen carbonate	0.6
	Annatto	3.0
	Ascorbyl palmitate	3.0
	Aspartame (Aspartyl phenyl alanine methyl ester)	3.0
	Benzoic acid	3.0
	Beta -apo-8'-carotenal	3.0
	Beta-carotene	3.0
	Brewed vinegar and synthetic vinegar	0.1
	Brilliant blue FCF	3.0
	Butylated hydroxyanisole	3.0
	Calcium alginate	3.0
	Caramel	3.0
	Carbonated water, expressed in mg/L	0.25
	Carmoisine	3.0
	Carrageenan	3.0
	Chicory-dried or roasted	4.0
	Chlorophyll	3.0
	Citric acid	3.0
	Dehydrated onions, edible gelatin, liquid pectin	2.0
	Dicalcium phosphate	3.0
	Dodecyl gallate	3.0
	Dried herbs, finings and clearing agents, solid pectin all grades, spices	5.0
	Edible fats and oils (edible fats and oils not covered by individual standards)	0.1
	Erythrosine	3.0
	Ethylester of Beta-apo-8'-carotenoic acid	3.0
	Fast Green FCF	3.0
Fish and Crustaceans	76	

	Food colouring other than synthetic colouring	5.0 on dry colouring matter basis
	Foods not specified	1.1
	Fumaric acid	3.0
	Gaur gum	3.0
	Glycerol esters of wood rosin	3.0
	Gum Arabic or Acacia gum	2.0
	Gum Ghatti	3.0
	Gum Karaya	3.0
	Hard boiled sugar confectionery	1.0
	Ice-cream, iced lollies and similar frozen confections	0.5
	Indigo carmine	3.0
	Infant milk substitute and Infant foods	0.05
	Iron fortified common salt	1.0
	Juice of orange, grape, apple, tomato, pineapple and lemon	0.2
	L (+)- Tartaric acid	3.0
	Malic acid	3.0
	Margarine	0.1
	Milk	0.1
	Minarine (Low Fat Spread)	0.1
	Mineral Oil (High viscosity)	1.0
	Mineral Oil (Low viscosity)	1.0
	Molluscs	86
	Monosodium L-glutamate	2.0
	Named Animal fats (lard, rendered pork fat, premier jus(suet) and edible tallow)	0.1
	Natural mineral water, expressed in mg/L	0.01
	Octyl gallate	3.0
	Olive oil, Virgin olive oil ,Extra virgin olive oil, Ordinary virgin olive oil, Refined olive oil, Refined olive pomace oil and Olive pomace oil	0.1
	Packaged drinking water (other than mineral water) , expressed in mg/L	0.01
	Pectin	5.0
	Phosphoric acid	2.0
	Polyglycerol esters of fatty acids	3.0
	Polyglycerol esters of interesterified ricinoleic acid	3.0
	Ponceau 4R	3.0
	Potassium iodate	3.0
	Potassium nitrate	3.0
	Potassium nitrite	3.0

	Preservatives, anti-oxidants, emulsifying and stabilising agents and synthetic food colours	3.0 on dry matter basis
	Propyl gallate	3.0
	Propylene glycol	3.0
	Pulp and pulp products of any fruit	0.2
	Riboflavin	5.0
	Saccharin sodium	2.0
	Sodium alginate	3.0
	Sodium ascorbate	3.0
	Sodium benzoate	3.0
	Sodium carboxymethyl cellulose	3.0
	Sodium propionate	3.0
	Soft drink intended for consumption after dilution except carbonated water	0.5
	Sorbic acid	3.0
	Sorbitol	3.0
	Steviol glycoside	1.0
	Sucralose	3.0
	Sulphur dioxide	3.0
	Sunset yellow	3.0
	Sunset yellow dye used in preparation of lake colour	3.0
	Synthetic food colour-preparation and mixtures	3.0
	Tartrazine	3.0
	Titanium dioxide	1.0
	Tragacanth gum	3.0
	Trisodium citrate	3.0
	Turmeric whole and powder	0.1
	Vegetables	1.1
	Vegetable oils, crude (oils of arachis (Groundnut), babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rapeseed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein).	0.1
	Vegetable oils, edible (oils of arachis (Groundnut), babasu, coconut, cotton seed, grape seed, maize, mustard seed, palm kernel, palm, rapeseed, safflower seed, sesame seed, soya bean, and sunflower seed, and palm olein, stearin and superolein).	0.1
4.Tin	Canned (citrus fruits, stone fruits, vegetables, fruit cocktail, mangoes, pineapple, raspberries, strawberries, tropical fruit salad).	250
	Canned beverages	150

	Canned chestnuts and chestnut puree	250
	Canned fish products	200
	Canned foods other than beverages	250
	Canned mushrooms	250
	Canned tomatoes	250
	Cooked cured chopped meat (for products in other containers)	50
	Cooked cured chopped meat (for products in tinsplate containers)	250
	Cooked cured ham (for products in other containers)	50
	Cooked cured ham (for products in tinsplate containers)	200
	Cooked cured pork shoulder (for products in other containers)	50
	Cooked cured pork shoulder (for products in tinsplate containers)	200
	Corned beef (for products in other containers)	50
	Corned beef (for products in tinsplate containers)	200
	Corned beef, Luncheon meat, Cooked ham, Chopped meat, Canned chicken, Canned mutton and Goat meat	250
	Foods not specified	250
	Hard boiled sugar confectionery	5.0
	Infant milk substitute and Infant foods	5.0
	Jam, Jellies and Marmalade	250
	Juice of orange, apple, tomato, pineapple and lemon	250
	Luncheon meat (for products in other containers)	50
	Luncheon meat (for products in tinsplate containers)	200
	Mango Chutney	250
	Pickled cucumber	250
	Processed and canned food products	250
	Processed tomato concentrates	250
	Pulp and pulp products of any fruit	250
	Table Olives	250
	Turmeric whole and powder	0.01
5. Cadmium	Bivalve Molluscs	2.0
	Brassica vegetables	0.05
	Bulb vegetables	0.05
	Carrageenan	1.5
	Cephalopods	2.0
	Cereal grains, except buckwheat, canihua and	0.1

	Quinoa (excluding wheat and rice; and bran and germ)	
	Crustaceans	0.5
	Fish	0.3
	Foods not specified	1.5
	Fruiting vegetables other than cucurbits (excluding tomatoes and edible fungi)	0.05
	Fruiting vegetables, cucurbits	0.05
	Infant milk substitute and Infant foods	0.1
	Leafy vegetables	0.2
	Legume vegetables	0.1
	Natural mineral water, expressed in mg/L	0.003
	Other vegetables	1.5
	Packaged drinking water (other than mineral water), expressed in mg/L	0.003
	Potato, peeled	0.1
	Pulses, excluding soybean dry	0.1
	Rice, polished	0.4
	Root and tuber vegetables, excluding potato and celeriac	0.1
	Salt, food grade	0.5
	Stalk and stem vegetables	0.1
	Turmeric whole and powder	0.1
	Wheat	0.2
6. Mercury	Alumina used in preparation of lake colour	1.0
	Aluminium lake of Sunset yellow FCF	1.0
	Caramel	0.1
	Carrageenan	1.0
	Fast green FCF	0.01
	Fish	0.5
	Foods not specified	1.0
	Natural mineral water, expressed in mg/L	0.001
	Non-predatory fish, crustaceans, cephalopods, molluscs	0.5
	Packaged drinking water (other than mineral water), expressed in mg/L	0.001
	Predatory fish (Tuna, Marlin, Sword Fish, Elasmobranch)	1.0
	Salt, food grade	0.1
	Sodium hydroxide	1.5
	Titanium oxide	1.0
	Vegetables	1.0
7. Methyl Mercury (Calculated as the element)	All foods	0.25

8. Chromium	All fishery products	12
	Brilliant blue FCF	50
	Fast green FCF	50
	Gelatin	10
	Mineral water, expressed in mg/L	0.05
	Packaged drinking water (other than mineral water), expressed in mg/L	0.05
	Refined sugar	0.02
	Vegetables	1.0
9. Nickel	All hydrogenated, partially hydrogenated, interesterified vegetable oils and fats such as vanaspati, table margarine, bakery and industrial margarine, bakery shortening, fat spread and partially hydrogenated margarine, bakery shortening, fat spread and partially hydrogenated soyabean oil	1.5
	Mineral water, expressed in mg/L	0.02
	Packaged drinking water (other than mineral water), expressed in mg/L	0.02
	Sorbitol	2.0
	Vegetables	1.0
10.Selenium	Mineral water , expressed in mg/L	0.05
	Packaged drinking water (other than mineral water), expressed in mg/L	0.01
	Potassium metabisulphite	5.0
	Sodium metabisulphite	5.0
	Sulphur dioxide	20
11.Antimony	Mineral water , expressed in mg/L	0.005
	Packaged drinking water (other than mineral water), expressed in mg/L	0.005
	Titanium dioxide	2.0
	Vegetables	1.0"]

2.2 Crop contaminants and naturally occurring toxic substances

2.2.1

¹⁵[1. No article of food specified in column (3) of the Table below shall contain any crop contaminant specified in the corresponding entry in column (2) thereof in excess of quantities specified in the corresponding entry in column (4) of the said Table:

Table

S.No.	Name of the Contaminants	Article of the food	Limit µg/kg
(1)	(2)	(3)	(4)
1	Total Aflatoxins	Cereal and cereal products	15
		Dried figs	10
		Arecanut or Betelnut	15
		Nuts: Nuts for further processing	15
		Ready to eat	15
		Oilseeds or oil: Oilseeds for further processing	15
		Ready to eat	15
		Pulses	15
		Spices/Spice Mix	30
		Food product containing any of the above mentioned food articles	20
2	Aflatoxin B1	Arecanut or Betelnut	10
		Cereal and cereal products	10
		Dried figs	10
		Nuts: Nuts for further processing	10
		Ready to eat	10
		Oilseeds or oil: Oilseeds for further processing	10
		Ready to eat	10
		Pulses	10
		Spices/Spice Mix	15
		Food product containing any of the above mentioned food articles	10
3	Aflatoxin M1	Milk (Liquid)	0.5
		Skimmed milk powder	6
		Whole milk powder	4

4	Ochratoxin A	¹⁶ [Wheat, wheat bran, rye, barley, coffee	5]
5	Patulin	Apple juice	50
		Apple juice used as an ingredient in other beverages	50
6	Deoxynivalenol	¹⁶ [Wheat, wheat bran, barley	1000]]

² [2. Naturally occurring Toxic Substances:

Table

Sl.No	Name of naturally occurring toxic substances (NOTS)	Article of food	Maximum limits (ppm)
(1)	(2)	(3)	(4)
1	Agaric acid	Food containing mushrooms	100
		Alcoholic beverages	100
2	Hydrocyanic acid	Nougat, marzipan or its substitutes or similar products	5
		Canned stone fruits	5
		Alcoholic beverages	5
		Confectionery	5
		Stone fruit juices	5
		¹⁰ [Sago, Cassava flour, Tapioca flour, Manihot flour and their products	10]
3	Hypericine	Alcoholic beverages	1
4	Saffrole	Meat preparations and meat products, including poultry and game	10
		Fish preparations and fish products	10
		Soups and sauces	10
		Non-alcoholic beverages	10
		Food containing mace and nutmeg	10
		Alcoholic beverages	10]

⁵ [3. Polychlorinated biphenyls (PCBs) and Polycyclic Aromatic Hydrocarbon (PAH) compounds in Fish and Fishery Products:

Sl.No.	Name of the contaminants	Article of food	Limit
(1)	(2)	(3)	(4)
1.	Polychlorinated biphenyls (Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180)	Inland and Migratory Fish	2.0 ppm

2.	Polychlorinated biphenyls (Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180)	Marine Fish, Crustaceans and molluscs	0.5 ppm
3.	Benzo(a)pyrene	Smoked Fishery Products	5.0 ppb]

2.3: Residues

¹⁴[2.3.1. Restriction on the use of insecticides:

(1) The expression “insecticide” shall have the meaning assigned to it in the Insecticide Act, 1968 (46 of 1968).

(2) Subject to the provisions of clause (3), no insecticides shall be used directly on articles of food:

Provided that nothing in this regulation shall apply to the fumigants which are registered and recommended for use as such on articles of food by the Registration Committee, constituted under section 5 of the Insecticides Act, 1968 (46 of 1968).

(3) The insecticide specified in column (2) of the table shall not exceed the Maximum Residue Limits (MRL) prescribed in column (4), for the article of food specified in column (3) of the said table, namely:-

Table

Sl. No.	Name of the Insecticide	Food	Maximum Residue Limit (MRL) in mg/kg
(1)	(2)	(3)	(4)
1.	2,4-Dichlorophenoxy Acetic Acid	Sugarcane	0.05
		Food grains	Maize-0.05, Wheat-2 and Rice-0.1 and other food grains- 0.01
		Milled food grains	0.01
		Potato	0.2
		Milk and Milk products	0.05
		Meat and Poultry	0.2
		Eggs	0.05 (shell free basis)
		Fruits	2
2.	Acephate (expressed as mixture of Methamidophos and acephate).	Rice	1
		Safflower seed	2
		Cottonseed	2
		Milk and Milk products	0.02
		Meat and Meat products	0.05
3.	Acetamiprid	Chilli	2
		Dried Chilli	20
		Rice	0.01
		Okra	0.1
		Cabbage	0.7
		Milk and Milk products	0.02
		Meat and Meat products	0.05
		Cotton seed Oil	0.1

4.	Alachlor	Cotton seed	0.05
		Groundnut	0.05
		Maize	0.1
		Soya bean	0.1
5.	Alpha cypermethrin	Cotton seed Oil	0.05
		Pine apple	0.5
6.	Alpha naphthyl Acetic Acid	Tomato	0.1
		Chilli	0.2
		Dried Chilli	2
		Mango	0.05
		Cotton seed Oil	0.05
		Grapes	0.05
		Pineapple	0.5
7.	Ametroctradin	Grapes	6
		Potato	0.05
		Cucumber	0.4
		Tomato	0.3
8.	Anilophos	Rice	0.1
9.	Atrazine	Maize	0.01
		Sugarcane	0.25
10.	Azimsulfuron	Rice	0.02*
11.	Azoxystrobin	Grapes	2
		Tomato	1
		Mango	0.7
		Chilli	1
		Dried Chilli	10
		Cucumber	0.05*
		Potato	7
		Milk and Milk products	0.01
		Cumin	0.03*
		Maize	0.03*
		Wheat	0.2
		Rice	0.03*
		Onion	0.05
12.	Benfuracarb	Red Gram	0.05
		Rice	0.05
13.	Sum of benomyl and carbendazim expressed as carbendazim	Food grains	0.5
		Milled food grains	0.1
		Vegetables	0.5
		Mango	2
		Banana (whole)	1
		Other fruits	5
		Cottonseed	0.1
		Groundnut	0.1
		Sugar beet	0.1
		Dry fruits	0.1
		Eggs	0.1 (shell free basis)
		Meat and Poultry	0.1 (carcass fat basis)

		Milk and Milk products	0.1 (F)
14.	Bensulfuron Methyl	Rice	0.01
15.	Beta Cyfluthrin	Okra	0.01*
		Brinjal	0.2
		Cotton seed	0.7
		Soya bean	0.03
		Soya bean Oil	0.01*
16.	Bifenthrin	Sugarcane	0.03
		Rice	0.05
		Apple	0.5
		Tea	30
		Cotton seed	0.5
		Milk and Milk products	0.2
17.	Bispyribac Sodium	Rice	0.05
18.	Bitertanol	Wheat	0.05
		Groundnut	0.05
		Milk and Milk products	0.05
		Meat and Meat products	0.05
		Tea	0.05*
		Apple	0.4
19.	Buprofezin	Cotton seed Oil	0.01
		Chilli	2
		Dried Chilli	20
		Mango	0.1
		Grapes	1
		Okra	0.01*
		Rice	0.05
		Milk and Milk products	0.01
20.	Butachlor	Rice	0.05
21.	Captan	Rice	0.3
		Fruit and Vegetables	Cherries-25, Grapes-25 and Melons-10, other fruits & other vegetables 15
		Black gram	0.01*
22.	Carbaryl	Sesamum	0.05
		Fish	0.2
		Food grains	Wheat-2.0 and Maize-0.02, other food grains 1.5
		Milled food grains	0.01
		Okra and leafy vegetables	10
		Potato	0.2
		Other vegetables	5
		Cotton seed (whole)	1
		Maize cob (kernels)	1
		Rice	2.5
		Maize	0.5

		Chilli	5
		Dried Chilli	50
		Citrus (Orange)	15
		Milk and Milk products	0.05
23.	Carbendazim	Food grains	Wheat-0.05, Rice-2.0 and other food grains 0.1
		Milled food grains	0.1
		Vegetables	0.5
		Mango	5
		Banana (whole)	1
		Other fruits	5
		Cotton seed	0.1
		Groundnut	0.1
		Sugar beet	0.1
		Dry fruits	0.1
		Eggs	0.1(shell free basis)
		Meat & Poultry	0.1(Carcass fat basis)
		Milk and Milk products	0.1 (F)
		Potato	0.01*
		Tea	0.5
		Grapes	3
		Rice	2*
24.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	Food grains	0.10
		Milled food grains	0.03
		Fruits & Vegetables	0.10
		Oil seeds	0.10
		Sugarcane	0.10
		Meat & Poultry	0.10 (carcass fat basis)
		Milk and Milk products	0.05 (fat basis)
25.	Carbosulfan	Chilli	2
		Dried Chilli	20
		Rice	0.2
26.	Carfentrazone Ethyl	Wheat	0.01
		Rice	0.1*
		Tea	0.02*
27.	Carpropamid	Rice	1
28.	Cartap Hydrochloride	Rice	0.5
29.	Chlorantraniliprole	Bengal Gram	0.03*
		Black Gram	0.03*
		Bitter Gourd	0.03*
		Okra	0.3
		Soya bean	0.03*
		Pigeon pea	0.03*
		Tomato	0.6
		Chilli	0.6
		Dried Chilli	6
		Brinjal	0.6

		Rice	0.4
		Cabbage	2
		Sugarcane	0.5
		Cotton	0.3
		Milk and Milk products	0.05
		Meat and Meat products	0.2
		Groundnut	0.03*
		Groundnut Oil	0.03*
		Maize	0.03*
30.	Chlorfenapyr	Chilli	0.05
		Dried Chilli	0.5
		Cabbage	0.05
31.	Chlorfluazuron	Cabbage	0.1*
		Cotton seed	0.01*
32.	Chlorimuron ethyl	Rice	0.01
		Soya bean seed	0.01
		Wheat	0.05
33.	Chlormequat Chloride (CCC)	Potato	0.1
		Brinjal	0.1
		Grape	0.05*
		Cotton seed	1
34.	Chlorothalonil	Groundnut	0.1
		Potato	0.1
		Milk and Milk products	0.07
		Meat and Meat products	0.02
35.	Chlorpropham	Potato	30
36.	Chlorpyrifos	Tea	2
		Food grains	Wheat-0.5, Rice-0.5 and Food grains 0.05
		Milled food grains	0.01
		Fruits	Stawberry-0.03, Plum-0.5, Pomefruit-1.0 and other Fruits 0.5
		Potatoes and Onions	Potato-2.0, Onions 0.01
		Cauliflower and Cabbage	1
		Other vegetables	0.2
		Meat and Poultry (carcass fat)	0.1
		Milk and Milk products	0.02
		Cotton seed	0.3
		Cotton seed oil (crude)	0.05
		Carbonated Water	0.001
37.	Chlothianidin (Chlothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG) TMG)	Sugarcane	0.4
		Cotton seed	0.02
		Cotton seed Oil	0.02
		Rice	0.5
		Tea	0.7
		Milk and Milk products	0.02

		Meat and Meat products	0.02
38.	Chromafenozide	Rice	0.03*
39.	Cinmethylene	Rice	0.05
40.	Clodinafop-propargyl	Soya bean	0.05*
		Wheat	0.1
41.	Clomazone	Rice	0.01
		Soya bean seed	0.01
		Soya bean seed oil	0.01
42.	Copper Hydroxide (Copper determined as elemental copper)	Rice	\$
		Potato	\$
		Grapes	\$
43.	Copper Oxychloride(Copper determined as elemental copper)	Fruit	\$
		Potato	\$
		Other vegetables	\$
		Areca nut	\$
		Cardamom	\$
		Coconut	\$
		Coffee	\$
		Pepper	\$
		Paddy	\$
44.	Copper Sulphate (Copper determined as elemental copper)	Coffee	\$
		Cardamom	\$
		Citrus	\$
		Coconut	\$
		Guava	\$
		Papaya	\$
		Pea	\$
		Grapes	\$
45.	Cuprous Oxide (Copper determined as elemental copper)	Paddy	\$
		Potato	\$
		Areca nut	\$
		Chilli	\$
		Citrus	\$
		Coffee	\$
		Grapes	\$
46.	Cyantranilipole	Grapes	0.01
		Pomegranate seed	0.01
		Pomegranate Juice	0.01
		Cabbage	2
		Chilli	0.5
		Dried Chilli	5
		Tomato	0.5
		Gherkin	0.3
		Okra	0.5
		Brinjal	0.06
		Cotton seed or Cotton seed Oil	1.5
47.	Cyazofamid	Potato	0.02*

		Tomato	0.01*
		Grapes	1
48.	Cyhalofop-butyl	Rice	0.5
49.	Cymoxanil	Tomato	0.01*
		Potato	0.01
		Grapes	0.1
		Citrus	0.05*
		Gherkin	0.05*
		Cucumber	0.1
50.	Cypermethrin (sum of isomers) (Fat soluble residue)	Rice	2
		Cottonseed Oil	0.01
		Wheat grains	2
		Milled wheat grains	0.01
		Brinjal	0.2
		Cabbage	2
		Okra	0.5
		Oil seeds except groundnut	0.2
		Meat and Poultry	2
		Milk and Milk products	0.05
	(a) Alpha Cypermethrin	Cotton seed Oil	0.05
51.	Deltamethrin (Decamethrin)	Chilli	0.05
		Dried Chilli	0.5
		Red gram	0.01
		Mango	0.01
		Tea	5
		Okra	0.05
		Tomato	0.3
		Brinjal	0.3
		Groundnut	0.01*
		Cotton seed	0.1
		Food grains	2.0
		Milled food grains	Milled Food grains- 0.2 and Wheat Flour-0.3
		Rice	2.0
		Wheat	2.0
		Milk and Milk products	0.05
		Meat and Meat products	0.5
52.	Diafenthiuron	Cardamom	0.5
		Brinjal	1
		Chilli	0.05
		Dried Chilli	0.5
		Cotton seed Oil	1
		Cabbage	1
		Citrus	0.2
53.	Dichlorvos (DDVP) (content of di-chloroacetaldehyde (D.C.A.) be reported where possible)	Food grains	Wheat-7.0, Rice-7.0 and other Food grains-1
		Milled food grains	0.25
		Vegetables	0.15

		Fruits	0.1
		Milk and Milk products	0.01
		Groundnut seeds	0.05
		Groundnut Oil	0.2
		Mustard seed or Mustard Oil	0.01
54.	Diclofop (sum diclofop-methyl and diclofop acid expressed as diclofop-methyl)"	Wheat	0.1
55.	Diclosulam	Soya bean	0.05*
56.	Dicofol (sum of o,p' and p,p' isomers)"	Fruits and Vegetables	5
		Tea	40
		Chilli	1
		Dried Chilli	10
57.	Difenoconazole	Chilli	0.01
		Dried Chilli	0.1
		Rice	0.01
		Pomegranate	0.8
		Milk and Milk products	0.02
		Meat and Meat products	0.2
		Apple	0.01
		Grapes	3
		Maize	0.01*
		Wheat	0.02
58.	Diflubenzuron	Tomato	0.2
59.	Dimethoate	Cotton seed	0.2
		Mustard	0.01
		Fruits and Vegetables	2
		Chilli	0.5
		Dried Chilli	5
		Milk and Milk products	0.05
60.	Dimethomorph	Meat and Meat products	0.05
		Grapes	2
		Potato	0.05
		Cucumber	0.2
61.	Dinocap	Tomato	0.2
		Mango	0.1
62.	Dinotefuran	Rice	8
		Cotton seed Oil	0.05*
		Milk and Milk products	0.1
63.	Dithianon	Apple	0.1
64.	Dithiocarbamates(the residue tolerance limit are determined and expressed as mg/CS ₂ /kg and refer separately to the residues arising from any or each group of dithiocarbamates)	Chilli	1
		Dry chilli	10
		Food grains	Wheat-1.0 and other Food Grains-0.2
		Milled food grains	0.05
		Potato	0.2
	(b) Ethylene bis- dithiocarbamates	Cherries	1

	resulting from the use of mancozeb, maneb or zineb (including zineb derived from nabam plus zinc sulphate)	Other fruits	3
	(c) Mancozeb	Chilli	1
		Dried Chilli	10
		Cauliflower	0.02
		Groundnut	0.1
		Cumin	10
		Black pepper	2
		Mustard seed	0.1
		Gherkin	0.1*
		Onion	4
		Milk and Milk products	0.05
		Meat and Meat products	0.1
		Mango	2
		Grapes	5
		Citrus	0.05*
		Cucumber	0.4
		Tea	3
		Rice	0.5*
	(d) Metiram as CS2	Chilli	1
		Dry chilli	10
		Grapes	5
		Potato	0.2
		Tomato	5
		Groundnut seed	0.1
		Groundnut seed oil	0.1
		Milk and Milk products	0.05
		Onion	0.05*
		Apple	0.05*
		Cotton seed	0.05*
		Cotton seed Oil	0.05*
		Cumin	10
		Banana	2
		Black gram	0.05*
		Cucumber	2
		Pomegranate	0.05*
		Green gram	0.05*
	(e) Zineb as CS2	Turmeric	2
		Tea	0.1*
65.	Diuron	Sugarcane	0.02
		Cottonseed	1
		Banana	0.1
		Maize	0.5
		Citrus (Sweet Orange)	1
		Grapes	1
66.	Dodine	Apple	5

67.	Edifenphos	Rice	0.02
		Rice bran	1
		Eggs	0.01(shell free basis)
		Meat and poultry	0.02 (carcass fat basis)
		Milk and Milk products	0.01(F)
68.	Emamectin Benzoate	Cotton seed	0.02
		Cotton seed oil	0.02
		Okra	0.05
		Groundnut oil	0.05
		Milk and Milk products	0.01*
		Tea	0.01*
			Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27 th April,2023 with the following: "0.06"
69.	Epoxyconazole	Ground nut oil	0.05*
		Groundnut cake	0.05*
		Maize	0.01*
		Cumin	0.01*
		coffee	0.05*
		wheat	0.01*
		Soya bean	0.05*
		Soya bean Oil	0.05*
		Rice	0.05*
70.	Ethephon	Pomegranate	0.05
		Pine apple	2
		Coffee	0.1
		Tomato	2
		Mango	2
71.	Ethion(Residues to be determined as ethion and its oxygen analogue and expressed as ethion)	Gram	0.01
		Pigeon Pea	0.01
		Soya bean Seed	0.01
		Tea	5
		Cucumber and Squash	0.5
		Other Vegetables	1
		Cottonseed	0.5
		Milk and Milk products	0.5 (F)
		Meat and Poultry	0.2 (carcass fat basis)
		Eggs	0.2 (shell free basis)
		Dry fruits	0.1 (shell free basis)
		Food grains	0.03
		Milled food grains	0.01
		Peaches	1
Other fruits	2		
72.	Ethofenprox (Etofenprox)	Rice	0.01

		Milk and Milk products	0.02
		Meat and Meat products	0.5
73.	Ethoxysulfuron	Rice	0.01
74.	Etoxazole	Brinjal	0.2
		Tea	15
75.	Famoxadone	Grapes	2
		Potato	0.05

		Tomato	2
		Gherkin	0.3
76.	Fenamidone	Potato	0.02
		Grapes	0.6
		Gherkin	0.2
		Tomato	1.5
77.	Fenarimol	Apple	5
78.	Fenazaquin	Apple	0.2
		Chilli	0.5
		Dried Chilli	5
		Okra	0.01
		Brinjal	0.01
		Tomato	0.01
		Tea	3
79.	Fenobucarb (BPMC)	Rice	0.01
80.	Fenoxaprop-p-ethyl	Cotton seed	0.02
		Black gram	0.01
		Rice	0.02*
		Wheat	0.02
		Soya bean seed	0.02
		Onion	0.05*
		Groundnut	0.01*
81.	Fenpropathrin	Brinjal	0.2
		Okra	0.5
		Chilli	0.2
		Tea	2
		Green tea	2
		Rice	0.03*
		Cottonseed oil	3
		Milk and Milk products	0.1
		Meat and Meat products	0.02
82.	Fenpyroximate	Chilli	1
		Dried Chilli	10
		Green Tea	2
		Coconut Water	0.02
		Tea	2
			Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27 th April,2023 with the following: "6"
83.	Fenvalerate (Fat soluble residue)	Cauliflower	2
		Brinjal	2
		Okra	2

		Cotton seed	0.2
		Cottonseed Oil	0.1
		Meat and Poultry	1.0 (carcass fat basis)
		Milk and Milk products	0.01 (F)
84.	Fipronil	Cotton seed Oil	0.01
		Rice	0.01
		Chilli	0.01
		Dried Chilli	0.1
		Sugarcane	0.01

		Cabbage	0.02
		Grapes	0.01*
		Milk and Milk products	0.02
		Meat and Meat products	0.01
		Wheat	0.01*
		Onion	0.04
85.	Flonicamid	Rice	0.05*
		Cotton seed Oil	0.02*
86.	Fluazifop-p-butyl	Soya bean	0.05
		Cotton seed Oil	0.01*
		Groundnut	0.01*
		Groundnut oil	0.01*
87.	Flubendiamide	Brinjal	0.1
		Bengal Gram	1.0
		Cotton seed Oil	1.5
		Rice	0.1
		Cabbage	4
		Tomato	2
		Pigeon pea	1.0
		Black Gram	1.0
		Chilli	0.02
		Dried Chilli	0.2
		Milk and Milk products	0.1
		Tea	50
		Soya bean	0.07
		Soya bean Oil	0.07
		Soya bean cake	0.07
88.	Fluchloralin	Cotton seed	0.05
		Soya bean	0.05
89.	Flufenacet	Rice	0.05
90.	Flusilazole	Rice	0.01
		Chilli	0.01
		Dried Chilli	0.1
		Milk and Milk products	0.05
		Meat and Meat products	1
		Groundnut	0.05*
		Apple	0.05
		Grapes	0.05
91.	Fluvalinate	Cotton seed Oil	0.05
		Tea	0.01
92.	Forchlorfenuron	Grapes	0.01
93.	Fosetyl-Al	Grapes	10
		Cardamom	0.2
94.	Glufosinate Ammonium	Cotton seed Oil	0.05*
		Tea	0.01
		Milk and Milk products	0.02
95.	Glyphosate	Tea	1
		Rice	0.01

		Meat and Meat products	0.05	
96.	Halosulfuron methyl	Sugarcane	0.03*	
		Maize	0.01*	
		Bottle Gourd	0.01*	
97.	Hexaconazole	Mango	0.02	
		Rice	0.02	
		Ground nut seed	0.02	
		Tea	0.02	
				<p style="text-align: center; color: red;">Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27th April,2023 with the following:</p> <p style="text-align: center; color: red;">“5”</p>
		Grapes	0.1	
		Chilli	0.5	
		Dried Chilli	5	
		Potato	0.02	
		Soya bean	0.02	
		Apple	0.1	
		Blackgram	0.01*	
		98.	Hexazinone	
99.	Hexythiazox	Tea	15	
		Chilli	0.01	
		Dried Chilli	0.1	
		Apple	0.3	
100.	Hydrogen Cyanamide	Grapes	0.01	
		Sugarcane	0.03*	
101.	Iodosulfuron Methyl Sodium	Wheat	0.01	
102.	Imazethapyr	Soyabean	0.03	
		Soyabean oil	0.1	
		Groundnut oil	0.1	
103.	Imidacloprid	Citrus (Acid Lime)	1	
		Groundnut Seed	1	
		Mango	0.2	
		Sugarcane	0.1	
		Okra	2	
		Sunflower Seed	0.5	
		Chilli	0.3	
		Dried Chilli	3	
		Grapes	1	
		Tomato	1	
		Cucumber	1	
		Cotton seed Oil	0.05	

		Rice	0.05
		Brinjal	0.2
		Milk and Milk products	0.1
		Meat and Meat products	0.1
		Soya bean	3.0
		Soya bean Oil	0.01*
104.	Indoxacarb	Tomato	0.5
		Chilli	0.01
		Dried Chilli	0.1
		Pigeon pea	0.1

		Chick Pea	0.2
		Rice	0.05
		Soya bean	0.5
		Cottonseed	1
		Cottonseed Oil	0.1
		Cabbage	3
		Milk and Milk products	0.1
		Meat and Meat products	2
105.	Iprobenfos (Kitazin)	Rice	0.2
106.	Iprodione	Rape seed	0.5
		Mustard seed	0.5
		Rice	10
		Tomato	5
		Grapes	10
107.	Isoprothiolane	Rice	0.1
108.	Isoproturon	Wheat	0.1
109.	Kasugamycin	Rice	0.05
		Tomato	0.05
110.	Kresoxim Methyl	Milk and Milk products	0.01
		Meat and Meat products	0.05
		Maize	0.02*
		Wheat	0.05*
		Chilli	0.15
		Dried Chilli	1.5
		Potato	0.02*
		Soya bean	0.02*
		Soya bean Oil	0.02*
		Soya bean Cake	0.02*
		Cotton seed Oil	0.02*
111.	Lambda cyhalothrin	Brinjal	0.2
		Tomato	0.1
		Rice	1
		Okra	2
		Red Gram	0.05
		Bengal Gram	0.05
		Chilli	0.05
		Dried Chilli	0.5
		Groundnut seed	0.01
		Onion	0.01
		Soya bean	0.01
		Mango	0.2
		Grapes	0.05
		Cotton seed Oil	0.05
		Tea	0.05*
		Maize	0.01*
112.	Linuron	Pea	0.05
113.	Lufenuron	Cauliflower	0.1
		Cotton seed	0.01

		Black Gram	0.02*
		Chilli	0.05
		Dried Chilli	0.5
		Cabbage	0.3
		Pigeon pea	0.01
114.	Malathion (Malathion to be determined and expressed as combined residues of malathion and malaaxon)	Food grains	Wheat-10.0, Maize-0.05 and other food grains-4
		Milled food grains	1
		Fruits	4
		Vegetables	3
		Dried fruits	8
		Carbonated Water	0.01
115.	Mandipropamid	Grapes	2
		Tomato	0.3
		Potato	0.05*
116.	Mepiquat Chloride	Potato	0.1
		Cotton seed	0.5
		Cotton seed Oil	0.5
117.	Mesosulfuron Methyl	Wheat	0.01
118.	Metaflumizone	Cabbage	0.05
119.	Metalaxyl	Pearl Millet (Bajra)	0.05
		Maize	0.05
		Sorghum	0.05
120.	Metalaxyl-M	Potato	0.05*
		Grapes	1
		Black pepper	0.5
		Mustard Seed	0.01
		Chilli	0.02
		Dried Chilli	0.2
		Tomato	0.5
121.	Methabenzthiazuron	Wheat	0.5
122.	Methomyl	Tomato	1
		Pigeon pea seeds	0.05
		Chilli	0.05
		Dried Chilli	0.5
		Groundnut seed	0.05
		Grapes	0.3
		Soya bean	0.2
		Milk and Milk products	0.02
		Meat and Meat products	0.02
123.	Methyl Chlorophenoxy Acetic Acid (MCPA)	Rice	0.05
		Wheat	0.2
		Milk and Milk products	0.04
124.	Methyl Parathion (combined residues of methyl parathion and its oxygen analogue to be determined and expressed as methyl parathion)	Rice	0.01
		Black Gram	0.01
		Cotton seed oil	0.01
		Mustard seed or Mustard oil	0.01

125.	Metolachlor	Soya bean Oil	0.05
		Milk and Milk products	0.01*
126.	Metribuzin	Tomato	0.05*
		Sugarcane	0.01*
		Potato	0.05*
		Soya bean Oil	0.1
		Wheat	0.03
127.	Metsulfuron Methyl	Rice	0.01
		Wheat	0.1
		Sugarcane	0.02
128.	Milbemectin	Chilli	0.01
		Dried Chilli	0.1
129.	Monocrotophos	Food grains	0.03
		Milled food grains	0.01
		Citrus fruits	0.2
		Other fruits	1
		Cotton seed	0.1
		Cotton seed Oil (raw)	0.05
		Meat and Poultry	0.02
		Milk and Milk products	0.02
		Eggs	0.02 (shell free basis)
		Coffee (Raw beans)	0.1
		Chilli	0.2
		Dried Chilli	2
		Cardamom	0.5
130.	Myclobutanil	Apple	0.01
		Chilli	0.2
		Dried Chilli	2
		Groundnut seed	0.1
		Grapes	1
131.	Novaluron	Chilli	0.01
		Dried Chilli	0.1
		Chickpea	0.01
		Cotton seed	0.5
		Cotton seed Oil	0.01
		Tomato	0.01
		Cabbage	0.7
132.	Orthosulfamuron	Paddy	0.1
133.	Oxadiargyl	Mustard Seed	0.05
		Onion	0.1
		Cumin	0.01
		Rice	0.1
		Sunflower seed	0.05*
		Sunflower Oil	0.05*
134.	Oxadiazon	Rice	0.03
135.	Oxydemeton-Methyl	Cotton seed oil	0.01
		Chilli	2
		Dried chilli	20

		Mustard oil	0.01
		Food grains	Wheat-0.02, Rye-0.02 and other Food grains- 0.02
		Milk and Milk products	0.01
		Meat and Meat products	0.05
136.	Oxyfluorfen	Rice	0.05
		Groundnut Oil	0.05
		Mentha	0.01
		Tea	0.2
		Potato	0.01
		Onion	0.05
137.	Paclobutrazol	Mango	0.01
138.	Paraquat dichloride (Determined as Paraquatcations)	Food grains	Sorghum-0.03 and other food grains- 0.1
		Milled food grains	0.03
		Potato	0.2
		Other vegetables	0.05
		Cotton seed	2
		Cotton seed oil (edible refined)	0.05
		Milk and Milk products (whole)	0.01
		Fruits	0.05
		Tea	0.2
139.	Penconazole	Grapes	0.4
		Black gram seed	0.02
		Mango	0.05
		Apple	0.1
		Milk and Milk products	0.01
		Meat and Meat products	0.05
140.	Pencycuron	Rice	0.01
141.	Pendimethalin	Wheat	0.05
		Rice	0.05
		Soyabean Oil	0.05
		Cotton seed Oil	0.05
		Chilli	0.05*
		Dried Chilli	0.5
		Onion	0.4
		Red gram	0.05*
142.	Penoxuslum	Rice	0.1*
143.	Permethrin	Cucumber	0.5
		Cotton seed	0.5
		Soya bean	0.05
		Sunflower Seed	1
144.	Phenthoate	Food grains	0.05
		Milled food grains	0.01
		Oilseeds	0.03

		Edible oils	0.01
		Eggs	0.05 (shell free basis)
		Meat and Poultry	0.05 (carcass fat basis)
		Milk and Milk products	0.01 (F)
145.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	Food Grains	0.05
		Milled food grains	0.01
		Tomato	0.1
		Fruits	0.05
		Oil seeds	0.05
		Sugarcane	0.05
		Eggs	0.05 (shell free basis)
		Meat & Poultry	0.02* (carcass fat basis)
		Milk and Milk products	0.05 (F)
		Green gram	0.01*
		Cotton seed Oil	0.05
146.	Phosalone	Pears	2
		Citrus fruits	1
		Other fruits	Apple-5.0, Pome fruit-2.0 and other fruits- 2.0
		Potato	0.1
		Other vegetables	1
		Rapeseed or Mustard Oil (crude)	0.05
147.	Picoxystrobin	Rice	0.05*
		Grapes	0.05*
		Chilli	0.05*
		Dried Chilli	0.5
		Soya bean	0.05*
		Soya bean Oil	0.05*
		Cumin	0.05*
		Wheat	0.05*
148.	Pinoxaden	Wheat	0.7
149.	Pretilachlor	Rice	0.05
150.	Pirimiphos-methyl	Rice	0.5
		Food grains except Rice	7
		Milled food grains except rice	1
		Eggs	0.05 (shell free basis)
		Meat & Poultry	0.05 (carcass fat basis)
		Milk and Milk products	0.05 (F)
151.	Profenofos	Cotton seed oil	3
		Soya bean	0.01*
		Meat and Meat products	0.05
152.	Prohexadione calcium	Apple	0.01*
153.	Propaquizafop	Black gram	0.01
		Soya bean	0.01
		Onion	0.01*
154.	Propargite	Brinjal	2

		Chilli	2
		Dried Chilli	20
		Apple	3
		Tea	10
155.	Propiconazole	Tea	0.1
			<p>Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27th April,2023 with the following:</p> <p>“6”</p>
		Groundnut seed	0.1
		Rice	0.05
		Soya bean seed	0.07
		Wheat	0.05
		Milk and Milk products	0.01
		Meat and Meat products	0.01
156.	Propineb	Rice	0.05
		Tomato	1
		Apple	1
		Pomegranate	0.5
		Potato	0.5
		Chilli	2
		Dried Chilli	20
		Grapes	0.5
157.	Pyraclostrobin	Grapes	2
		Potato	0.05*
		Tomato	0.3
		Chilli	0.05*
		Dry chilli	0.5
		Soya bean	0.05
		Cotton	0.02*
		Milk and Milk products	0.03
		Onion	1.5
		Groundnut oil	0.05*
		Ground nut cake	0.05*
		Apple	0.5
		Corn	0.02*
		Cumin	0.02*
		Banana	0.02*
		Black gram	0.02*
		Cucumber	0.2
		coffee	0.05*
		Wheat	0.01*

		Pomegranate	0.02*
		Green gram	0.02*
		Rice	0.02*
158.	Pyrazosulfuron ethyl	Rice	0.01
159.	Pyridalyl	Cotton seed Oil	0.02
		Cabbage	0.02
		Okra	0.02
		Chilli	0.02
		Dried Chilli	0.2
160.	Pyriproxyfen	Cotton seed	0.05

		Cotton seed Oil	0.03*		
		Brinjal	0.02		
		Okra	0.03		
		Chilli	0.02		
		Dried Chilli	0.2		
161.	Pyrithiolac Sodium	Cotton seed Oil	0.02		
162.	Pymetrozine	Rice	0.01*		
163.	Quinalphos	Cauliflower	0.1		
		Citrus	0.05		
		Bengal Gram	0.05		
		Cotton seed Oil	0.05		
		Mustard seed oil	0.1		
		Soya bean	0.05		
		Groundnut oil	0.3		
		Rice	0.01		
		Pigeon pea	0.01		
		Cardamom	0.01		
		Tea	0.01		
					Highlighted provision substituted (operationalized) through direction no. F.No. SS-T007/1/2023-standard-FSSAI dated 27 th April,2023 with the following: "0.7"
				Fish	0.01
		Chilli	0.2		
		Dried Chilli	2		
164.	Quizalofop ethyl	Cotton seed	0.1		
		Soya bean seed	0.05		
		Onion	0.01*		
		Groundnut	0.1		
		Black Gram	0.01*		
165.	Quizalofop-P-tefuryl	Soya bean Seed	0.02		
		Cotton seed or Cotton seed oil	0.05*		
166.	Sodium Aceflourofen	Soya bean	0.05*		
167.	Spinosad	Cotton seed oil	0.02		
		Cabbage	2		
		Cauliflower	0.02		
		Red gram	0.01		
		Chilli	0.01		
		Dried Chilli	0.1		
		Meat and Meat products	2		

168.	Spiromesifen	Tomato	0.7
		Cottonseed	0.7
		Apple	0.01
		Brinjal	0.5
		Chilli	0.1
		Dried Chilli	1
		Tea	70
		Green Tea	70
		Okra	0.03
169.	Sulfosulfuron	Wheat	0.02
170.	Tebuconazole	Rice	1.5

		Groundnut seed	0.15
		Groundnut oil	0.05
		Wheat	0.15
		Milk and Milk products	0.01
		Tomato	2
		Meat and Meat products	0.05
		Onion	0.15
		Soya bean	0.15
		Mango	0.2
		Grapes	6
		Chilli	0.4
		Dry Chilli	4
		Cotton seed Oil	2
		Apple	1
		Banana	1.5
		Black Gram	0.01*
		Maize	0.05*
		Cabbage	1.0
171.	Thiacloprid	Cotton seed	0.05
		Cotton seed Oil	0.05
		Rice	0.02
		Brinjal	0.7
		Tea	5
		Soya bean seed	0.03*
		Apple	0.7
		Milk and Milk products	0.05
		Meat and Meat products	0.1
		Chilli	0.02
		Dried Chilli	0.2
172.	Thifluzamide	Rice	0.05
173.	Thiodicarb	Cabbage	0.02
		Brinjal	0.05
		Red Gram	0.05
		Black Gram	0.03
		Chilli	0.01
		Dried Chilli	0.1
		Cotton seed oil	0.02
		Meat and Meat products	0.02
174.	Thiamethoxam	Rice	0.02
		Okra	0.5
		Cotton seed Oil	0.01
		Brinjal	0.3
		Tomato	0.70
		Wheat	0.05
		Tea	20
		Mango	0.20
		Potato	0.30
		Mustard seed	0.01

		Cumin	0.01
		Acid Lime	0.5
		Milk and Milk products	0.05
		Meat and Meat products	0.02
		Groundnut	0.05*
		Groundnut Oil	0.05*
		Sugarcane	0.05*
		Maize	0.05*
		Soya bean	0.05*
		Soya bean Oil	0.05*
		Chilli	0.5
		Dried Chilli	5
175.	Thiometon(Residues determined as thiometon its sulfoxide and sulphone expressed as thiometon)	Food grains	0.03
		Milled food grains	0.01
		Fruits	0.5
		Potato, Carrots and Sugar beets	0.05
		Other vegetables	0.5
176.	Thiophanate-Methyl	Apple	5
		Papaya	7
		Milk and Milk products	0.05
		Wheat	0.03*
		Bottle gourd	0.4
		Pigeon pea	0.03*
		Cucumber	0.2
		Grapes	3
177.	Tolfenpyrad	Cabbage	0.01*
		Okra	0.7
178.	Trichlorfon	Food grains	0.05
		Milled food grains	0.01
		Sugar beet	0.05
		Fruits and Vegetables	0.1
		Oil seeds	0.1
		Edible oil (Refined)	0.05
		Meat and Poultry	0.1
		Milk and Milk products	0.05
179.	Triaccontanol	Milk and Milk products	0.01
180.	Triadimefon	Wheat	0.5
		Pea	0.1
		Grapes	2
		Milk and Milk products	0.01*
		Meat and Meat products	0.02*
		Chilli	0.4
		Dried Chilli	4
		Coffee	0.5
		Mango	0.03*
		Soya bean	0.02*
181.	Trifloxystrobin	Tomato	1

		Wheat	0.2
		Mango	0.4
		Grapes	3
		Chilly	0.4
		Dry Chilly	4
		Cotton seed Oil	0.02
		Apple	0.7
		Banana	0.1
		Maize	0.1
		Cabbage	0.5
182.	Triallate	Wheat	0.05
183.	Triasulfuron	Wheat	0.01*
184.	Triazophos	Chilli	0.2
		Dried Chilli	2
		Rice	0.6
		Cotton seed oil	1
		Soya bean oil	0.05
185.	Tricyclazole	Rice	3
		Chilli	0.3
		Dried Chilli	3
186.	Tridemorph	Wheat	0.1
		Grapes	0.5
		Mango	0.05
187.	Trifluralin	Wheat	0.05
188.	Validamycin	Rice	0.01
189.	Fluopicolide	Grapes	2.0
190.	Tembotrione	Maize	0.02*
191.	Propanil	Rice	0.05*
192.	Fluopyram and its metabolites	Grapes	2
193.	Topramezone	Corn	0.05*
194.	Thiocyclam Hydrogen Oxalate	Rice	0.01*
195.	2,4-D Amine Salt	Tea	0.05*
196.	Ametyrn	Sugarcane	0.05*
197.	Fomesafen	Soya bean	0.02*
		Soya bean oil	0.02*
		Ground nut	0.02*
		Ground nut oil	0.02*
198.	Imazamox	Ground nut	0.01*
		Ground nut oil	0.01*
199.	Spinetoram and its metabolites (Spinosyn-J and Spinosyn-L)	Chilli	0.05
		Dry Chilli	0.5
		Cottonseed Oil	0.02
		Soya bean	0.02
		Soya bean Oil	0.02
200.	Sodium Para Nitro Phenolate	Tomato	0.3
		Cottonseed	0.5*
		Cottonseed oil	0.5*
201.	Bentazone	Soya bean	0.05*

		Soya bean oil	0.05*
		Rice	0.05*
202.	Cyflumetofen	Tea	0.05*
203.	Boscalid	Grapes	5
204.	Flucetosulfuron	Rice	0.02*
205.	Haloxypop-R Methyl	Soya bean	2
		Soya bean Oil	0.02*
		Soya bean deoiled Cake	0.02*
206.	Sulfentrazone and its metabolite Desmethylsulfentrazone and 3-Hydroxymethylsulfentrazone	Soya bean	0.2
		Soya bean Oil	0.2
		Soya bean deoiled Cake	0.2
207.	Spirotetramat	Okra	1.0
		Brinjal	1.0
		Chilli	2
		Dry Chilli	20
208.	Metrafenone	Grapes	5
209.	Fluxapyroxad	Grapes	3.0
		Apple	0.9
		Rice	5
210.	Tetraconazole	Watermelon	0.01*
211.	Abamectin	Grapes	0.05*
		Chilli	0.05*
		Dry Chilli	0.5
212.	Flupyradifurone and its metabolites Difluoroacetic Acid and Difluoroethylamino-furanone	Okra	0.8
213.	Sulfoxaflor	Cotton seed and Cotton seed Oil	0.4
		Rice	0.01*

* Maximum Residue Limit fixed at Limit of Quantification (LOQ)

F: Maximum Residue Limit Calculation on Fat Basis

\$. The limit shall be for copper in the regulations 2.1 metal contaminants of the Food Safety and Standards (Contaminants, Toxins And Residues) Regulations, 2011 and as amended from time to time.

Note: Tolerance limit of 0.01 mg/kg shall apply in cases of pesticides for which MRL have not been fixed.]

2.3.2 : ANTIBIOTIC AND OTHER PHARMA-COLOGICALLY ACTIVE SUBSTANCES

1) The amount of antibiotic mentioned in column (2), on the sea foods including shrimps, prawns or any other variety of fish and fishery products, shall not exceed the tolerance limit prescribed in column (3) of the table given below:—

Table

S.No.	Name of Antibiotics	Tolerance limit mg/kg (ppm)
(1)	(2)	(3)
1.	Tetracycline	0.1
2.	Oxytetracycline	0.1
3.	Trimethoprim	0.05
4.	Oxolinic acid	0.3

16[(2) Following antimicrobials and other drugs used in veterinary practices are not permitted to be used at any stage of production of meat and meat products, milk and milk products, poultry and eggs, aquaculture and its products; and the Extraneous Maximum Residue Limits (EMRL) of 0.001 mg/kg shall be applicable except for Chloramphenicol for which it shall be 0.0003 mg/kg (0.3 ug/kg).

1. Carbadox
2. Chloramphenicol
3. Chlorpromazine
4. Clenbuterol
5. Colistin
6. Crystal Violet (Sum of Crystal Violet and Leucocrystal Violet)
7. Glycopeptides
8. Malachite Green (Sum of Malachite green and Leucomalachite green)
9. Nitrofurans and its metabolites furazolidone (AOZ), nitrofurazone (SEM), furaltadone (AMOZ) and nitrofurantoin (AHD)
10. Streptomycin and its metabolite dihydrostreptomycin
11. Nitroimidazoles including-
 - (A) Dimetridazole (DMZ)
 - (B) Ronidazole (RNZ) and its metabolite 2-hydroxymethyl-1-methyl-3 nitroimidazole (HMMNI)
 - (C) Iprnidazole (IPZ) and its metabolite Hydroxyipronidazole
 - (D) Metronidazole (MNZ) and its metabolite 3 hydroxymetronidazole
12. Steroids
13. Stilbenes
14. Sulphamethoxazole

(3) The use of any antibiotic is not permitted during the honey production, but, in order to test the misuse of antibiotics, the antibiotics specified in column (2) shall not exceed the Minimum Required Performance Limit (MRPL) specified in column (3) of the Table below, namely: -

Table

Serial No.	Name of Antibiotics	Maximum Residue Performance Limit (MRPL) (ug/kg)
(1)	(2)	(3)
1	Chloramphenicol	0.3
2	Nitrofurans and its metabolites	1
3	Sulphonamides and its metabolites	10 either individually or collectively
4	Streptomycin	10 either individually or collectively

5	Tetracycline	10
6	(a) Oxytetracycline	10
	(b) Chlortetracycline	10
7	Ampicillin	10
8	Enrofloxacin	10
9	Ciprofloxacin	10
10	Erythromycin	10
11	Tylosin	10

(4) The antimicrobials and other drugs used in veterinary practices specified in column (2) shall not exceed the tolerance limit specified in column (4) for the article of food in column (3) of the Table below, namely:-

Table

Serial No.	Antimicrobials and other drugs used in veterinary practices	Food	Tolerance limit (mg/Kg)	
(1)	(2)	(3)	(4)	
1.	Ampicillin	All edible animal tissues	0.01	
		Fats derived from animal tissues		
		Milk	0.05	
		Finfish		
2.	Amprolium	Cattle	0.5	
		Kidney, Liver, Muscle		
		Fat		2.0
		Poultry		1.0
		Kidney and Liver		
		Egg		
		Muscle	0.5	
3	Apramycin	All edible animal tissues except in fish	0.01	
		Fats derived from animal tissues		
		Milk		
4.	Albendazole	Species not specified	0.1	
		Muscle		
		Liver		5.0
		Kidney		5.0
		Fat		0.1
		Milk		0.1
		Fish		0.1
5.	Amoxicillin	Cattle	0.05	
		Kidney		
		Liver		
		Muscle		
		Milk		0.004
		Fat		0.05
		Finfish		0.05
		Fillet		
		Muscle		
		Pig		0.05
		Liver		
		Fat or Skin		
		Muscle		

		Kidney	0.05
		Sheep	
		Muscle	0.05
		Kidney	0.05
		Milk	0.004
		Fat	0.05
		Liver	0.05
		Muscle	0.05
6.	Cloxacillin	All edible animal tissues	0.01
		Fats derived from animal tissues	
		Milk	0.03
7.	Chlortetracycline or Oxytetracycline or Tetracycline	Cattle	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Milk	0.1
		Muscle	0.2
		Giant prawn (Paeneusmonodon) (muscle)	0.2
		Pig	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Poultry	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Eggs	0.4
		Sheep	
		Muscle	0.2
		Liver	0.6
		Kidney	1.2
		Milk	0.1
	Oxytetracycline	Fish	0.2
8.	Ceftiofur	Cattle	
		Muscle	1.0
		Liver	2.0
		Kidney	6.0
		Fat	2.0
		Milk	0.1 mg/l
		Pig	
		Muscle	1.0
		Liver	2.0
		Kidney	6.0
		Fat	2.0
		Sheep	
		Muscle	1.0
		Liver	2.0
		Kidney	6.0
		Fat	2.0
9.	Cephapirine	All edible animal tissues except in fish	0.01

		Fats derived from animal tissues	
		Milk	0.06
10.	Clopidol	All edible animal tissues except in fish Fats derived from animal tissues	0.01
11.	Closantel	Cattle	
		Muscle	1.0
		Liver	1.0
		Kidney	3.0
		Fat	3.0
		Sheep	
		Muscle	1.5
		Liver	1.5
		Kidney	5.0
		Fat	2.0
		Milk (Bovine)	0.045
12.	Cefphacetrile	All edible animal tissues except in fish Fats derived from animal tissues	0.01
		Milk	0.125
13.	Cephalexin	All edible animal tissues except in fish Fats derived from animal tissues	0.01
		Milk	0.1
14.	Danofloxacin	Cattle	
		Muscle	0.2
		Liver	0.4
		Kidney	0.4
		Fat	0.1
		Pig	
		Muscle	0.1
		Liver	0.05
		Kidney	0.2
		Fat	0.1
		Chicken	
		Muscle	0.2
		Liver	0.4
		Kidney	0.4
Fat	0.1		
15.	Doramectin	Cattle	
		Muscle	0.01
		Liver	0.1
		Kidney	0.03
		Fat	0.15
		Milk	0.015
		Pig	
		Muscle	0.005
		Liver	0.1
		Kidney	0.03
Fat	0.15		
16.	Diminazene	Cattle	
		Muscle	0.5
		Liver	12.0
		Kidney	6.0
		Milk	0.15

17.	Erythromycin	Chicken	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Eggs	0.05
		Turkey	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
18.	Flumequine	Fat	0.1
		Cattle	
		Muscle	0.5
		Liver	0.5
		Kidney	3.0
		Fat	1.0
		Chicken	
		Muscle	0.5
		Liver	0.5
		Kidney	3.0
		Fat	1.0
		Pig	
		Muscle	0.5
		Liver	0.5
		Kidney	3.0
		Fat	1.0
		Sheep	
		Muscle	0.5
		Liver	0.5
		Kidney	3.0
Fat	1.0		
Trout			
Muscle	0.5		
19.	Flunixin	All edible animal tissues except in fish	0.01
		Fats derived from animal tissues	
		Milk	
20.	Febantel or Fenbendazole or Oxyfendazole	Cattle	
		Muscle	0.1
		Liver	0.5
		Kidney	0.1
		Fat	0.1
		Milk	0.1
		Pig	
		Muscle	0.1
		Liver	0.5
		Kidney	0.1
		Fat	0.1
		Sheep	
		Muscle	0.1
		Liver	0.5
Kidney	0.1		

		Fat	0.1
		Milk	0.1
		Goat	
		Muscle	0.1
		Liver	0.5
		Kidney	0.1
		Fat	0.1
21.	Gentamicin	Cattle	
		Milk	0.2 mg/l
		Liver	2.0
		Fat	0.1
		Kidney	5.0
		Muscle	0.1
		Pig	
		Muscle	0.1
		Kidney	5.0
		Fat	0.1
		Liver	2.0
22.	Ivermectin	Cattle	
		Milk	0.01
		Liver	0.8
		Fat	0.4
		Muscle	0.03
		Kidney	0.1
		Pig	
		Liver	0.015
		Fat	0.02
		Sheep	
		Liver	0.015
		Fat	0.02
23.	Lincomycin	Cattle	
		Milk	0.15
		Chicken	
		Muscle	0.2
		Liver	0.5
		Kidney	0.5
		Fat	0.1
		Pig	
		Muscle	0.2
		Liver	0.5
		Kidney	1.5
		Fat	0.1
24.	Levamisole	Cattle	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.01
		Pig	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01

		Fat	0.01
		Sheep	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.01
		Poultry	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.01
25.	Monensin	Cattle	
		Muscle	0.01
		Liver	0.1
		Kidney	0.01
		Fat	0.1
		Milk	0.002
		Sheep	
		Muscle	0.01
		Liver	0.02
		Kidney	0.01
		Fat	0.1
		Goat	
		Muscle	0.01
		Liver	0.02
		Kidney	0.01
		Fat	0.1
		Chicken	
		Muscle	0.01
		Liver	0.01
		Kidney	0.01
		Fat	0.1
		Turkey	
		Muscle	0.01
		Liver	0.01
		Kidney	0.01
		Fat	0.1
		Quail	
		Liver	0.01
		Kidney	0.01
		Muscle	0.01
		Fat	0.1
26.	Moxidectin	Cattle	
		Muscle	0.02
		Liver	0.1
		Kidney	0.05
		Fat	0.5
		Sheep	
		Muscle	0.05
		Liver	0.1
		Kidney	0.05

		Fat	0.5
27.	Meloxicam	Bovines	
		Muscle	0.02
		Kidney	0.065
		Liver	0.065
		Milk	0.015
28.	Neomycin	Cattle	
		Liver	0.5
		Milk	1.5
		Kidney	10
		Fat	0.5
		Muscle	0.5
		Chicken	
		Liver	0.5
		Eggs	0.5
		Muscle	0.5
		Kidney	10
		Fat	0.5
		Duck	
		Fat	0.5
		Liver	0.5
		Kidney	10
		Muscle	0.5
		Goat	
		Liver	0.5
		Kidney	10
		Fat	0.5
		Muscle	0.5
		Pig	
		Kidney	10
		Liver	0.5
		Muscle	0.5
		Fat	0.5
		Sheep	
		Kidney	10
		Muscle	0.5
Fat	0.5		
Liver	0.5		
Turkey			
Liver	0.5		
Muscle	0.5		
Kidney	10		
Fat	0.5		
29.	Nicarbazin	Chicken	
		Kidney	0.2
		Fat or skin	0.2
		Liver	0.2
		Muscle	0.2
30.	Oxybendazole	All edible animal tissues except in fish	
		Fats derived from animal tissues	0.01

31.	Oxyclozanide	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
32.	Parbendazole	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
33.	Praziquantel	All edible tissues of pig	0.01
		Sheep:	
		All edible tissues (Muscle, Liver, Kidney, Fat)-	0.05
34.	Pencillin G/Benzylpenicillin	Pig	
		Liver	0.05
		Muscle	0.05
		Kidney	0.05
		Chicken	
		Kidney	0.05
		Liver	0.05
		Muscle	0.05
		Cattle	
		Muscle	0.05
		Milk	0.004
		Liver	0.05
		Kidney	0.05
35.	Spectinomycin	Cattle	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
		Fat	2.0
		Milk	0.2 mg/l
		Chicken	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
		Fat	2.0
		Eggs	2.0
		Pig	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
		Fat	2.0
		Sheep	
		Muscle	0.5
		Liver	2.0
		Kidney	5.0
Fat	2.0		
36.	Sulfadiazine	All edible animal tissues Fats derived from animal tissues Milk	0.01
37.	Sulfanilamide	All edible animal tissues Fats derived from animal tissues Milk	0.01

38.	Sulfaquinoxaline	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
39.	Sulfadimidine	Cattle	
		Milk	0.025
		No Specified	
		Muscle	0.1
		Fat	0.1
		Kidney	0.1
40.	SulfaChloropyrazine	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
41.	Sulfamethazine	All edible animal tissues except in fish Fats derived from animal tissues	0.01
42.	Sulfadimethoxine	All edible animal tissues except in fish Fats derived from animal tissues Milk	0.01
43.	Thiabendazole	Cattle	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Milk	0.1
		Pig	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Sheep	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Goat	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
Fat	0.1		
44.	Triclabendazole	Cattle	
		Muscle	0.25
		Liver	0.85
		Kidney	0.4
		Fat or skin	0.1
		Sheep	
		Muscle	0.2
		Liver	0.3
		Kidney	0.2
		Fat or skin	0.1
		Milk (All ruminants)	0.01

45.	Trimethoprim	All edible animal tissues except in fish	0.01
		Fats derived from animal tissues	
		Milk	0.05
46.	Tylosin	Cattle	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Milk	0.1
		Pig	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Fat	0.1
		Sheep	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
		Chicken	
		Muscle	0.1
		Liver	0.1
		Kidney	0.1
Fat or skin	0.1		
Eggs	0.3		
47.	Virginiamycin	Poultry and egg	0.01
48.	Xylazine	All edible animal tissues except in fish Fats derived from animal tissues	0.01
49.	Zinc Bacitracin (minimum 60IU/mg dried substance)	All edible animal tissues except in fish Fats derived from animal tissues	0.01
		Milk	0.1".]

⁵ [2.4. Limits of biotoxins in fish and fishery products:

Sl. No.	Name of the contaminants	Article of food	Limit ($\mu\text{g}/\text{kg}$)
(1)	(2)	(3)	(4)
1.	Paralytic Shellfish Poison (PSP)	Bivalve Molluscs	80 $\mu\text{g}/100\text{g}$ (Saxitoxin Equivalent)
2.	Amnesic Shellfish Poison (ASP)	Bivalve Molluscs	20 $\mu\text{g}/\text{g}$ (Domoic acid equivalent)
3.	Diarrhetic shellfish poison (DSP)	Bivalve Molluscs	160 μg of Okadaic acid equivalent/Kg
4.	Azaspiracid poison (AZP)	Bivalve Molluscs	160 μg of azaspiracid equivalent/Kg
5.	Brevetoxin (BTX)	Bivalve Molluscs	200 mouse units or equivalent/Kg]

⁶ [2.5 Other Contaminants

2.5.1 : The contaminant mentioned in column 2 on the foods mentioned in column 3, shall not exceed the Maximum Level prescribed in column 4 of the Table given below:

Sl.No.	Name of the contaminants	Food	Maximum level (mg/kg)
(1)	(2)	(3)	(4)
1.	Melamine	Powdered infant formula	1.0
		Liquid infant formula	0.15
		Other foods	2.5]

⁹ [2.5.2 Histamine in Fish and Fishery Products contaminants, toxins and Residues

1. Fish species having potential to cause histamine poisoning

Sl.No.	Family	Scientific Name	Common Name
1.	Carangidae	<i>Alectis indica</i>	Indian Threadfish
		<i>Alepes</i> spp.	Scad
		<i>Atropus atropus</i>	Cleftbelly trevally
		<i>Carangoides bartholomaei</i>	Yellow Jack
		<i>Carangoides</i> spp.	Trevally
		<i>Caranx crysos</i>	Blue runner
		<i>Caranx</i> spp.	Jack/Trevally
		<i>Decapterus koheru</i>	Koheru
		<i>Decapterus russelli</i>	Indian scad
		<i>Decapterus</i> spp.	Scad
		<i>Elagatis bipinnulata</i>	Rainbow Runner
		<i>Megalaspis cordyla</i>	Horse Mackerel/Torpedo Scad
		<i>Nematistius pectoralis</i>	Roosterfish
		<i>Oligoplites saurus</i>	Leather Jacket
		<i>Pseudocaranx dentex</i>	White trevally
		<i>Scomberoides commersonianus</i>	Talang queenfish
		<i>Scomberoides</i> spp.	Leather Jacket/Queen Fish
		<i>Selene</i> spp.	Moonfish
		<i>Seriola dumerili</i>	Greater/Japanese Amberjack or Rudder Fish
		<i>Seriola lalandi</i>	Yellowtail Amberjack
		<i>Seriola quinqueradiata</i>	Japanese Amberjack
		<i>Seriola rivoliana</i>	Longfin Yellowtail
		<i>Seriola</i> spp.	Amberjack or Yellowtail
		<i>Trachurus capensis</i>	Cape Horse Mackerel
		<i>Trachurus japonicas</i>	Japanese Jack Mackerel
		<i>Trachurus murphyi</i>	Chilean Jack Mackerel
		<i>Trachurus novaezelandiae</i>	Yellowtail Horse Mackerel
<i>Trachurus</i> spp.	Jack Mackerel/Horse Mackerel		
<i>Trachurus trachurus</i>	Atlantic Horse Mackerel		
<i>Uraspis secunda</i>	Cottonmouth jack		
2.	Chanidae	<i>Chanos chanos</i>	Milkfish
3.	Clupeidae	<i>Alosa pseudoharengus</i>	Alewife
		<i>Alosa</i> spp.	Herring
		<i>Amblygaster sirm</i>	Spotted Sardinella
		<i>Anodontostoma chacunda</i>	Chacunda gizzard shad
		<i>Brevoortia patronus</i>	Gulf Menhaden
<i>Brevoortia</i> spp.	Menhaden		

		<i>Brevoortia tyrannus</i>	Atlantic Menhaden
		<i>Clupea bentincki</i>	Araucanian herring
		<i>Clupea harengus</i>	Atlantic herring
		<i>Clupea pallasii pallasii</i>	Pacific herring
		<i>Clupea</i> spp.	Pichard/Shad/Herring
		<i>Dorosoma</i> spp.	Gizzard Shad
		<i>Ethmalosa fimbriata</i>	Bonga Shad
		<i>Ethmidium maculatum</i>	Pacific Menhaden
		<i>Etrumeus sadina</i>	Red-eye round herring
		<i>Harengula</i> spp.	Sprat/Herring
		<i>Harengula thrissina</i>	Pacific flatiron herring
		<i>Hilsa</i> spp.	Shad
		<i>Nematolosa</i> spp.	Gizzard Shad
		<i>Opisthonema libertate</i>	Pacific thread herring
		<i>Opisthonema</i> spp	Thread Herring
		<i>Opisthopterus tardoore</i>	Tardoore
		<i>Sardina pilchardus</i>	European Pilchard
		<i>Sardinella aurita</i>	Round Sardinella
		<i>Sardinella gibbosa</i>	Gold stripe Sardinella
		<i>Sardinella longiceps</i>	Indian Oil Sardine
		<i>Sardinella maderensis</i>	Madeiran Sardinella
		<i>Sardinella</i> spp.	Sardine
		<i>Sardinops sagax</i>	South American Pilchard
		<i>Sardinops</i> spp.	South American Pilchard
		<i>Spratelloides gracilis</i>	Silver-stripe round herring
		<i>Tenualosa ilisha</i>	Hilsa shad
		<i>Tenualosa</i> spp.	Shad
4	Coryphaenidae	<i>Coryphaena hippurus</i>	Mahi-Mahi /Dolphin fish
5	Engraulidae	<i>Anchoa</i> spp.	Anchovy
		<i>Anchoviella</i> spp.	Anchovy
		<i>Cetengraulis mysticetus</i>	Pacific anchoveta
		<i>Engraulis capensis</i>	Southern African anchovy
		<i>Engraulis encrasicolus</i>	European anchovy
		<i>Engraulis japonicus</i>	Japanese anchovy
		<i>Engraulis ringens</i>	Peruvian anchovy
		<i>Engraulis</i> spp.	Anchovy
		<i>Stolephorus</i> spp.	Anchovy
6	Istiophoridae	<i>Istiompax indica</i>	Black Marlin
		<i>Istiophorus albicans</i>	Atlantic sailfish
		<i>Istiophorus platypterus</i>	Indo-Pacific sailfish
		<i>Kajikia albida</i>	Atlantic white marlin
		<i>Kajikia audax</i>	Striped Marlin
		<i>Makaira mazara</i>	Indo-Pacific blue marlin
		<i>Makaira</i> spp.	Marlin/Sailfish
		<i>Tetrapturus</i> spp.	Marlin/Spearfish

		<i>Tetrapturus</i> spp.	Spearfish
7	Mugilidae	<i>Mugil cephalus</i>	Flathead Grey Mullet
8	Pristigasteridae	<i>Ilisha</i> spp.	Ilisha/Pellona
		<i>Pellona ditchella</i>	Indian pellona
9	Scombridae	<i>Acanthocybium solandri</i>	Wahoo
		<i>Auxis</i> spp.	Bullet Tuna/Frigate Tuna
		<i>Cybiosarda elegans</i>	Leaping Bonito
		<i>Euthynnus affinis</i>	Little tuna or Kawakawa
		<i>Euthynnus</i> spp.	Bonito
		<i>Gasterochisma melampus</i>	Butterfly kingfish
		<i>Grammatorcynus</i> spp.	Short Mackerel
		<i>Gymnosarda unicolor</i>	Dogtooth tuna
		<i>Katsuwonus pelamis</i>	Skipjack Tuna
		<i>Orcynopsis unicolor</i>	Plain Bonito
		<i>Rastrelliger brachysoma</i>	Short Mackerel
		<i>Rastrelliger kanagurta</i>	Indian Mackerel
		<i>Sarda</i> spp	Bonito
		<i>Scomber australasicus</i>	Blue mackerel
		<i>Scomber japonicas</i>	Chub mackerel
		<i>Scomber scombrus</i>	Atlantic mackerel
		<i>Scomber</i> spp.	Mackerel
		<i>Scomberomorus cavalla</i>	King Mackerel
		<i>Scomberomorus commerson</i>	Narrow-barred Spanish mackerel
		<i>Scomberomorus guttatus</i>	Indo-Pacific king mackerel/Spotted Spanish Mackerel
		<i>Scomberomorus niphonius</i>	Japanese Spanish mackerel
		<i>Scomberomorus</i> spp.	Spanish Mackerel
		<i>Scomeromorus lineolatus</i>	Streaked seerfish
		<i>Thunnus alalunga</i>	Albacore Tuna
		<i>Thunnus albacares</i>	Yellowfin Tuna
		<i>Thunnus atlanticus</i>	Blackfin Tuna
		<i>Thunnus maccoyi</i>	Southern bluefin tuna
		<i>Thunnus obesus</i>	Bigeye Tuna
<i>Thunnus orientalis</i>	Pacific bluefin tuna		
<i>Thunnus</i> spp.	Tuna		
<i>Thunnus thynnus</i>	Atlantic bluefin tuna		
<i>Thunnus tonggol</i>	Longtail Tuna		
10	Xiphiidae	<i>Xiphias gladius</i>	Swordfish

2. Limits of histamine level in fish and fishery products

S. No.	Product Category	Applicable to	Histamine Level
1.	Raw/Chilled/Frozen Finfish	Species with high amount of free histidine (Listed fish species with potential to cause histamine fish poisoning)	n=9, c=2; m=100 mg/kg, M=200 mg/kg
2.	Thermally Processed Fishery Products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
3.	Smoked fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
4.	Fish Mince/Surimi and analogues		n=9, c=2; m=100 mg/kg, M=200 mg/kg
5.	Battered and breaded fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
6.	Other Ready to Eat fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
7.	Other value added fishery products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
8.	Other fish based products		n=9, c=2; m=100 mg/kg, M=200 mg/kg
9.	Dried/ Salted and Dried fishery products		n=9, c=2; m=200 mg/kg, M=400 mg/kg
10.	Fermented Fishery products		n=9, c=2; m=200 mg/kg, M=400 mg/kg
11.	Fish Pickle		n=9, c=2; m=200 mg/kg, M=400 mg/kg

Where,

n: Number of units comprising the sample

c: Maximum allowable number of defective sample units

m: Acceptable level in a sample

M: Specified level when exceeded in one or more samples would cause the lot to be rejected

Satisfactory, if the following requirements are fulfilled:

1. the mean value observed is $\leq m$
2. a maximum of c/n values observed are between m and M
3. no values observed exceed the limit of M,

Unsatisfactory, if the mean value observed exceeds m or more than c/n values are between m and M or one or more of the values observed are $>M$.

Note:

1. Inserted by notification no. F. No. 1-12/Sci.Panel/(Notification)/FSSAI/2012, dated the 3rdDecember, 2014
2. Substituted by notification no. F.No. P.15025/264/13-PA/FSSAI, dated the 4th November,2015
3. Inserted by notification no. F.No. 1-99/4/SP(Contaminants)/FSSAI/2014, dated the 4thNovember, 2015
4. Substituted by notification no. F.No.1-99/1/SP(contaminants)/FSSAI/2009, dated the 4thNovember, 2015
5. Inserted by notification no. F. No. 1-10(6)/Standards/SP (Fish and Fisheries Products)/FSSAI-2013, dated the 4th January, 2016
6. Inserted by notification no. F. No. P. 15025/264/13-PA/FSSAI, dated the 5th January, 2016.
7. Inserted by notification no. F. No. P.15025/264/13-PA/FSSAI, dated the 3rd May, 2016
8. Omitted by Notification F. No.1-99/SP (Contaminants)/REG/FSSAI/201,5 dated the 10thOctober, 2016
9. Inserted by notification no. F. No. 1-10(2)/Standards/SP (Fish and Fisheries Products)/FSSAI-2013, dated the 18th January, 2017
10. Inserted by notification no. F. No. P/15025/264/13-PA/FSSAI, dated the 21st July, 2017.
11. Inserted by notification no F. No. P.15025/264/13-PA/FSSAI-2017, dated 27th December,2017.
12. omitted by notification no. 1-100/SPPAR-NOTIFICATION-CTR/FSSAI/2016, dated 19thMarch, 2018.
13. Inserted by notification no No. 1-100/SP(PAR)- Notification/Enf/FSSAI/2014, dated 20thJuly, 2018.
14. substituted by notification No. 1-SP(PAR)- Notification-pesticide/stds-FSSAI/2017, dated24th December, 2018;
15. substituted by F. No. Stds/SP/(Contaminants)/Notification-1/FSSAI-2018, dated 7th August,2020;
16. No.01-SP (PAR)-Notification-Pesticides/Std-FSSAI/2017, 17th October 2024.

IS 10500 : 2012
(Reaffirmed 2018)
(Reaffirmed 2023)

भारतीय मानक

पीने का पानी — विशिष्टि
(दूसरा पुनरीक्षण)

Indian Standard

DRINKING WATER — SPECIFICATION
(Second Revision)

ICS 13.060.20

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Drinking Water Sectional Committee, FAD 25

FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Drinking Water Sectional Committee had been approved by the Food and Agriculture Division Council.

This standard was originally published in 1983. A report prepared by the World Health Organization in cooperation with the World Bank showed that in 1975, some 1 230 million people were without safe water supplies. These appalling facts were central to the United Nations decision to declare an International Drinking Water Supply and Sanitation decade, beginning in 1981. Further, the VI Five-Year Plan of India had made a special provision for availability of safe drinking water for the masses. Therefore, the standard was formulated with the objective of assessing the quality of water resources, and to check the effectiveness of water treatment and supply by the concerned authorities.

The first revision was undertaken to take into account the up-to-date information available about the nature and effect of various contaminants as also the new techniques for identifying and determining their concentration. Based on experience gained additional requirements for alkalinity; aluminium and boron were incorporated and the permissible limits for dissolved solids, nitrate and pesticides residues modified.

As per the eleventh five year plan document of India (2007-12), there are about 2.17 lakh quality affected habitations in the country with more than half affected with excess iron, followed by fluoride, salinity, nitrate and arsenic in that order. Further, approximately, 10 million cases of diarrhoea, more than 7.2 lakh typhoid cases and 1.5 lakh viral hepatitis cases occur every year a majority of which are contributed by unclean water supply and poor sanitation. The eleventh five year plan document of India (2007-2012) recognizes dealing with the issue of water quality as a major challenge and aims at addressing water quality problems in all quality affected habitations with emphasis on community participation and awareness campaigns as well as on top most priority to water quality surveillance and monitoring by setting up of water quality testing laboratories strengthened with qualified manpower, equipments and chemicals.

The second revision was undertaken to upgrade the requirements of the standard and align with the internationally available specifications on drinking water. In this revision assistance has been derived from the following:

- a) EU Directives relating to the quality of water intended for human consumption (80/778/EEC) and Council Directive 98/83/EC.
- b) USEPA standard — National Primary Drinking Water Standard. EPA 816-F-02-013 dated July, 2002.
- c) WHO Guidelines for Drinking Water Quality. 3rd Edition Vol. 1 Recommendations, 2008.
- d) Manual on Water Supply and Treatment, third edition — revised and updated May 1999, Ministry of Urban Development, New Delhi.

This standard specifies the acceptable limits and the permissible limits in the absence of alternate source. It is recommended that the acceptable limit is to be implemented as values in excess of those mentioned under 'Acceptable' render the water not suitable. Such a value may, however, be tolerated in the absence of an alternative source. However, if the value exceeds the limits indicated under 'permissible limit in the absence of alternate source' in col 4 of Tables 1 to 4, the sources will have to be rejected.

Pesticide residues limits and test methods given in Table 5 are based on consumption pattern, persistence and available manufacturing data. The limits have been specified based on WHO guidelines, wherever available. In cases where WHO guidelines are not available, the standards available from other countries have been examined and incorporated, taking in view the Indian conditions.

In this revision, additional requirements for ammonia, chloramines, barium, molybdenum, silver, sulphide, nickel, polychlorinated biphenyls and trihalomethanes have been incorporated while the requirements for colour, turbidity, total hardness, free residual chlorine, iron, magnesium, mineral oil, boron, cadmium, total arsenic, lead, polynuclear aromatic hydrocarbons, pesticides and bacteriological requirements have been modified.

In this revision, requirement and test method for virological examination have been included. Further, requirements and test methods for cryptosporidium and giardia have also been specified.

Routine surveillance of drinking water supplies should be carried out by the relevant authorities to understand the risk of specific pathogens and to define proper control procedures. The WHO Guidelines for Drinking Water Quality, 3rd Edition, Vol. 1 may be referred for specific recommendations on using a water safety approach incorporating risk identification. Precautions/Care should be taken to prevent contamination of drinking water from chlorine resistant parasites such as cryptosporidium species and giardia.

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*Indian Standard***DRINKING WATER — SPECIFICATION***(Second Revision)***1 SCOPE**

This standard prescribes the requirements and the methods of sampling and test for drinking water.

2 REFERENCES

The standards listed in Annex A contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

3 TERMINOLOGY

For the purpose of this standard the following definition shall apply.

3.1 Drinking Water — Drinking water is water intended for human consumption for drinking and cooking purposes from any source. It includes water (treated or untreated) supplied by any means for human consumption.

4 REQUIREMENTS

Drinking water shall comply with the requirements given in Tables 1 to 4. The analysis of pesticide residues given in Table 3 shall be conducted by a recognized laboratory using internationally established test method meeting the residue limits as given in Table 5.

Drinking water shall also comply with bacteriological requirements (*see 4.1*), virological requirements (*see 4.2*) and biological requirements (*see 4.3*).

4.1 Bacteriological Requirements**4.1.1 Water in Distribution System**

Ideally, all samples taken from the distribution system including consumers' premises, should be free from coliform organisms and the following bacteriological quality of drinking water collected in the distribution system, as given in Table 6 is, therefore specified when tested in accordance with IS 1622.

4.2 Virological Requirements

4.2.1 Ideally, all samples taken from the distribution

Table 1 Organoleptic and Physical Parameters*(Foreword and Clause 4)*

SI No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 3025	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Colour, Hazen units, <i>Max</i>	5	15	Part 4	Extended to 15 only, if toxic substances are not suspected in absence of alternate sources
ii)	Odour	Agreeable	Agreeable	Part 5	a) Test cold and when heated b) Test at several dilutions
iii)	pH value	6.5-8.5	No relaxation	Part 11	—
iv)	Taste	Agreeable	Agreeable	Parts 7 and 8	Test to be conducted only after safety has been established
v)	Turbidity, NTU, <i>Max</i>	1	5	Part 10	—
vi)	Total dissolved solids, mg/l, <i>Max</i>	500	2 000	Part 16	—

NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

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Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Aluminium (as Al), mg/l, <i>Max</i>	0.03	0.2	IS 3025 (Part 55)	—
ii)	Ammonia (as total ammonia-N), mg/l, <i>Max</i>	0.5	No relaxation	IS 3025 (Part 34)	—
iii)	Anionic detergents (as MBAS) mg/l, <i>Max</i>	0.2	1.0	Annex K of IS 13428	—
iv)	Barium (as Ba), mg/l, <i>Max</i>	0.7	No relaxation	Annex F of IS 13428* or IS 15302	—
v)	Boron (as B), mg/l, <i>Max</i>	0.5	1.0	IS 3025 (Part 57)	—
vi)	Calcium (as Ca), mg/l, <i>Max</i>	75	200	IS 3025 (Part 40)	—
vii)	Chloramines (as Cl ₂), mg/l, <i>Max</i>	4.0	No relaxation	IS 3025 (Part 26)* or APHA 4500-Cl G	—
viii)	Chloride (as Cl), mg/l, <i>Max</i>	250	1 000	IS 3025 (Part 32)	—
ix)	Copper (as Cu), mg/l, <i>Max</i>	0.05	1.5	IS 3025 (Part 42)	—
x)	Fluoride (as F) mg/l, <i>Max</i>	1.0	1.5	IS 3025 (Part 60)	—
xi)	Free residual chlorine, mg/l, <i>Min</i>	0.2	1	IS 3025 (Part 26)	To be applicable only when water is chlorinated. Tested at consumer end. When protection against viral infection is required, it should be minimum 0.5 mg/l
xii)	Iron (as Fe), mg/l, <i>Max</i>	0.3	No relaxation	IS 3025 (Part 53)	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xiii)	Magnesium (as Mg), mg/l, <i>Max</i>	30	100	IS 3025 (Part 46)	—
xiv)	Manganese (as Mn), mg/l, <i>Max</i>	0.1	0.3	IS 3025 (Part 59)	Total concentration of manganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xv)	Mineral oil, mg/l, <i>Max</i>	0.5	No relaxation	Clause 6 of IS 3025 (Part 39) Infrared partition method	—
xvi)	Nitrate (as NO ₃), mg/l, <i>Max</i>	45	No relaxation	IS 3025 (Part 34)	—
xvii)	Phenolic compounds (as C ₆ H ₅ OH), mg/l, <i>Max</i>	0.001	0.002	IS 3025 (Part 43)	—
xviii)	Selenium (as Se), mg/l, <i>Max</i>	0.01	No relaxation	IS 3025 (Part 56) or IS 15303*	—
xix)	Silver (as Ag), mg/l, <i>Max</i>	0.1	No relaxation	Annex J of IS 13428	—
xx)	Sulphate (as SO ₄) mg/l, <i>Max</i>	200	400	IS 3025 (Part 24)	May be extended to 400 provided that Magnesium does not exceed 30
xxi)	Sulphide (as H ₂ S), mg/l, <i>Max</i>	0.05	No relaxation	IS 3025 (Part 29)	—
xxii)	Total alkalinity as calcium carbonate, mg/l, <i>Max</i>	200	600	IS 3025 (Part 23)	—
xxiii)	Total hardness (as CaCO ₃), mg/l, <i>Max</i>	200	600	IS 3025 (Part 21)	—
xxiv)	Zinc (as Zn), mg/l, <i>Max</i>	5	15	IS 3025 (Part 49)	—

NOTES

1 In case of dispute, the method indicated by '*' shall be the referee method.

2 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

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Table 3 Parameters Concerning Toxic Substances
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Cadmium (as Cd), mg/l, <i>Max</i>	0.003	No relaxation	IS 3025 (Part 41)	—
ii)	Cyanide (as CN), mg/l, <i>Max</i>	0.05	No relaxation	IS 3025 (Part 27)	—
iii)	Lead (as Pb), mg/l, <i>Max</i>	0.01	No relaxation	IS 3025 (Part 47)	—
iv)	Mercury (as Hg), mg/l, <i>Max</i>	0.001	No relaxation	IS 3025 (Part 48)/ Mercury analyser	—
v)	Molybdenum (as Mo), mg/l, <i>Max</i>	0.07	No relaxation	IS 3025 (Part 2)	—
vi)	Nickel (as Ni), mg/l, <i>Max</i>	0.02	No relaxation	IS 3025 (Part 54)	—
vii)	Pesticides, µg/l, <i>Max</i>	See Table 5	No relaxation	See Table 5	—
viii)	Polychlorinated biphenyls, mg/l, <i>Max</i>	0.000 5	No relaxation	ASTM 5175*	—
ix)	Polynuclear aromatic hydrocarbons (as PAH), mg/l, <i>Max</i>	0.000 1	No relaxation	APHA 6440	or APHA 6630 —
x)	Total arsenic (as As), mg/l, <i>Max</i>	0.01	0.05	IS 3025 (Part 37)	—
xi)	Total chromium (as Cr), mg/l, <i>Max</i>	0.05	No relaxation	IS 3025 (Part 52)	—
xii)	Trihalomethanes:				
a)	Bromoform, mg/l, <i>Max</i>	0.1	No relaxation	ASTM D 3973-85* or APHA 6232	—
b)	Dibromochloromethane, mg/l, <i>Max</i>	0.1	No relaxation	ASTM D 3973-85* or APHA 6232	—
c)	Bromodichloromethane, mg/l, <i>Max</i>	0.06	No relaxation	ASTM D 3973-85* or APHA 6232	—
d)	Chloroform, mg/l, <i>Max</i>	0.2	No relaxation	ASTM D 3973-85* or APHA 6232	—

NOTES

1 In case of dispute, the method indicated by '*' shall be the referee method.

2 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

Table 4 Parameters Concerning Radioactive Substances
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 14194	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Radioactive materials:				
a)	Alpha emitters Bq/l, <i>Max</i>	0.1	No relaxation	Part 2	—
b)	Beta emitters Bq/l, <i>Max</i>	1.0	No relaxation	Part 1	—

NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

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Table 5 Pesticide Residues Limits and Test Method
(Foreword and Table 3)

Sl No.	Pesticide	Limit µg/l	Method of Test, Ref to	
			USEPA (4)	AOAC/ ISO (5)
(1)	(2)	(3)		
i)	Alachlor	20	525.2, 507	—
ii)	Atrazine	2	525.2, 8141 A	—
iii)	Aldrin/ Dieldrin	0.03	508	—
iv)	Alpha HCH	0.01	508	—
v)	Beta HCH	0.04	508	—
vi)	Butachlor	125	525.2, 8141 A	—
vii)	Chlorpyrifos	30	525.2, 8141 A	—
viii)	Delta HCH	0.04	508	—
ix)	2,4- Dichlorophenoxyacetic acid	30	515.1	—
x)	DDT (<i>o, p</i> and <i>p, p</i> – Isomers of DDT, DDE and DDD)	1	508	AOAC 990.06
xi)	Endosulfan (alpha, beta, and sulphate)	0.4	508	AOAC 990.06
xii)	Ethion	3	1657 A	—
xiii)	Gamma — HCH (Lindane)	2	508	AOAC 990.06
xiv)	Isoproturon	9	532	—
xv)	Malathion	190	8141 A	—
xvi)	Methyl parathion	0.3	8141 A	ISO 10695
xvii)	Monocrotophos	1	8141 A	—
xviii)	Phorate	2	8141 A	—

NOTE — Test methods are for guidance and reference for testing laboratory. In case of two methods, USEPA method shall be the reference method.

Table 6 Bacteriological Quality of Drinking Water¹⁾
(Clause 4.1.1)

Sl No.	Organisms	Requirements
(1)	(2)	(3)
i)	<i>All water intended for drinking:</i>	
a)	<i>E. coli</i> or thermotolerant coliform bacteria ^{2), 3)}	Shall not be detectable in any 100 ml sample
ii)	<i>Treated water entering the distribution system:</i>	
a)	<i>E. coli</i> or thermotolerant coliform bacteria ²⁾	Shall not be detectable in any 100 ml sample
b)	Total coliform bacteria	Shall not be detectable in any 100 ml sample
iii)	<i>Treated water in the distribution system:</i>	
a)	<i>E. coli</i> or thermotolerant coliform bacteria	Shall not be detectable in any 100 ml sample
b)	Total coliform bacteria	Shall not be detectable in any 100 ml sample

¹⁾Immediate investigative action shall be taken if either *E.coli* or total coliform bacteria are detected. The minimum action in the case of total coliform bacteria is repeat sampling; if these bacteria are detected in the repeat sample, the cause shall be determined by immediate further investigation.

²⁾Although, *E. coli* is the more precise indicator of faecal pollution, the count of thermotolerant coliform bacteria is an acceptable alternative. If necessary, proper confirmatory tests shall be carried out. Total coliform bacteria are not acceptable indicators of the sanitary quality of rural water supplies, particularly in tropical areas where many bacteria of no sanitary significance occur in almost all untreated supplies.

³⁾It is recognized that, in the great majority of rural water supplies in developing countries, faecal contamination is widespread. Under these conditions, the national surveillance agency should set medium-term targets for progressive improvement of water supplies.

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system including consumers' premises, should be free from virus.

4.2.2 None of the generally accepted sewage treatment methods yield virus-free effluent. Although a number of investigators have found activated sludge treatment to be superior to trickling filters from this point of view, it seems possible that chemical precipitation methods will prove to be the most effective.

4.2.3 Virus can be isolated from raw water and from springs, enterovirus, reovirus, and adenovirus have been found in water, the first named being the most resistant to chlorination. If enterovirus are absent from chlorinated water, it can be assumed that the water is safe to drink. Some uncertainty still remains about the virus of infectious hepatitis, since it has not so far been isolated but in view of the morphology and resistance of enterovirus it is likely that, if they have been inactivated hepatitis virus will have been inactivated also.

4.2.4 An exponential relationship exists between the rate of virus inactivation and the redox potential. A redox potential of 650 mV (measured between platinum and calomel electrodes) will cause almost instantaneous inactivation of even high concentrations of virus. Such a potential can be obtained with even a low concentration of free chlorine, but only with an extremely high concentration of combined chlorine. This oxidative inactivation may be achieved with a number of other oxidants also, for example, iodine, ozone and potassium permanganate, but the effect of the oxidants will always be counteracted, if reducing components, which are mainly organic, are present. As a consequence, the sensitivity of virus towards disinfectants will depend on the *milieu* just as much as on the particular disinfectant used.

4.2.5 Viruses are generally resistant to disinfectants as well as get protected on account of presence of particulate and organic matter in water. Because the difference between the resistance of coliform organisms and of virus to disinfection by oxidants increases with increasing concentration of reducing components, for example, organic matter, it cannot be assumed that the absence of available coliform organisms implies freedom from active virus under circumstances where a free chlorine residual cannot be maintained. Sedimentation and slow sand filtration in themselves may contribute to the removal of virus from water.

4.2.6 In practice, >0.5 mg/l of free chlorine for 1 h is sufficient to inactivate virus, even in water that was originally polluted provided the water is free from particulates and organic matter.

4.2.7 MS2 phage are indicator of viral contamination in drinking water. MS2 phage shall be absent in 1 litre of water when tested in accordance with USEPA method 1602. If MS2 phage are detected in the drinking water, virological examination shall be done by the Polymerase Chain Reaction (PCR) method for virological examination as given in Annex B. USEPA method in Manual of Method for Virology Chapter 16, June 2001 shall be the alternate method. If viruses are detected, the cause shall be determined by immediate further investigation.

4.3 Biological Requirements

4.3.1 Ideally, all samples taken including consumers premises should be free from biological organisms. Biological examination is of value in determining the causes of objectionable tastes and odours in water and controlling remedial treatments, in helping to interpret the results of various chemical analysis, and in explaining the causes of clogging in distribution pipes and filters. In some instances, it may be of use in demonstrating that water from one source has been mixed with that from another.

4.3.2 The biological qualities of water are of greater importance when the supply has not undergone the conventional flocculation and filtration processes, since increased growth of methane-utilizing bacteria on biological slimes in pipes may then be expected, and the development of bryozoal growths such as *Plumatella* may cause operational difficulties.

4.3.3 Some of the animalcules found in water mains may be free-living in the water, but others such as *Dreissena* and *Asellus* are more or less firmly attached to the inside of the mains. Although these animalcules are not themselves pathogenic, they may harbour pathogenic organisms or virus in their intestines, thus protecting these pathogens from destruction by chlorine.

4.3.4 Chlorination, at the dosages normally employed in waterworks, is ineffective against certain parasites, including amoebic cysts; they can be excluded only by effective filtration or by higher chlorine doses than can be tolerated without subsequent dechlorination. *Amoebiasis* can be conveyed by water completely free from enteric bacteria; microscopic examination after concentration is, therefore, the only safe method of identification.

4.3.5 Strict precautions against back-syphonage and cross-connections are required, if amoebic cysts are found in a distribution system containing tested water.

4.3.6 The *cercariae of schistosomiasis* can be detected by similar microscopic examination, but there is, in

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any case, no evidence to suggest that this disease is normally spread through piped water supplies.

4.3.7 The cyclops vector of the embryos of *Dracunculus medinensis* which causes dracontiasis or Guinea-worm disease can be found in open wells in a number of tropical areas. They are identifiable by microscopic examination. Such well supplies are frequently used untreated, but the parasite can be relatively easily excluded by simple physical improvements in the form of curbs, drainage, and apron surrounds and other measures which prevent physical contact with the water source.

4.3.8 Cryptosporidium shall be absent in 10 liter of water when tested in accordance with USEPA method 1622 or USEPA method 1623* or ISO 15553 : 2006.

4.3.9 Giardia shall be absent in 10 liter of water when tested in accordance with USEPA method 1623* or ISO 15553 : 2006.

4.3.10 The drinking water shall be free from microscopic organisms such as algae, zooplanktons, flagellates, parasites and toxin producing organisms. An illustrative (and not exhaustive) list is given in Annex C for guidance.

NOTE — In case of dispute, the method indicated by '*' in **4.3.8** and **4.3.9** shall be referee method.

5 SAMPLING

Representative samples of water shall be drawn as prescribed in IS 1622 and IS 3025 (Part 1).

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
1622 : 1981	Methods of sampling and microbiological examination of water (<i>first revision</i>)	(Part 41) : 1992	Cadmium (<i>first revision</i>)
		(Part 42) : 1992	Copper (<i>first revision</i>)
		(Part 43) : 1992	Phenols (<i>first revision</i>)
3025	Methods of sampling and test (physical and chemical) for water and waste water:	(Part 46) : 1994	Magnesium
(Part 1) : 1987	Sampling (<i>first revision</i>)	(Part 47) : 1994	Lead
(Part 2) : 2002	Determination of 33 elements by inductively coupled plasma atomic emission spectroscopy	(Part 48) : 1994	Mercury
(Part 4) : 1983	Colour (<i>first revision</i>)	(Part 49) : 1994	Zinc
(Part 5) : 1983	Odour (<i>first revision</i>)	(Part 52) : 2003	Chromium
(Part 7) : 1984	Taste threshold (<i>first revision</i>)	(Part 53) : 2003	Iron
(Part 8) : 1984	Tasting rate (<i>first revision</i>)	(Part 54) : 2003	Nickel
(Part 10) : 1984	Turbidity (<i>first revision</i>)	(Part 55) : 2003	Aluminium
(Part 11) : 1983	pH value (<i>first revision</i>)	(Part 56) : 2003	Selenium
(Part 16) : 1984	Filterable residue (total dissolved solids) (<i>first revision</i>)	(Part 57) : 2005	Boron
(Part 21) : 1983	Total hardness (<i>first revision</i>)	(Part 59) : 2006	Manganese
(Part 23) : 1983	Alkalinity (<i>first revision</i>)	(Part 60) : 2008	Fluoride
(Part 24) : 1986	Sulphates (<i>first revision</i>)	13428 : 2003	Packaged natural mineral water — Specification (<i>first revision</i>)
(Part 26) : 1986	Chlorine residual (<i>first revision</i>)	14194	Radionuclides in environmental samples — Method of estimation:
(Part 27) : 1986	Cyanide (<i>first revision</i>)	(Part 1) : 1994	Gross beta activity measurement
(Part 29) : 1986	Sulphide (<i>first revision</i>)	(Part 2) : 1994	Gross alpha activity measurement
(Part 32) : 1988	Chloride (<i>first revision</i>)	15302 : 2002	Determination of aluminium and barium in water by direct nitrous oxide-acetylene flame atomic absorption spectrometry
(Part 34) : 1988	Nitrogen (<i>first revision</i>)	15303 : 2002	Determination of antimony, iron and selenium in water by electrothermal atomic absorption spectrometry
(Part 37) : 1988	Arsenic (<i>first revision</i>)		
(Part 39) : 1989	Oil and grease		
(Part 40) : 1991	Calcium		

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ANNEX B (Clause 4.2.7)

POLYMERASE CHAIN REACTION (PCR) METHOD

B-1 GENERAL

The method involves the concentration of viruses from 100 litre of drinking water to 1 ml by membrane filter technique. The concentrate is subjected to amplification using polymerase chain reaction (PCR) and primers based on highly conserved regions of viral genomes. This method can detect as low as 10 genome copies. Stringent precautions are needed to avoid contamination with amplified DNA products leading to false positive reactions. Detection of hepatitis A virus (HAV) RNA and enterovirus (EV) RNA is considered as an indication of presence of viruses in water. Steps involved include concentration of water, RNA extraction, complementary DNA (cDNA) synthesis and PCR.

B-2 CONCENTRATION OF DRINKING WATER

B-2.1 Apparatus

B-2.1.1 Pressure Pump

B-2.1.2 Membrane Filter Assembly with 144 mm Diameter with Tripod Stand

B-2.1.3 Pressure Vessel (50 litre capacity) with Pressure Gauge

B-2.1.4 Inter-connecting Pressure Tubes

B-2.2 Reagents

Autoclaved double distilled water shall be used for the preparation of reagents/buffers in this study.

B-2.2.1 Aluminium Chloride

B-2.2.2 HCl/NaOH Urea (Extra Pure)

B-2.2.3 Disodium Hydrogen Phosphate ($\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O}$) — 0.2 M, filter sterilized.

B-2.2.4 Sodium Dihydrogen Phosphate ($\text{NaH}_2\text{PO}_4 \cdot 2\text{H}_2\text{O}$) — 0.2 M, filter sterilized.

B-2.2.5 Citric Acid — 0.1 M, filter sterilized.

B-2.2.6 L-Arginine — 0.5 M, filter sterilized.

B-2.2.7 Urea-Arginine Phosphate Buffer (U-APB) — Mix 4.5 g of urea with 2 ml of 0.2 M NaH_2PO_4 and 2 ml of 0.5 M L - Arginine and make up the volume to 50 ml with sterile distilled water. The pH of the eluent shall be 9.0.

B-2.2.8 Magnesium Chloride (MgCl_2) — 1 M.

B-2.2.9 McII Vaines Buffer (pH 5.0) — Mix 9.7 ml of

0.1 M citric acid with 10.3 ml of 0.2 M $\text{Na}_2\text{HPO}_4 \cdot 2\text{H}_2\text{O}$ under sterile conditions.

B-2.3 Procedure

Filter 100 litre of drinking water sample through membrane filter assembly using either positively charged membrane of 144 mm diameter or 0.22 micron diameter pore size nitrocellulose membrane. For positively charged membrane the test water pH need not be adjusted. But for the 0.22 micron nitrocellulose membrane adjust the pH to 3.5 after adding the aluminium chloride as a coagulant to a final concentration of 0.000 5 M.

At lower pH pass the water through the membrane. The flow rate shall be 40 litre/h approximately. After the completion of the filtration, elute the adsorbed particles using 100 ml of urea-arginine phosphate buffer (U-APB). Precipitate the suspended particles using 1 ml of magnesium chloride (1 M). Dissolve the resultant precipitate centrifuged out of the sample in 800-1.0 ml of McII vaines buffer. The processed sample can be stored at refrigerator until required.

B-3 RNA EXTRACTION

B-3.1 Apparatus

B-3.1.1 Cooling Centrifuge

B-3.1.2 Deep Freezer (-20°C)

B-3.1.3 Vortex Mixer

B-3.1.4 Pipette Man

B-3.2 Reagents

B-3.2.1 Cetyl Trimethyl Ammonium Bromide (CTAB) Buffer

CTAB	:	1 percent
Sodium Dodecyl Sulphate (SDS)	:	1 percent
EDTA	:	20 mM
Sodium Chloride	:	1 M

B-3.2.2 Phenol, Chloroform and Isoamylalcohol in the ratio of 25:24:1 (PCI)

B-3.2.3 Ethanol

B-3.2.4 TE Buffer (pH 8.0)

Tris base	:	1 M
EDTA	:	0.5 M

B-3.2.5 Sodium Acetate — 3 M.

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B-3.3 Procedure

Treat 300 µl of concentrated water sample with equal volume of CTAB and 1/10th volume of PCI. Vortex and centrifuge at 5 000 × g for 30 min at 4°C. Add 1/10th volume of 3 M sodium acetate and double the volume of cold ethanol to the aqueous layer. Keep the mixture at either at -20°C for overnight or in liquid nitrogen for 2-5 min. Centrifuge at 10 000 × g, for 30 min at 4°C. Discard the supernatant and air dry the pellet and dissolve it in 20 µl TE buffer.

B-4 COMPLEMENTARY DNA (c DNA) SYNTHESIS

B-4.1 Apparatus

B-4.1.1 PCR Machine

B-4.1.2 Deep Freezer (-20°C)

B-4.2 Reagents

B-4.2.1 cDNA Synthesis Kit

B-4.3 Procedure

Suspend the extracted RNA in 20 µl of cDNA reaction mixture, which consists of 4 µl of 5X reverse transcriptase reaction buffer [250 mM TRIS-HCl (pH 8.5), 40 mM KCl, 150 mM MgCl₂, 5 mM dithiothreitol (DTT)], 0.5 µl of 10 mM deoxynucleotide phosphate (dNTP), 2 µl of hexa nucleotide mixture, 1 µl of 25 U of Maloney Murine Leukaemia Virus (M-MuLV) reverse transcriptase, 0.5 µl of 20 U of human placental RNase inhibitor. Heat the reaction mixture to 95°C for 5 min and rapidly chill on ice, this is followed by the addition of 1 µl (25 U/µl) of M-MuLV reverse transcriptase. Incubate the reaction mixture as given by the manufacturer of the kit and quickly chill the reaction tube on ice.

B-5 PCR AMPLIFICATION

B-5.1 Apparatus

B-5.1.1 PCR Machine

B-5.1.2 Deep Freezer (-20°C)

B-5.1.3 Micropipette

B-5.2 Reagents

B-5.2.1 Primers for EV and HAV

EV sense primer, 5' — TCC TCC GGC CCC TGA ATG CG — 3'
antisense primer, 5' — ATT GTC ACC ATA AGC AGC CA — 3'
HAV sense primer, 5' — GTTTT GCTCC TCTTT ATCAT GCTAT G-3'

antisense primer, 5' — GGAAA TGTCT CAGGT ACTTT CTTTG-3'

B-5.2.2 PCR Master Mix

B-5.2.3 Mineral Oil

B-5.3 Procedure

B-5.3.1 PCR Amplification for Hepatitis A Virus (HAV)

In 5 µl of cDNA, add 95 µl of a PCR Master Mix (10 mM TRIS-HCl (pH 8.3), 50 mM KCl, 2.5 mM MgCl₂, 0.01 percent gelatin (1× PCR buffer), 200 µM of each dNTP, 1.5 U of *Thermus aquaticus* polymerase). Add 25 pico moles of sense and antisense oligonucleotide primers of HAV and overlay with mineral oil. Appropriate positive and negative controls shall be included with each run. Set the following reaction at thermo cycler:

Denaturation at 94°C for 2 min
Denaturation for 1.0 min at 94°C
Annealing for 1.0 min at 57°C
Extension for 1.3 min at 72°C } 35 cycles
Final extension at 72°C for 7 min.

B-5.3.2 PCR Amplification for Enterovirus (EV)

In 5 µl of cDNA, add 95 µl of a PCR Master Mix (10 mM TRIS-HCl (pH 8.3), 50 mM KCl, 2.5 mM MgCl₂, 0.01 percent gelatin (1X PCR buffer), 200 µM of each dNTP, 1.5 U of *Thermus aquaticus* polymerase). Add 25 pico moles of sense and antisense oligonucleotide primers of EV and overlay with mineral oil. Appropriate positive and negative controls shall be included with each run. Set the following reaction at thermo cycler:

Denaturation at 94°C for 2 min
Denaturation for 1.0 min at 94°C
Annealing for 1.0 min at 42°C
Extension for 2.0 min at 72°C } 35 cycles
Final extension at 72°C for 7 min.

B-6 AGAROSE GEL ELECTROPHORESIS

B-6.1 Apparatus

B-6.1.1 Micropipette

B-6.1.2 Electrophoresis Apparatus

B-6.1.3 Gel Documentation System

B-6.2 Reagents

B-6.2.1 Running Buffer — 50X TAE buffer

Tris base/Tris buffer : 121.00 g

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Glacial acetic acid : 28.55 ml
0.5 M EDTA : 50 .00 ml
Distilled water : 300.45 ml
(autoclaved)

Make the final volume upto 1 000 ml with deionised distilled water, sterilize and store at 4°C. The final concentration for the preparation of agarose gel and to run the gel shall be 1X.

B-6.2.2 Tracking Dye — 6X bromophenol blue.

B-6.2.3 Ethidium Bromide — 0.5 µg/ml.

B-6.3 Procedure

Run the PCR amplified product of EV and HAV on 1.5 percent agarose gel using 1X TAE buffer. Load 10 µl of amplified product after mixing it with 1 µl 10X loading dye. Run the molecular weight marker along with the samples. Run the electrophoresis at 100 V for 30 min. Stain the gel with ethidium bromide (0.5 µl/ml) for 20 min. Wash it with distilled water and view under UV transilluminator and photograph the gel to analyse the band pattern. EV gives the band as 155 base pair and the HAV gives band as 225 base pair.

ANNEX C (Clause 4.3.10)

ILLUSTRATIVE LIST OF MICROSCOPIC ORGANISMS PRESENT IN WATER

Sl No.	Classification of Microscopic Organism	Group and Name of the Organism	Habitat	Effect of the Organisms and Significance
(1)	(2)	(3)	(4)	(5)
i)	Algae	a) Chlorophyceae:		
		1) <i>Species of</i> Coelastrum, Gomphospherium, Micractinium, Mougeotia, Oocystis, Euastrum, Scenedesmus, Actinastrum, Gonium, Eudorina Pandorina, Pediastrum, Zygnema, Chlamydomonas, Careteria, Chlorella, Chroococcus, Spirogyra, Tetraedron, Chlorogonium, Stigeoclonium	Polluted water, impounded sources	Impart colouration
		2) <i>Species of</i> Pandorina, Volvox, Gomphospherium, Staurastrum, Hydrodictyon, Nitella	Polluted waters	Produce taste and odour
		3) <i>Species of</i> Rhizoclonium, Cladotrix, Ankistrodesmus, Ulothrix, Micrasterias, Chromulina	Clean water	Indicate clean condition
		4) <i>Species of</i> Chlorella, Tribonema, Clostrium, Spirogyra, Palmella	Polluted waters, impounded sources	Clog filters and create impounded difficulties
		b) Cyanophyceae:		
		1) <i>Species of</i> Anacystis and Cylandrospermum	Polluted waters	Cause water bloom and impart colour
		2) <i>Species of</i> Anabena, Phormidium, Lyngbya, Arthrospira, Oscillatoria	Polluted waters	Impart colour
		3) <i>Species of</i> Anabena, Anacystis, Aphanizomenon	Polluted waters, impounded sources	Produce taste and odour
		4) <i>Species of</i> Anacystis, Anabena, Coelospherium, Cleotrichina, Aphanizomenon	Polluted waters	Toxin producing
		5) <i>Species of</i> Anacystis, Rivularia, Oscillatoria, Anabena	Polluted waters	Clog filters

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Sl No.	Classification of Microscopic Organism	Group and Name of the Organism	Habitat	Effect of the Organisms and Significance
(1)	(2)	(3)	(4)	(5)
		6) <i>Species of Rivularia</i>	Calcareous waters and also rocks	Bores rocks and calcareous strata and causes matted growth
		7) <i>Species of Agmenellum, Microcoleus, Lemanea</i>	Clean waters	Indicators of purification
		c) Diatoms (Bacillareophyceae):		
		1) <i>Species of Fragillaria, Stephanodiscus, Stauroneis</i>	—	Cause discoloration
		2) <i>Species of Asterionella, Tabellaria</i>	Hill streams high altitude, torrential and temperate waters	Taste and odour producing clog filters
		3) <i>Species of Synedra and Fragillavia</i>	Polluted waters	Taste and odour producing
		4) <i>Species of Nitzchia, Gomphonema</i>	Moderately polluted waters	Cause discoloration
		5) <i>Species of Cymbela, Synedra, Melosira, Navicula, Cyclotella, Fragillaria, Diatoma, Pleurosigma</i>	Rivers and streams impounded sources	Clog filters and cause operational difficulties
		6) <i>Species of Pinnularia, Surinella, Cyclotella, Meridion, Cocconeis</i>	Clean waters	Indicators of purification
		d) Xanthophyceae:		
		<i>Species of Botryococcus</i>	Hill streams, high altitude and temperate waters	Produces coloration
ii)	Zooplankton	a) Protozoa:		
		1) Amoeba, Giardia, Lamblia, Arcella, Diffugia, Actinophrys	Polluted waters	Pollution indicators
		2) Endamoeba, Histolytica	Sewage and activated sludge	Parasitic and pathogenic
		b) Ciliates:		
		Paramoecium, Vorticella, Carchesium, Stentor, Colpidium, Coleps, Euplotes, Colopoda, Bodo	Highly polluted waters, sewage and activated sludge	Bacteria eaters
		c) Crustacea:		
		1) Bosmina, Daphnia	Stagnant polluted waters	Indicators of pollution
		2) Cyclops	Step wells in tropical climate	Carrier host of guinea worm
iii)	Rotifers	a) Rotifers:		
		Anurea, Rotaria, Philodina	Polluted and Algae laden waters	Feed on algae
		b) Flagellates:		
		1) Ceratium, Glenodinium, Dinobryon, Peridinium	Rocky strata, iron bearing and acidic waters	Impart colour and fishy taste
		2) Euglena, Phacus	Polluted waters	Impart colour

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<i>Sl No.</i>	<i>Classification of Microscopic Organism</i>	<i>Group and Name of the Organism</i>	<i>Habitat</i>	<i>Effect of the Organisms and Significance</i>
(1)	(2)	(3)	(4)	(5)
iv)	Miscellaneous Organisms	a) Sponges, Hydra	Fresh water	Clog filters and affect purification systems
		b) Tubifex, Eristalls, Chironomids	Highly polluted waters, sewage and activated sludge and bottom deposits	Clog filters and render water unaesthetic
		c) Plumatella	Polluted waters	Produces biological slimes and causes filter operational difficulties
		c) Dreissena, Asellus	Polluted waters	Harbour pathogenic organisms

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This Indian Standard has been developed from Doc No.: FAD 25 (2047).

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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AMENDMENT NO. 1 JUNE 2015
TO
IS 10500 : 2012 DRINKING WATER — SPECIFICATION
(Second Revision)

[Page 2, Table 2, Sl No. xii), col 3] — Substitute ‘1.0’ for ‘0.3’.

[Page 3, Table 3, Sl No. x) , col 4] — Substitute ‘No relaxation’ for ‘0.05’.

(FAD 14)

Publication Unit, BIS, New Delhi, India

AMENDMENT NO. 2 SEPTEMBER 2018
TO
IS 10500 : 2012 DRINKING WATER — SPECIFICATION
(Second Revision)

(Page 1, clause 4.1.1, line 6) — Substitute ‘IS 15185’ for ‘IS 1622’.

[Page 2, Table 2, Sl No. (v), col 4] — Substitute ‘2.4’ for ‘1.0’.

(FAD 14)

Publication Unit, BIS, New Delhi, India

AMENDMENT NO. 3 FEBRUARY 2021

TO

IS 10500 : 2012 DRINKING WATER — SPECIFICATION

(*Second Revision*)

[Page 2, Table 2, Sl. No. (xv), col 3] — Substitute ‘1.0’ for ‘0.5’.

(Page 2, Table 2, Notes) — Substitute the following for the existing Notes:

‘NOTES

1 Approved and validated international test methods from ISO/ APHA/ ASTM/ AOAC/ EPA/ EN may also be followed.

2 In case of dispute, methods given at column 5 and wherever indicated by ‘*’ shall be the referee method.

3 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under ‘acceptable’ render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under ‘permissible limit in the absence of alternate source’ in col 4, above which the sources will have to be rejected.’

(Page 3, Table 3) — Insert the following new entry at the end:

Table 3

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
xiii)	Uranium, mg/l, <i>Max</i>	0.03	No relaxation	IS 3025 (Part 65)	—

(Page 3, Table 3, Notes) — Substitute the following for the existing:

‘NOTES

1 Approved and validated international test methods from ISO/ APHA/ ASTM/ AOAC/ EPA/ EN may also be followed.

2 In case of dispute, methods given at column 5 and wherever indicated by ‘*’ shall be the referee method.

3 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.'

(Page 5, clause 4.2.7) — Substitute the following for the existing clause:

4.2.7 MS2 phage are indicators of viral contamination in drinking water and have been taken as representatives for presence of viruses for the purpose in this standard. MS2 phage shall be absent in 1 litre of water when tested in accordance with USEPA method 1601 or USEPA method 1602. In case of dispute, USEPA method 1602 shall be the referee method.

NOTE (for guidance purpose only) — If MS2 phage are detected in the drinking water, the virological examination is to be done by the Polymerase Chain Reaction (PCR) method as given in Annex B or the USEPA method in Manual of Method for Virology Chapter 16, June 2001. If viruses are detected, the cause must be determined by immediate further investigation by the concerned authorities.'

(Page 5, clause 4.2.7) — Insert the following new clause:

4.2.8 The information given in clauses 4.2.1 to 4.2.6 is for guidance purposes only.'

(Page 6, clause 4.3.10) — Substitute the following for the existing clause:

4.3.10 The drinking water is expected to be free from microscopic organisms such as algae, zooplanktons, flagellates, parasites and toxin producing organisms. An illustrative (and not exhaustive) list is given in Annex C for guidance.'

(Page 6, clause 4.3.10) — Insert the following after clause 4.3.10:

4.3.11 The information given in clauses 4.3.1 to 4.3.7 and 4.3.10 is for guidance purposes only.'

(Page 6, clause 5) — Substitute the following for the existing clause:

5 SAMPLING

Representative samples of water shall be drawn as prescribed in IS 1622 and IS 3025 (Part 1). For bacteriological requirements, representative samples of water shall be drawn as given in IS 15185.'

(Page 6, Annex A) — Insert the following new entries at appropriate places:

<i>IS No.</i>	<i>Title</i>
3025 (Part 65) : 2014	Methods of sampling and test (physical and chemical) for water and waste water : Part 2 Application of inductively coupled plasma mass spectrometry (ICP-MS) — Determination of 62 elements
15185 : 2016	Water quality — Detection and enumeration of <i>Escherichia coli</i> and coliform bacteria — Membrane filtration method for water with low bacterial background flora (<i>first revision</i>)

AMENDMENT NO. 4 NOVEMBER 2021

TO

IS 10500 : 2012 DRINKING WATER — SPECIFICATION

(*Second Revision*)

[*Page 3, Table 3, Sl. No. (xiii), col 5 (see also Amendment No. 3)*] — Substitute 'IS 3025 (Part 65)* or IS 14194 (Part 3)' for 'IS 3025 (Part 65)'.

(*Page 6, Annex A*) — Insert the following reference at appropriate place:

<i>IS No.</i>	<i>Title</i>
14194 (Part 3) : 2021	Radionuclides in environmental samples — Method of estimation: Part 3 Uranium (<i>first revision</i>)

3. Analysis results of samples collected on 27.02.2025 from the M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalinganahalli, Nelamangala, Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.

S. No.	Test Parameter	Unit	17	18	19	20	21
			Result				
			Sample Code				
			17	18	19	20	21
			27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
			Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)
			Heavy metals				
1.	Antimony as Sb	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ
2.	Arsenic as As	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ
3.	Cadmium as Cd	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ
4.	Chromium as Cr	mg/kg	0.058	BLQ	0.093	BLQ	0.090
5.	Copper as Cu	mg/kg	0.943	4.635	0.773	BLQ	2.854
6.	Lead as Pb	mg/kg	BLQ of 0.02	1.953	BLQ	BLQ	0.666
7.	Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ
8.	Methyl Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ
9.	Nickel as Ni	mg/kg	0.168	BLQ	0.133	BLQ	0.301
10.	Selenium as Se	mg/kg	BLQ of 0.04	BLQ	BLQ	BLQ	BLQ
11.	Tin as Sn	mg/kg	BLQ of 0.02	BLQ	0.032	BLQ	BLQ
			Minerals				
1.	Iron as Fe	mg/100g	BLQ of 0.8	BLQ	1.14	3.78	0.840
2.	Zinc as Zn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ
3.	Manganese as Mn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ

5. Analysis results of samples collected on 28.02.2025 from Retail Farmers Market, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.

S. No.		30	31	32	33	34	
Sample Code		27BG30RM	27Q31RM	27ON32RM	27BE33RM	27CB34RM	
Latitude-Longitude:		12.999179 77.541220	12.999179 77.541220	12.999179 77.541220	12.999179 77.541220	12.999179 77.541220	
Location:		Farmers Market, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.					
Vegetable		Bitter Gourd	Squash	Onion	Beans	Chilli Bajji	
S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM	27Q31RM	27ON32RM	27BE33RM	27CB34RM
			Bitter Gourd	Squash	Onion	Beans	Chilli Bajji
Heavy metals							
1.	Antimony as Sb	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	
2.	Arsenic as As	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	
3.	Cadmium as Cd	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	
4.	Chromium as Cr	mg/kg	BLQ of 0.02	0.076	BLQ	BLQ	0.077
5.	Copper as Cu	mg/kg	BLQ of 0.04	2.119	0.442	3.839	0.852
6.	Lead as Pb	mg/kg	BLQ of 0.02	0.433	BLQ	BLQ	0.542
7.	Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ
8.	Methyl Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ
9.	Nickel as Ni	mg/kg	BLQ of 0.04	0.339	BLQ	BLQ	0.134
10.	Selenium as Se	mg/kg	BLQ of 0.04	BLQ	BLQ	BLQ	BLQ
11.	Tin as Sn	mg/kg	BLQ of 0.02	0.046	BLQ	BLQ	BLQ
Minerals							
1.	Iron as Fe	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ
2.	Zinc as Zn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ
3.	Manganese as Mn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ

6. Analysis results of samples collected on 27.02.2025 from M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalinganahalli, Nelamangala, Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.

S. No.	35	36	37	38	39	40	41		
Sample Code	27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M		
Latitude-Longitude:	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488		
Location:	M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalingana halli, Nelamangala Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.								
Vegetable	Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small		
S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
	Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small		
Heavy metals									
1.	Antimony as Sb	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
2.	Arsenic as As	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
3.	Cadmium as Cd	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
4.	Chromium as Cr	mg/kg	0.309	0.326	0.126	BLQ	0.045	0.040	0.389
5.	Copper as Cu	mg/kg	4.454	4.638	4.078	1.230	0.534	2.244	0.998
6.	Lead as Pb	mg/kg	BLQ of 0.02	1.680	1.825	BLQ	0.273	1.764	0.515
7.	Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
8.	Methyl Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
9.	Nickel as Ni	mg/kg	0.355	0.244	0.366	0.190	0.302	0.181	0.840
10.	Selenium as Se	mg/kg	BLQ of 0.04	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
11.	Tin as Sn	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
Minerals									
1.	Iron as Fe	mg/100g	9.01	7.78	BLQ	BLQ	BLQ	BLQ	1.430
2.	Zinc as Zn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
3.	Manganese as Mn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

7. Analysis results of samples collected on 28.02.2025 from Agricultural field Chakarasahalli, Narsapura Hobli, Kolar road, Kolar.

S. No.	1	2	3	4	5			
Sample Code	28BG01K	28BIG02K	28C03K	28B04K	28LF05K			
Latitude-Longitude:	13.129484 77.965672	13.12954 77.965828	13.12974 77.966258	13.129677 77.966215	13.130107 77.966176			
Location:	Agricultural field Chakarasahalli, Narsapura Hobli, Kolar road, Kolar.							
Vegetable	Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger			
S. No.	Test Parameter	Unit	Result					
			Sample Code					
			1	2	3	4	5	
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K	
	Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger			
Heavy metals								
1.	Antimony as Sb	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ
2.	Arsenic as As	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ
3.	Cadmium as Cd	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ
4.	Chromium as Cr	mg/kg	0.194	0.041	0.060	0.034	0.112	
5.	Copper as Cu	mg/kg	1.344	0.762	0.948	1.230	3.390	
6.	Lead as Pb	mg/kg	BLQ of 0.02	0.053	BLQ	0.121	BLQ	BLQ
7.	Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ
8.	Methyl Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ	BLQ	BLQ	BLQ
9.	Nickel as Ni	mg/kg	0.626	0.220	0.215	0.199	0.269	
10.	Selenium as Se	mg/kg	BLQ of 0.04	BLQ	BLQ	BLQ	BLQ	BLQ
11.	Tin as Sn	mg/kg	0.071	BLQ	BLQ	BLQ	BLQ	BLQ
Minerals								
1.	Iron as Fe	mg/100g	BLQ of 0.8	BLQ	BLQ	3.63	BLQ	BLQ
2.	Zinc as Zn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ	BLQ
3.	Manganese as Mn	mg/100g	BLQ of 0.8	BLQ	BLQ	BLQ	BLQ	BLQ

10. Analysis results of samples collected on 28.02.2025 from Agricultural field at Thurandahalli, Kolar.

S. No.	23	24	25		
Sample Code	28MB24TH	28B26TH	28O27TH		
Latitude-Longitude:	13.228339 78.139329	13.230714 78.13925	13.230714 78.13925		
Location:	Thurandahalli, Kolar				
Vegetable	Chilli Bajji	Beans	Sambar Onion		
S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH	28B26TH	28O27TH
	Chilli Bajji	Beans	Sambar Onion		
Heavy metals					
1.	Antimony as Sb	mg/kg	BLQ of 0.02	BLQ	BLQ
2.	Arsenic as As	mg/kg	BLQ of 0.02	BLQ	BLQ
3.	Cadmium as Cd	mg/kg	BLQ of 0.02	BLQ	BLQ
4.	Chromium as Cr	mg/kg	BLQ of 0.02	0.037	0.370
5.	Copper as Cu	mg/kg	2.281	1.252	24.476
6.	Lead as Pb	mg/kg	BLQ of 0.02	0.122	BLQ
7.	Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ
8.	Methyl Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ
9.	Nickel as Ni	mg/kg	BLQ of 0.04	BLQ	BLQ
10.	Selenium as Se	mg/kg	BLQ of 0.04	BLQ	BLQ
11.	Tin as Sn	mg/kg	BLQ of 0.02	0.229	0.398
Minerals					
1.	Iron as Fe	mg/100g	BLQ of 0.8	BLQ	3.630
2.	Zinc as Zn	mg/100g	BLQ of 0.8	BLQ	BLQ
3.	Manganese as Mn	mg/100g	BLQ of 0.8	BLQ	BLQ

11. Analysis results of samples collected on 28.02.2025 and 01.09.2025 from Soppahalli Agricultural field, Chikkaballapura.

S. No.	26	27	28		
Sample Code	1-SP-RG	3-SP-SG	28BR30SH		
Latitude-Longitude:	13.495119 77.784774	13.495577 77.779249	13.444936 77.779487		
Location:	Agricultural fields at Soppahalli, Chikkaballapura				
Vegetable	Ridge Gourd	Snake Gourd	BT Brinjal		
S. No.	Test Parameter	Unit	Result		
			Sample Code		
			26	27	28
			1-SP-RG	3-SP-SG	28BR30SH
			Ridge Gourd	Snake Gourd	BT Brinjal
Heavy metals					
1.	Antimony as Sb	mg/kg	BLQ of 0.02 - NA	NA	BLQ
2.	Arsenic as As	mg/kg	BLQ of 0.02	BLQ	BLQ
3.	Cadmium as Cd	mg/kg	BLQ of 0.02	BLQ	BLQ
4.	Chromium as Cr	mg/kg	BLQ of 0.02 – NA	NA	0.107
5.	Copper as Cu	mg/kg	2.950 (BLQ of 0.04)	1.900	0.925
6.	Lead as Pb	mg/kg	BLQ of 0.02	BLQ	BLQ
7.	Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ
8.	Methyl Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ
9.	Nickel as Ni	mg/kg	BLQ of 0.04 – NA	NA	BLQ
10.	Selenium as Se	mg/kg	BLQ of 0.04 – NA	NA	BLQ
11.	Tin as Sn	mg/kg	BLQ of 0.02	BLQ	0.080

*NA – Not analysed.

12. Analysis results of samples collected on 28.02.2025 from HOPCOMS, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.

S. No.	29	30	31		
Sample Code	28CC32HC	28PT33HC	28ON34HC		
Latitude-Longitude:	12.999888 77.541344	12.999888 77.541344	12.999888 77.541344		
Location:	HOPCOMS, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.				
Vegetable	Cucumber	Potato	Onion		
Result					
Sample Code					
	29	30	31		
	28CC32HC	28PT33HC	28ON34HC		
	Cucumber	Potato	Onion		
Heavy metals					
1.	Antimony as Sb	mg/kg	BLQ of 0.02	BLQ	BLQ
2.	Arsenic as As	mg/kg	BLQ of 0.02	BLQ	BLQ
3.	Cadmium as Cd	mg/kg	BLQ of 0.02	BLQ	BLQ
4.	Chromium as Cr	mg/kg	(BLQ of 0.02)	BLQ	BLQ
5.	Copper as Cu	mg/kg	1.177 (BLQ of 0.04)	4.225	0.950
6.	Lead as Pb	mg/kg	0.403 (BLQ of 0.02)	0.057	BLQ
7.	Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ
8.	Methyl Mercury as Hg	mg/kg	BLQ of 0.02	BLQ	BLQ
9.	Nickel as Ni	mg/kg	BLQ of 0.04	BLQ	BLQ
10.	Selenium as Se	mg/kg	BLQ of 0.04	BLQ	BLQ
11.	Tin as Sn	mg/kg	(BLQ of 0.02)	BLQ	BLQ
Minerals					
1.	Iron as Fe	mg/100g	(BLQ of 0.8)	1.150	BLQ
2.	Zinc as Zn	mg/100g	BLQ of 0.8	BLQ	BLQ
3.	Manganese as Mn	mg/100g	BLQ of 0.8	BLQ	BLQ

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			1	2	3	4	5	6	7	8
			27B01 Beans	27BR02 Brinjal	27BRL03 White Long Brinjal	27T04 Tomato Raw	27MB05 Chilli Bajji	27R06 Radish	27C07 Capsicum	27BRR08 Beetroot
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	0.069	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	1.009	0.814	2.364	0.998	3.892	0.777	1.009	4.638
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	1.009	0.814	2.364	0.998	3.892	0.777	1.009	4.638
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	1.009	0.814	2.364	0.998	3.892	0.777	1.009	4.638

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			1	2	3	4	5	6	7	8
			27B01 Beans	27BR02 Brinjal	27BRL03 White Long Brinjal	27T04 Tomato Raw	27MB05 Chilli Bajji	27R06 Radish	27C07 Capsicum	27BRR08 Beetroot
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	1.009	0.814	2.364	0.998	3.892	0.777	1.009	4.638
55.	Cyantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
56.	Cyazofamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
57.	Cyflumetofen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
59.	Cymoxanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
61.	D.D.T	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
63.	Diafenthiuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
64.	Diazinon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
65.	Dichlorvos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
66.	Diclofop (sum of Diclofop-methyl and Dichlofop acid expressed as Diclofop-methyl)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
67.	Diclosulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
69.	Dieldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
70.	Difenoconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
71.	Diiflubenzuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
72.	Dimethoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
73.	Dimethomorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
74.	Dinocap	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
75.	Dinotefuran	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	0.044	BLQ

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			1	2	3	4	5	6	7	8
			27B01 Beans	27BR02 Brinjal	27BRL03 White Long Brinjal	27T04 Tomato Raw	27MB05 Chilli Bajji	27R06 Radish	27C07 Capsicum	27BRR08 Beetroot
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
122.	Haloxypop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
130.	Imidacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaaxon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
144.	Mandipropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			1	2	3	4	5	6	7	8
			27B01 Beans	27BR02 Brinjal	27BRL03 White Long Brinjal	27T04 Tomato Raw	27MB05 Chilli Bajji	27R06 Radish	27C07 Capsicum	27BRR08 Beetroot
190.	Pyraclostrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
192.	Pyridalyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
193.	Pyriproxyfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
194.	Pyrithiobac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
195.	Quinalphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
196.	Quinalofop Ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
197.	Quinalofop-P-tefuryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
198.	Simazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
202.	Spinosad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
203.	Spiromesifen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
204.	Spirotetramat	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
206.	Sulfosulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
207.	Sulfoxaflor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
212.	Thiamethoxam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	0.523	BLQ

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			1	2	3	4	5	6	7	8
			27B01 Beans	27BR02 Brinjal	27BRL03 White Long Brinjal	27T04 Tomato Raw	27MB05 Chilli Bajji	27R06 Radish	27C07 Capsicum	27BRR08 Beetroot
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
220.	Triacontanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			9	10	11	12	13	14	15	16
			27P09M Potato	27ON10M Sambar Onion	27G11M Ginger	27BG12M Bitter Gourd	27SC13M Sambar Cucumber	27SQ14M Squash	27TO15M Tomato	27LG16M Little Gourd
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	3.892	24.861	1.136	1.392	0.715	2.123	1.037	2.594
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	3.892	24.861	1.136	1.392	0.715	2.123	1.037	2.594
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	3.892	24.861	1.136	1.392	0.715	2.123	1.037	2.594
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	3.892	24.861	1.136	1.392	0.715	2.123	1.037	2.594

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			9	10	11	12	13	14	15	16
			27P09M	27ON10M	27G11M	27BG12M	27SC13M	27SQ14M	27TO15M	27LG16M
Potato	Sambar Onion	Ginger	Bitter Gourd	Sambar Cucumber	Squash	Tomato	Little Gourd			
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
220.	Triacantanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

3. Analysis results of vegetable samples collected on 27.02.2025 from the M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalinganahalli, Nelamangala, Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.

S. No.	17	18	19	20	21
Sample Code	27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
Latitude-Longitude:	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488
Location:	M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalingana halli, Nelamangala Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.				
Vegetable	Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
			Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)
Pesticide Residues							
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
2.	2,4-D-Amine salt	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
3.	Abamectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
5.	Acetamiprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
6.	Alachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
8.	Aldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
9.	Alpha Cypermethrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
10.	Alphanaphthyl Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
11.	Ametoctradin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
12.	Ametryn	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
13.	Anilofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
14.	Atrazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)			
15.	Azimsulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
16.	Azoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
17.	Benfuracarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
19.	Bensulfuron-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
20.	Bentazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
21.	Beta Cyfluthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
22.	Bifenthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
23.	Bispyribac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
24.	Bitertanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
25.	Boscalid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
26.	Buprofezin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
27.	Butachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
28.	Captafol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
29.	Captan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
30.	Carbaryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
31.	Carbendazim	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
33.	Carbosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
34.	Carfentrazone-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
35.	Carpropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
36.	Cartap Hydrochloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M Carrot	27BRO18M Brinjal (organic)	27RRO19M Red Radish (organic)	27SPO20M Spinach (organic)	27LBO21M Long Beans (organic)
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
47.	Cinmethyline	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	0.943	4.635	0.773	BLQ	2.854
52.	Copper Oxychloride (Copper determined as elemental copper)	mg/kg	0.943	4.635	0.773	BLQ	2.854
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	0.943	4.635	0.773	BLQ	2.854
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	0.943	4.635	0.773	BLQ	2.854
55.	Cyantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
56.	Cyazofamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M Carrot	27BRO18M Brinjal (organic)	27RRO19M Red Radish (organic)	27SPO20M Spinach (organic)	27LBO21M Long Beans (organic)
57.	Cyflumetofen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
59.	Cymoxanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
61.	D.D.T	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
63.	Diafenthuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
64.	Diazinon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
65.	Dichlorvos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
66.	Diclofop (sum of Diclofop-methyl and Dichlofop acid expressed as Diclofop-methyl)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
67.	Diclosulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
69.	Dieldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
70.	Difenoconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
71.	Diflubenzuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
72.	Dimethoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
73.	Dimethomorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
74.	Dinocap	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
75.	Dinotefuran	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
76.	Dithianon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
		Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)	
78.	Diuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
79.	Dodine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
80.	Edifenphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
81.	Emamectin benzoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
82.	Endosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
83.	Epoxyconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
84.	Ethephon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
86.	Ethofenprox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
87.	Ethoxysulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
89.	Etoxazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
90.	Famaxadone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
91.	Fenamidone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
92.	Fenarimol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
93.	Fenazaquin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
94.	Fenitrothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
95.	Fenobucarb (BPMC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
96.	Fenoxaprop-P-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
97.	Fenpropathrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
98.	Fenpyroximate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
99.	Fenthion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
100.	Fenvalerate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
101.	Ferbam	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M Carrot	27BRO18M Brinjal (organic)	27RRO19M Red Radish (organic)	27SPO20M Spinach (organic)	27LBO21M Long Beans (organic)
102.	Fipronil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
103.	Flonicamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
104.	Fluazifop-P-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
105.	Flubendiamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
106.	Flucetosulfurone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
107.	Fluchloralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
108.	Flufenacet	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
109.	Fluopicolide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
110.	Fluopyram and its metabolites	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
111.	Flupyradifurone and its metabolites (Difluoroacetic acid and Difluoroethylamino-furanone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
112.	Flusilazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
113.	Fluvalinate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
114.	Fluxapyroxad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
115.	Fomesafen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
116.	Forchlorfenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
117.	Formothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
118.	Fosetyl Aluminium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
122.	Haloxypop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
		Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)	
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
130.	Imidacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaoxon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
144.	Mandipropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
145.	Mepiquat Chloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
146.	Mesusulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
147.	Metaflumizone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
148.	Metalaxyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
149.	Metalaxyl-M	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
150.	Methabenzthiazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
151.	Methomyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M Carrot	27BRO18M Brinjal (organic)	27RRO19M Red Radish (organic)	27SPO20M Spinach (organic)	27LBO21M Long Beans (organic)
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
154.	Metolachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
155.	Metrafenone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
156.	Metribuzin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
157.	Metsulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
158.	Milbemectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
159.	Monocrotophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
160.	Myclobutanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
161.	Novaluron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
162.	Orthosulfamuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
163.	Oxadiazyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
164.	Oxadiazon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
165.	Oxydemeton methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
166.	Oxyflorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
167.	Paclobutrazol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
169.	Penconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
170.	Pencycuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
171.	Pendimethalin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
172.	Penoxsulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
173.	Permethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
174.	Phenthoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M Carrot	27BRO18M Brinjal (organic)	27RRO19M Red Radish (organic)	27SPO20M Spinach (organic)	27LBO21M Long Beans (organic)
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
176.	Phosalone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
177.	Phosphamidon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
178.	Picoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
179.	Pinoxaden	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
180.	Pirimiphos-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
181.	Pretilachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
182.	Profenofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
183.	Prohexadione calcium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
184.	Propanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
185.	Propaquizafop	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
186.	Propargite	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
187.	Propiconazole (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
188.	Propineb	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
189.	Pymetrozine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
190.	Pyraclostrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
192.	Pyridalyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
193.	Pyriproxyfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
194.	Pyrithiobac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
195.	Quinalphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
196.	Quizalofop Ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
197.	Quizalofop-P-tefuryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
198.	Simazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
		Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)	
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
202.	Spinosad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
203.	Spiromesifen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
204.	Spirotetramat	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
206.	Sulfosulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
207.	Sulfoxaflor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
212.	Thiamethoxam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			17	18	19	20	21
			27CR17M	27BRO18M	27RRO19M	27SPO20M	27LBO21M
Carrot	Brinjal (organic)	Red Radish (organic)	Spinach (organic)	Long Beans (organic)			
220.	Triacantanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			22	23	24	25	26	27	28	29
			27CM22RM Capsicum	27B23RM Brinjal	27LB24RM White Long Brinjal	27G25RM Ginger	27LG26RM Little Gourd	27CR27RM Carrot	27RD28RM Radish	27PT29RM Potato
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	0.068	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	2.732	0.898	2.366	1.175	2.594	0.885	0.724	3.638
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	2.732	0.898	2.366	1.175	2.594	0.885	0.724	3.638
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	2.732	0.898	2.366	1.175	2.594	0.885	0.724	3.638
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	2.732	0.898	2.366	1.175	2.594	0.885	0.724	3.638

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			22	23	24	25	26	27	28	29
			27CM22RM Capsicum	27B23RM Brinjal	27LB24RM White Long Brinjal	27G25RM Ginger	27LG26RM Little Gourd	27CR27RM Carrot	27RD28RM Radish	27PT29RM Potato
118.	Fosetyl Aluminium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
122.	Haloxypop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
130.	Imidacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
143.	Malathion (Malathion to be determined and	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			22	23	24	25	26	27	28	29
			27CM22RM Capsicum	27B23RM Brinjal	27LB24RM White Long Brinjal	27G25RM Ginger	27LG26RM Little Gourd	27CR27RM Carrot	27RD28RM Radish	27PT29RM Potato
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
212.	Thiamethoxam	mg/kg	0.522	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
220.	Triacantanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

5. Analysis results of vegetable samples collected on 28.02.2025 from Retail Farmers Market, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.

S. No.	30	31	32	33	34
Sample Code	27BG30RM	27Q31RM	27ON32RM	27BE33RM	27CB34RM
Latitude-Longitude:	12.999179 77.541220	12.999179 77.541220	12.999179 77.541220	12.999179 77.541220	12.999179 77.541220
Location:	Farmers Market, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.				
Vegetable	Bitter Gourd	Squash	Onion	Beans	Chilli Bajji

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM	27Q31RM	27ON32RM	27BE33RM	27CB34RM
			Bitter Gourd	Squash	Onion	Beans	Chilli Bajji
Pesticide Residues							
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
2.	2,4-D-Amine salt	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
3.	Abamectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	0.970
5.	Acetamiprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
6.	Alachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
8.	Aldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
9.	Alpha Cypermethrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
10.	Alphanaphthyl Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
11.	Ametoctradin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
12.	Ametryn	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
13.	Anilofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
14.	Atrazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
15.	Azimsulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
16.	Azoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
17.	Benfuracarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
19.	Bensulfuron-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
20.	Bentazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
21.	Beta Cyfluthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
22.	Bifenthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
23.	Bispyribac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
24.	Bitertanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
25.	Boscalid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
26.	Buprofezin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
27.	Butachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
28.	Captafol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
29.	Captan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
30.	Carbaryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
31.	Carbendazim	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
33.	Carbosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
34.	Carfentrazone-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
35.	Carpropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
36.	Cartap Hydrochloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	0.425
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	BLQ of 0.04	2.119	0.442	3.839	0.852
52.	Copper Oxochloride (Copper determined as elemental copper)	mg/kg	BLQ of 0.04	2.119	0.442	3.839	0.852
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	BLQ of 0.04	2.119	0.442	3.839	0.852
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	BLQ of 0.04	2.119	0.442	3.839	0.852
55.	Cyantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
56.	Cyazofamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
57.	Cyflumetofen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
59.	Cymoxanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
61.	D.D.T	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
63.	Diafenthiuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
64.	Diazinon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
65.	Dichlorvos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
66.	Diclofop (sum of Diclofop-methyl and Diclofop acid expressed as Diclofop-methyl)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
67.	Diclosulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
69.	Dieldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
70.	Difenoconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
71.	Diflubenzuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
72.	Dimethoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
73.	Dimethomorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
74.	Dinocap	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
75.	Dinotefuran	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
76.	Dithianon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
78.	Diuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
79.	Dodine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
80.	Edifenphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
81.	Emamectin benzoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
82.	Endosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
83.	Epoxyconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
84.	Ethephon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
86.	Ethofenprox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
87.	Ethoxysulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
89.	Etoxazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
90.	Famaxadone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
91.	Fenamidone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
92.	Fenarimol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
93.	Fenazaquin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
94.	Fenitrothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
95.	Fenobucarb (BPMC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
96.	Fenoxaprop-P-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
97.	Fenpropathrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
98.	Fenpyroximate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
99.	Fenthion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
100.	Fenvalerate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
101.	Ferbam	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
102.	Fipronil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
103.	Flonicamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
104.	Fluazifop-P-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
105.	Flubendiamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
106.	Flucetosulfurone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
107.	Fluchloralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
108.	Flufenacet	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
109.	Fluopicolide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
110.	Fluopyram and its metabolites	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
111.	Flupyradifurone and its metabolites (Difluoroacetic acid and Difluoroethylamino- furanone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
112.	Flusilazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
113.	Fluvalinate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
114.	Fluxapyroxad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
115.	Fomesafen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
116.	Forchlorfenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
117.	Formothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
118.	Fosetyl Aluminium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
122.	Haloxfop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
130.	Imidacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	0.325
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaoxon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
144.	Mandipropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
145.	Mepiquat Chloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
146.	Mesusulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
147.	Metaflumizone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
148.	Metalaxyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
149.	Metalaxyl-M	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
150.	Methabenzthiazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
151.	Methomyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
154.	Metolachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
155.	Metrafenone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
156.	Metribuzin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
157.	Metsulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
158.	Milbemectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
159.	Monocrotophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	0.495
160.	Myclobutanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
161.	Novaluron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
162.	Orthosulfamuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
163.	Oxadiazyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
164.	Oxadiazon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
165.	Oxydemeton methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
166.	Oxyflorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
167.	Paclobutrazol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
169.	Penconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
170.	Pencycuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
171.	Pendimethalin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
172.	Penoxsulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
173.	Permethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
174.	Phenthoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
176.	Phosalone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
177.	Phosphamidon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
178.	Picoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
179.	Pinoxaden	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
180.	Pirimiphos-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
181.	Pretilachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
182.	Profenofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
183.	Prohexadione calcium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
184.	Propanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
185.	Propaquizafop	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
186.	Propargite	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
187.	Propiconazole (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
188.	Propineb	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
189.	Pymetrozine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
190.	Pyraclostrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
192.	Pyridalyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
193.	Pyriproxyfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
194.	Pyriothiobac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
195.	Quinalphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
196.	Quizalofop Ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
197.	Quizalofop-P-tefuryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
198.	Simazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
202.	Spinosad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
203.	Spiromesifen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
204.	Spirotetramat	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
206.	Sulfosulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
207.	Sulfoxaflor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
212.	Thiamethoxam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	0.955
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			30	31	32	33	34
			27BG30RM Bitter Gourd	27Q31RM Squash	27ON32RM Onion	27BE33RM Beans	27CB34RM Chilli Bajji
220.	Triacantanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

6. Analysis results of vegetable samples collected on 27.02.2025 from M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalinganahalli, Nelamangala, Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.

S. No.	35	36	37	38	39	40	41
Sample Code	27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
Latitude-Longitude:	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488	13.093331 77.374488
Location:	M/s Shivaganga Farmers Producers Market, GF, S. No. 10, Kempalingana halli, Nelamangala Kasaba Hobli, Bengaluru Rural, Nelamangala Town, Bengaluru.						
Vegetable	Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
Pesticide Residues									
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
2.	2,4-D-Amine salt	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
3.	Abamectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
5.	Acetamiprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
6.	Alachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
8.	Aldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
9.	Alpha Cypermethrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
10.	Alphanaphthyl Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
11.	Ametoctradin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
12.	Ametryn	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
13.	Anilofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
14.	Atrazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
15.	Azimsulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
16.	Azoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
17.	Benfuracarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
19.	Bensulfuron-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
20.	Bentazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
21.	Beta Cyfluthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
22.	Bifenthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
23.	Bispyribac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
24.	Bitertanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
25.	Boscalid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
26.	Buprofezin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
27.	Butachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
28.	Captafol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
29.	Captan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
30.	Carbaryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
31.	Carbendazim	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
33.	Carbosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
34.	Carfentrazone-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
35.	Carpropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
36.	Cartap Hydrochloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
47.	Cinmethylene	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	4.454	4.638	4.078	1.230	0.534	2.244	0.998
52.	Copper Oxychloride (Copper determined as elemental copper)	mg/kg	4.454	4.638	4.078	1.230	0.534	2.244	0.998
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	4.454	4.638	4.078	1.230	0.534	2.244	0.998
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	4.454	4.638	4.078	1.230	0.534	2.244	0.998

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
55.	Cyantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
56.	Cyazofamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
57.	Cyflumetofen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
59.	Cymoxanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
61.	D.D.T	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
63.	Diafenthuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
64.	Diazinon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
65.	Dichlorvos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
66.	Diclofop (sum of Diclofop-methyl and Dichlofop acid expressed as Diclofop-methyl)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
67.	Diclosulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
69.	Dieldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
70.	Difenoconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
71.	Diffubenzuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
72.	Dimethoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
73.	Dimethomorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
74.	Dinocap	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
75.	Dinotefuran	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
76.	Dithianon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
78.	Diuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
79.	Dodine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
80.	Edifenphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
81.	Emamectin benzoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
82.	Endosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
83.	Epoxyconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
84.	Ethephon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
86.	Ethofenprox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
87.	Ethoxysulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
89.	Etoazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
90.	Famaxadone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
91.	Fenamidone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
92.	Fenarimol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
93.	Fenazaquin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
94.	Fenitrothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
95.	Fenobucarb (BPMC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
96.	Fenoxaprop-P-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
97.	Fenpropathrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
98.	Fenpyroximate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
99.	Fenthion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
100.	Fenvalerate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
101.	Ferbam	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
102.	Fipronil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
103.	Fonicamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
104.	Fluazifop-P-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
105.	Flubendiamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
106.	Flucetosulfurone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
107.	Fluchloralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
108.	Flufenacet	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
109.	Fluopicolide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
110.	Fluopyram and its metabolites	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
111.	Flupyradifurone and its metabolites (Difluoroacetic acid and Difluoroethylamino-furanone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
112.	Flusilazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
113.	Fluvalinate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
114.	Fluxapyroxad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
115.	Fomesafen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
116.	Forchlorfenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
117.	Formothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
118.	Fosetyl Aluminium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
122.	Haloxypop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
130.	Imidacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
143.	Malathion (Malathion to be determined and	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
	expressed as combined residues of Malathion and Malaaxon)								
144.	Mandipropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
145.	Mepiquat Chloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
146.	Mesusulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
147.	Metaflumizone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
148.	Metalaxyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
149.	Metalaxyl-M	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
150.	Methabenzthiazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
151.	Methomyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
154.	Metolachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
155.	Metrafenone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
156.	Metribuzin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
157.	Metsulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
158.	Milbemectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
159.	Monocrotophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
160.	Myclobutanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
161.	Novaluron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
162.	Orthosulfamuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
163.	Oxadiargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
164.	Oxadiazon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
165.	Oxydemeton methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
166.	Oxyflorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
167.	Paclobutrazol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
169.	Penconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
170.	Pencycuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
171.	Pendimethalin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
172.	Penoxsulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
173.	Permethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
174.	Phenthoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
176.	Phosalone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
177.	Phosphamidon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
178.	Picoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
179.	Pinoxaden	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
180.	Pirimiphos-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
181.	Pretilachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
182.	Profenofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
183.	Prohexadione calcium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
184.	Propanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
185.	Propaquizafop	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
186.	Propargite	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
187.	Propiconazole (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
188.	Propineb	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
189.	Pymetrozine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
190.	Pyraclostrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
192.	Pyridalyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
193.	Pyriproxyfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
194.	Pyriproxyfen Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
195.	Quinalphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
196.	Quizalofop Ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
197.	Quizalofop-P-tefuryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
198.	Simazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
202.	Spinosad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
203.	Spiromesifen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
204.	Spirotetramat	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
206.	Sulfosulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
207.	Sulfoxaflor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result						
			Sample Code						
			35	36	37	38	39	40	41
			27ME35M	27LF36M	27FB37M	27BE38M	27CF39M	27CB40M	27CC41M
			Feugreek/ Methi	Leafy Green Veg	Flat bean	Beans	Cauliflower	Cabbage	Cucumber small
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
212.	Thiamethoxam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
220.	Triaccontanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

7. Analysis results of vegetable samples collected on 28.02.2025 from Agricultural field Chakarasahalli, Narsapura Hobli, Kolar road, Kolar.

S. No.	1	2	3	4	5
Sample Code	28BG01K	28BIG02K	28C03K	28B04K	28LF05K
Latitude-Longitude:	13.129484 77.965672	13.12954 77.965828	13.12974 77.966258	13.129677 77.966215	13.130107 77.966176
Location:	Agricultural field Chakarasahalli, Narsapura Hobli, Kolar road, Kolar.				
Vegetable	Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K Bottle Gourd	28BIG02K Bitter Gourd	28C03K Carrot	28B04K Beans	28LF05K Lady Finger
Pesticide Residues							
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
2.	2,4-D-Amine salt	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
3.	Abamectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
5.	Acetamiprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
6.	Alachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
8.	Aldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
9.	Alpha Cypermethrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
10.	Alphanaphthyl Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
11.	Ametoctradin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
12.	Ametryn	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
13.	Anilofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
14.	Atrazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
			Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger
15.	Azimsulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
16.	Azoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
17.	Benfuracarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
19.	Bensulfuron-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
20.	Bentazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
21.	Beta Cyfluthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
22.	Bifenthrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
23.	Bispyribac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
24.	Bitertanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
25.	Boscalid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
26.	Buprofezin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
27.	Butachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
28.	Captafol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
29.	Captan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
30.	Carbaryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
31.	Carbendazim	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
33.	Carbosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
34.	Carfentrazone-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
35.	Carpropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
36.	Cartap Hydrochloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
		Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger	
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	1.344	0.762	0.948	1.230	3.390
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	1.344	0.762	0.948	1.230	3.390
53.	Copper Sulphate(Copper determined as elemental copper)	mg/kg	1.344	0.762	0.948	1.230	3.390
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	1.344	0.762	0.948	1.230	3.390
55.	Cyantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
56.	Cyazofamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K Bottle Gourd	28BIG02K Bitter Gourd	28C03K Carrot	28B04K Beans	28LF05K Lady Finger
57.	Cyflumetofen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
59.	Cymoxanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
61.	D.D.T	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
63.	Diaphenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
64.	Diazinon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
65.	Dichlorvos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
66.	Diclofop (sum of Diclofop-methyl and Dichlofop acid expressed as Diclofop-methyl)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
67.	Diclosulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
69.	Dieldrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
70.	Difenoconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
71.	Diflubenzuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
72.	Dimethoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
73.	Dimethomorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
74.	Dinocap	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
75.	Dinotefuran	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
76.	Dithianon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
			Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger
78.	Diuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
79.	Dodine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
80.	Edifenphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
81.	Emamectin benzoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
82.	Endosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
83.	Epoxyconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
84.	Ethephon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
86.	Ethofenprox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
87.	Ethoxysulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
89.	Etoxazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
90.	Famaxadone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
91.	Fenamidone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
92.	Fenarimol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
93.	Fenazaquin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
94.	Fenitrothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
95.	Fenobucarb (BPMC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
96.	Fenoxaprop-P-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
97.	Fenpropathrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
98.	Fenpyroximate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
99.	Fenthion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
100.	Fenvalerate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
101.	Ferbam	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
			Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger
102.	Fipronil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
103.	Flonicamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
104.	Fluazifop-P-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
105.	Flubendiamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
106.	Flucetosulfurone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
107.	Fluchloralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
108.	Flufenacet	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
109.	Fluopicolide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
110.	Fluopyram and its metabolites	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
111.	Flupyradifurone and its metabolites (Difluoroacetic acid and Difluoroethylamino-furanone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
112.	Flusilazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
113.	Fluvalinate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
114.	Fluxapyroxad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
115.	Fomesafen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
116.	Forchlorfenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
117.	Formothion	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
118.	Fosetyl Aluminium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
122.	Haloxypop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
		Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger	
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
130.	Imidacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaoxon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
144.	Mandipropamid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
145.	Mepiquat Chloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
146.	Mesusulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
147.	Metaflumizone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
148.	Metalaxyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
149.	Metalaxyl-M	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
150.	Methabenzthiazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
151.	Methomyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
			Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
154.	Metolachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
155.	Metrafenone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
156.	Metribuzin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
157.	Metsulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
158.	Milbemectin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
159.	Monocrotophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
160.	Myclobutanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
161.	Novaluron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
162.	Orthosulfamuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
163.	Oxadiazyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
164.	Oxadiazon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
165.	Oxydemeton methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
166.	Oxyflorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
167.	Paclobutrazol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
169.	Penconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
170.	Pencycuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
171.	Pendimethalin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
172.	Penoxsulam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
173.	Permethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
174.	Phenthoate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
			Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
176.	Phosalone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
177.	Phosphamidon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
178.	Picoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
179.	Pinoxaden	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
180.	Pirimiphos-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
181.	Pretilachlor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
182.	Profenofos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
183.	Prohexadione calcium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
184.	Propanil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
185.	Propaquizafop	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
186.	Propargite	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
187.	Propiconazole (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
188.	Propineb	mg/kg	BLQ of 0.010	BLQ	BLQ	BLQ	BLQ
189.	Pymetrozine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
190.	Pyraclostrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
192.	Pyridalyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
193.	Pyriproxyfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
194.	Pyrithiobac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
195.	Quinalphos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
196.	Quizalofop Ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
197.	Quizalofop-P-tefuryl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
198.	Simazine	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
			Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
202.	Spinosad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
203.	Spiromesifen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
204.	Spirotetramat	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
206.	Sulfosulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
207.	Sulfoxaflor	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
212.	Thiamethoxam	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

S. No.	Test Parameter	Unit	Result				
			Sample Code				
			1	2	3	4	5
			28BG01K	28BIG02K	28C03K	28B04K	28LF05K
			Bottle Gourd	Bitter Gourd	Carrot	Beans	Lady Finger
220.	Triacantanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			6	7	8	9	10	11	12	13
			28CAP06KM Capsicum	28NL07KM Knol Khol (Turnip)	28TO08KM Tomato	28B09KM Beans	28RG10KM Ridge Gourd	28BIG11KM Bitter Gourd	28CAB12KM Cabbage	28CF13KM Cauliflower
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	0.072	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	1.801	1.570	0.979	1.247	1.334	3.839	1.230	2.854
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	1.801	1.570	0.979	1.247	1.334	3.839	1.230	2.854
53.	Copper Sulphate(Copper determined as elemental copper)	mg/kg	1.801	1.570	0.979	1.247	1.334	3.839	1.230	2.854
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	1.801	1.570	0.979	1.247	1.334	3.839	1.230	2.854

S. No.	Test Parameter	Unit	Result							
			Sample Code							
			6	7	8	9	10	11	12	13
			28CAP06KM Capsicum	28NL07KM Knol Khol (Turnip)	28TO08KM Tomato	28B09KM Beans	28RG10KM Ridge Gourd	28BIG11KM Bitter Gourd	28CAB12KM Cabbage	28CF13KM Cauliflower
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	0.059	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
220.	Triacantanol	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ

*BLQ – Below Limit of Quantification.

S. No.	Test Parameter	Unit	Result									
			Sample Code									
			14	15	16	17	18	19	20	21	22	
			28BR14KM	28MB15KM	28SC16KM	28BR17KM	28ON18KM	28SG19KM	28PO20KM	28CAR21KM	28RA22KM	
Beetroot	Chilli Bajji	Sambar Cucumbe r	Round Brinjal	Sambar Onion	Snake Gourd	Potato	Carrot	Radish				
36.	Cartap Hydrochloride	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	0.446	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	2.976	4.920	0.754	1.876	1.803	0.276	3.414	0.985	0.741	
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	2.976	4.920	0.754	1.876	1.803	0.276	3.414	0.985	0.741	

S. No.	Test Parameter	Unit	Result									
			Sample Code									
			14	15	16	17	18	19	20	21	22	
			28BR14KM	28MB15KM	28SC16KM	28BR17KM	28ON18KM	28SG19KM	28PO20KM	28CAR21KM	28RA22KM	
			Beetroot	Chilli Bajji	Sambar Cucumber	Round Brinjal	Sambar Onion	Snake Gourd	Potato	Carrot	Radish	
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	BLQ	

*BLQ – Below Limit of Quantification.

10. Analysis results of vegetable samples collected on 28.02.2025 from Agricultural field at Thurandahalli, Kolar.

S. No.	23	24	25
Sample Code	28MB24TH	28B26TH	28O27TH
Latitude-Longitude:	13.228339 78.139329	13.230714 78.13925	13.230714 78.13925
Location:	Agricultural field at Thurandahalli, Kolar		
Vegetable	Chilli Bajji	Beans	Sambar Onion

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
Pesticide Residues					
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ
2.	2,4-D-Amine salt	mg/kg	BLQ of 0.008	BLQ	BLQ
3.	Abamectin	mg/kg	BLQ of 0.008	BLQ	BLQ
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	1.091 (BLQ of 0.008)	BLQ	BLQ
5.	Acetamiprid	mg/kg	BLQ of 0.008	BLQ	BLQ
6.	Alachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	BLQ of 0.008	BLQ	BLQ
8.	Aldrin	mg/kg	BLQ of 0.008	BLQ	BLQ
9.	Alpha Cypermethrin	mg/kg	BLQ of 0.008	BLQ	BLQ
10.	Alphanaphthyl Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ
11.	Ametoctradin	mg/kg	BLQ of 0.008	BLQ	BLQ
12.	Ametryn	mg/kg	BLQ of 0.008	BLQ	BLQ
13.	Anilofos	mg/kg	BLQ of 0.008	BLQ	BLQ
14.	Atrazine	mg/kg	BLQ of 0.008	BLQ	BLQ
15.	Azimsulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
16.	Azoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
17.	Benfuracarb	mg/kg	BLQ of 0.008	BLQ	BLQ
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	BLQ of 0.008	BLQ	BLQ
19.	Bensulfuron-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
20.	Bentazone	mg/kg	BLQ of 0.008	BLQ	BLQ
21.	Beta Cyfluthrin	mg/kg	BLQ of 0.008	BLQ	BLQ
22.	Bifenthrin	mg/kg	BLQ of 0.008	BLQ	BLQ
23.	Bispyribac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ
24.	Bitertanol	mg/kg	BLQ of 0.008	BLQ	BLQ
25.	Boscalid	mg/kg	BLQ of 0.008	BLQ	BLQ
26.	Buprofezin	mg/kg	BLQ of 0.008	BLQ	BLQ
27.	Butachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
28.	Captafol	mg/kg	BLQ of 0.008	BLQ	BLQ
29.	Captan	mg/kg	BLQ of 0.008	BLQ	BLQ
30.	Carbaryl	mg/kg	BLQ of 0.008	BLQ	BLQ
31.	Carbendazim	mg/kg	BLQ of 0.008	BLQ	BLQ
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	BLQ of 0.008	BLQ	BLQ
33.	Carbosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ
34.	Carfentrazone-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
35.	Carpropamid	mg/kg	BLQ of 0.008	BLQ	BLQ
36.	Cartap Hydrochloride	mg/kg	BLQ of 0.008	BLQ	BLQ
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	0.467	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	2.281	1.252	24.476
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	2.281	1.252	24.476
53.	Copper Sulphate(Copper determined as elemental copper)	mg/kg	2.281	1.252	24.476
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	2.281	1.252	24.476
55.	Cyantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ
56.	Cyazofamid	mg/kg	BLQ of 0.008	BLQ	BLQ
57.	Cyflumetofen	mg/kg	BLQ of 0.008	BLQ	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
59.	Cymoxanil	mg/kg	BLQ of 0.008	BLQ	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
61.	D.D.T	mg/kg	BLQ of 0.008	BLQ	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ of 0.008	BLQ	BLQ
63.	Diafenthiuron	mg/kg	BLQ of 0.008	BLQ	BLQ
64.	Diazinon	mg/kg	BLQ of 0.008	BLQ	BLQ
65.	Dichlorvos	mg/kg	BLQ of 0.008	BLQ	BLQ
66.	Diclofop (sum of Diclofop-methyl and Dichlofop acid expressed as Diclofop-methyl)	mg/kg	BLQ of 0.008	BLQ	BLQ
67.	Diclosulam	mg/kg	BLQ of 0.008	BLQ	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
69.	Dieldrin	mg/kg	BLQ of 0.008	BLQ	BLQ
70.	Difenoconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
71.	Diflubenzuron	mg/kg	BLQ of 0.008	BLQ	BLQ
72.	Dimethoate	mg/kg	BLQ of 0.008	BLQ	BLQ
73.	Dimethomorph	mg/kg	BLQ of 0.008	BLQ	BLQ
74.	Dinocap	mg/kg	BLQ of 0.008	BLQ	BLQ
75.	Dinotefuran	mg/kg	BLQ of 0.008	BLQ	BLQ
76.	Dithianon	mg/kg	BLQ of 0.008	BLQ	BLQ
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	BLQ of 0.010	BLQ	BLQ
78.	Diuron	mg/kg	BLQ of 0.008	BLQ	BLQ
79.	Dodine	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
80.	Edifenphos	mg/kg	BLQ of 0.008	BLQ	BLQ
81.	Emamectin benzoate	mg/kg	BLQ of 0.008	BLQ	BLQ
82.	Endosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ
83.	Epoxyconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
84.	Ethephon	mg/kg	BLQ of 0.008	BLQ	BLQ
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	BLQ of 0.008	BLQ	BLQ
86.	Ethofenprox	mg/kg	BLQ of 0.008	BLQ	BLQ
87.	Ethoxysulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ
89.	Etoxazole	mg/kg	BLQ of 0.008	BLQ	BLQ
90.	Famaxadone	mg/kg	BLQ of 0.008	BLQ	BLQ
91.	Fenamidone	mg/kg	BLQ of 0.008	BLQ	BLQ
92.	Fenarimol	mg/kg	BLQ of 0.008	BLQ	BLQ
93.	Fenazaquin	mg/kg	BLQ of 0.008	BLQ	BLQ
94.	Fenitrothion	mg/kg	BLQ of 0.008	BLQ	BLQ
95.	Fenobucarb (BPMC)	mg/kg	BLQ of 0.008	BLQ	BLQ
96.	Fenoxaprop-P-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
97.	Fenpropathrin	mg/kg	BLQ of 0.008	BLQ	BLQ
98.	Fenpyroximate	mg/kg	BLQ of 0.008	BLQ	BLQ
99.	Fenthion	mg/kg	BLQ of 0.008	BLQ	BLQ
100.	Fenvalerate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
101.	Ferbam	mg/kg	BLQ of 0.010	BLQ	BLQ
102.	Fipronil	mg/kg	BLQ of 0.008	BLQ	BLQ
103.	Flonicamid	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
104.	Fluazifop-P-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ
105.	Flubendiamide	mg/kg	BLQ of 0.008	BLQ	BLQ
106.	Flucetosulfurone	mg/kg	BLQ of 0.008	BLQ	BLQ
107.	Fluchloralin	mg/kg	BLQ of 0.008	BLQ	BLQ
108.	Flufenacet	mg/kg	BLQ of 0.008	BLQ	BLQ
109.	Fluopicolide	mg/kg	BLQ of 0.008		
110.	Fluopyram and its metabolites	mg/kg	BLQ of 0.008	BLQ	BLQ
111.	Flupyradifurone and its metabolites (Difluoroacetic acid and Difluoroethylamino-furanone)	mg/kg	BLQ of 0.008	BLQ	BLQ
112.	Flusilazole	mg/kg	BLQ of 0.008	BLQ	BLQ
113.	Fluvalinate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
114.	Fluxapyroxad	mg/kg	BLQ of 0.008	BLQ	BLQ
115.	Fomesafen	mg/kg	BLQ of 0.008	BLQ	BLQ
116.	Forchlorfenuron	mg/kg	BLQ of 0.008	BLQ	BLQ
117.	Formothion	mg/kg	BLQ of 0.008	BLQ	BLQ
118.	Fosetyl Aluminium	mg/kg	BLQ of 0.008	BLQ	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ of 0.008	BLQ	BLQ
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
122.	Haloxypop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ
130.	Imidacloprid	mg/kg	0.311 (BLQ of 0.008)	BLQ	BLQ
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaonoxon)	mg/kg	BLQ of 0.008	BLQ	BLQ
144.	Mandipropamid	mg/kg	BLQ of 0.008	BLQ	BLQ
145.	Mepiquat Chloride	mg/kg	BLQ of 0.008	BLQ	BLQ
146.	Mesusulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
147.	Metaflumizone	mg/kg	BLQ of 0.008	BLQ	BLQ
148.	Metalaxyl	mg/kg	BLQ of 0.008	BLQ	BLQ
149.	Metalaxyl-M	mg/kg	BLQ of 0.008	BLQ	BLQ
150.	Methabenzthiazuron	mg/kg	BLQ of 0.008	BLQ	BLQ
151.	Methomyl	mg/kg	BLQ of 0.008	BLQ	BLQ
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ
154.	Metolachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
155.	Metrafenone	mg/kg	BLQ of 0.008	BLQ	BLQ
156.	Metribuzin	mg/kg	BLQ of 0.008	BLQ	BLQ
157.	Metsulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
158.	Milbemectin	mg/kg	BLQ of 0.008	BLQ	BLQ
159.	Monocrotophos	mg/kg	0.496 (BLQ of 0.008)	BLQ	BLQ
160.	Myclobutanil	mg/kg	BLQ of 0.008	BLQ	BLQ
161.	Novaluron	mg/kg	BLQ of 0.008	BLQ	BLQ
162.	Orthosulfamuron	mg/kg	BLQ of 0.008	BLQ	BLQ
163.	Oxadiazyl	mg/kg	BLQ of 0.008	BLQ	BLQ
164.	Oxadiazon	mg/kg	BLQ of 0.008	BLQ	BLQ
165.	Oxydemeton methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
166.	Oxyflorfen	mg/kg	BLQ of 0.008	BLQ	BLQ
167.	Paclobutrazol	mg/kg	BLQ of 0.008	BLQ	BLQ
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	BLQ of 0.008	BLQ	BLQ
169.	Penconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
170.	Pencycuron	mg/kg	BLQ of 0.008	BLQ	BLQ
171.	Pendimethalin	mg/kg	BLQ of 0.008	BLQ	BLQ
172.	Penoxsulam	mg/kg	BLQ of 0.008	BLQ	BLQ
173.	Permethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
174.	Phenthoate	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	BLQ of 0.008	BLQ	BLQ
176.	Phosalone	mg/kg	BLQ of 0.008	BLQ	BLQ
177.	Phosphamidon	mg/kg	BLQ of 0.008	BLQ	BLQ
178.	Picoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ
179.	Pinoxaden	mg/kg	BLQ of 0.008	BLQ	BLQ
180.	Pirimiphos-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
181.	Pretilachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
182.	Profenofos	mg/kg	BLQ of 0.008	BLQ	BLQ
183.	Prohexadione calcium	mg/kg	BLQ of 0.008	BLQ	BLQ
184.	Propanil	mg/kg	BLQ of 0.008	BLQ	BLQ
185.	Propaquizafop	mg/kg	BLQ of 0.008	BLQ	BLQ
186.	Propargite	mg/kg	BLQ of 0.008	BLQ	BLQ
187.	Propiconazole (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
188.	Propineb	mg/kg	BLQ of 0.010	BLQ	BLQ
189.	Pymetrozine	mg/kg	BLQ of 0.008	BLQ	BLQ
190.	Pyraclostrobin	mg/kg	BLQ of 0.008	BLQ	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
192.	Pyridalyl	mg/kg	BLQ of 0.008	BLQ	BLQ
193.	Pyriproxyfen	mg/kg	BLQ of 0.008	BLQ	BLQ
194.	Pyriithiobac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ
195.	Quinalphos	mg/kg	BLQ of 0.008	BLQ	BLQ
196.	Quizalofop Ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
197.	Quizalofop-P-tefuryl	mg/kg	BLQ of 0.008	BLQ	BLQ
198.	Simazine	mg/kg	BLQ of 0.008	BLQ	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ of 0.008	BLQ	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ of 0.008	BLQ	BLQ
202.	Spinosad	mg/kg	BLQ of 0.008	BLQ	BLQ
203.	Spiromesifen	mg/kg	BLQ of 0.008	BLQ	BLQ
204.	Spirotetramat	mg/kg	BLQ of 0.008	BLQ	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ of 0.008	BLQ	BLQ
206.	Sulfosulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
207.	Sulfoxaflor	mg/kg	BLQ of 0.008	BLQ	BLQ
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ
212.	Thiamethoxam	mg/kg	0.943		
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			23	24	25
			28MB24TH Chilli Bajji	28B26TH Beans	28O27TH Sambar Onion
220.	Triacantanol	mg/kg	BLQ of 0.008	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ

*BLQ – Below Limit of Quantification.

11. Analysis results of vegetable samples collected on 28.02.2025 and 01.09.2025 from Soppahalli Agricultural field, Chikkaballapura.

S. No.	28
Sample Code	28BR30SH
Latitude-Longitude:	13.444936, 77.779487
Location:	Soppahalli Agricultural field, Chikkaballapura
Vegetable	BT Brinjal

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
Pesticide Residues			
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	BLQ
2.	2,4-D-Amine salt	mg/kg	BLQ
3.	Abamectin	mg/kg	BLQ
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	BLQ
5.	Acetamiprid	mg/kg	BLQ
6.	Alachlor	mg/kg	BLQ
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	BLQ
8.	Aldrin	mg/kg	BLQ
9.	Alpha Cypermethrin	mg/kg	BLQ
10.	Alphanaphthyl Acetic Acid	mg/kg	BLQ
11.	Ametoctradin	mg/kg	BLQ
12.	Ametryn	mg/kg	BLQ
13.	Anilofos	mg/kg	BLQ
14.	Atrazine	mg/kg	BLQ
15.	Azimsulfuron	mg/kg	BLQ
16.	Azoxystrobin	mg/kg	BLQ
17.	Benfuracarb	mg/kg	BLQ
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	BLQ
19.	Bensulfuron-methyl	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
20.	Bentazone	mg/kg	BLQ
21.	Beta Cyfluthrin	mg/kg	BLQ
22.	Bifenthrin	mg/kg	BLQ
23.	Bispyribac Sodium	mg/kg	BLQ
24.	Bitertanol	mg/kg	BLQ
25.	Boscalid	mg/kg	BLQ
26.	Buprofezin	mg/kg	BLQ
27.	Butachlor	mg/kg	BLQ
28.	Captafol	mg/kg	BLQ
29.	Captan	mg/kg	BLQ
30.	Carbaryl	mg/kg	BLQ
31.	Carbendazim	mg/kg	BLQ
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	BLQ
33.	Carbosulfan	mg/kg	BLQ
34.	Carfentrazone-ethyl	mg/kg	BLQ
35.	Carpropamid	mg/kg	BLQ
36.	Cartap Hydrochloride	mg/kg	BLQ
37.	Chlorantraniliprole	mg/kg	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ
39.	Chlorfenapyr	mg/kg	BLQ
40.	Chlorfluazuron	mg/kg	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ
43.	Chlorothalonil	mg/kg	BLQ
44.	Chlorpropham	mg/kg	BLQ
45.	Chlorpyrifos	mg/kg	BLQ
46.	Chromafenozide	mg/kg	BLQ
47.	Cinmethylen	mg/kg	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
49.	Clomazone	mg/kg	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	0.925
52.	Copper Oxochloride (Copper determined as elemental copper)	mg/kg	0.925
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	0.925
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	0.925
55.	Cyantraniliprole	mg/kg	BLQ
56.	Cyazofamid	mg/kg	BLQ
57.	Cyflumetofen	mg/kg	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ
59.	Cymoxanil	mg/kg	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ
61.	D.D.T	mg/kg	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ
63.	Diaphenhiuron	mg/kg	BLQ
64.	Diazinon	mg/kg	BLQ
65.	Dichlorvos	mg/kg	BLQ
66.	Diclofop (sum of Diclofop-methyl and Diclofop acid expressed as Diclofop-methyl)	mg/kg	BLQ
67.	Diclosulam	mg/kg	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ
69.	Dieldrin	mg/kg	BLQ
70.	Difenoconazole	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
71.	Diflubenzuron	mg/kg	BLQ
72.	Dimethoate	mg/kg	BLQ
73.	Dimethomorph	mg/kg	BLQ
74.	Dinocap	mg/kg	BLQ
75.	Dinotefuran	mg/kg	BLQ
76.	Dithianon	mg/kg	BLQ
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	BLQ
78.	Diuron	mg/kg	BLQ
79.	Dodine	mg/kg	BLQ
80.	Edifenphos	mg/kg	BLQ
81.	Emamectin benzoate	mg/kg	BLQ
82.	Endosulfan	mg/kg	BLQ
83.	Epoxyconazole	mg/kg	BLQ
84.	Ethephon	mg/kg	BLQ
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	BLQ
86.	Ethofenprox	mg/kg	BLQ
87.	Ethoxysulfuron	mg/kg	BLQ
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	BLQ
89.	Etoxazole	mg/kg	BLQ
90.	Famaxadone	mg/kg	BLQ
91.	Fenamidone	mg/kg	BLQ
92.	Fenarimol	mg/kg	BLQ
93.	Fenazaquin	mg/kg	BLQ
94.	Fenitrothion	mg/kg	BLQ
95.	Fenobucarb (BPMC)	mg/kg	BLQ
96.	Fenoxaprop-P-ethyl	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
97.	Fenpropathrin	mg/kg	BLQ
98.	Fenpyroximate	mg/kg	BLQ
99.	Fenthion	mg/kg	BLQ
100.	Fenvalerate (sum of isomers)	mg/kg	BLQ
101.	Ferbam	mg/kg	BLQ
102.	Fipronil	mg/kg	BLQ
103.	Flonicamid	mg/kg	BLQ
104.	Fluazifop-P-butyl	mg/kg	BLQ
105.	Flubendiamide	mg/kg	BLQ
106.	Flucetosulfurone	mg/kg	BLQ
107.	Fluchloralin	mg/kg	BLQ
108.	Flufenacet	mg/kg	BLQ
109.	Fluopicolide	mg/kg	BLQ
110.	Fluopyram and its metabolites	mg/kg	BLQ
111.	Flupyradifurone and its metabolites (Difluoroacetic acid and Difluoroethylamino-furanone)	mg/kg	BLQ
112.	Flusilazole	mg/kg	BLQ
113.	Fluvalinate (sum of isomers)	mg/kg	BLQ
114.	Fluxapyroxad	mg/kg	BLQ
115.	Fomesafen	mg/kg	BLQ
116.	Forchlorfenuron	mg/kg	BLQ
117.	Formothion	mg/kg	BLQ
118.	Fosetyl Aluminium	mg/kg	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ
120.	Glyphosate	mg/kg	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ
122.	Haloxypop-methyl	mg/kg	BLQ
123.	Heptachlor	mg/kg	BLQ
124.	Hexaconazole	mg/kg	BLQ
125.	Hexazinone	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
126.	Hexythiazox	mg/kg	BLQ
127.	Hydrogen Cyanamide	mg/kg	BLQ
128.	Imazomox	mg/kg	BLQ
129.	Imazethapyr	mg/kg	BLQ
130.	Imidacloprid	mg/kg	BLQ
131.	Indoxacarb	mg/kg	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ
134.	Iprodione	mg/kg	BLQ
135.	Isoprothiolane	mg/kg	BLQ
136.	Isoproturon	mg/kg	BLQ
137.	Kasugamycin	mg/kg	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ
141.	Linuron	mg/kg	BLQ
142.	Lufenuron	mg/kg	BLQ
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaoxon)	mg/kg	BLQ
144.	Mandipropamid	mg/kg	BLQ
145.	Mepiquat Chloride	mg/kg	BLQ
146.	Mesusulfuron-Methyl	mg/kg	BLQ
147.	Metaflumizone	mg/kg	BLQ
148.	Metalaxyl	mg/kg	BLQ
149.	Metalaxyl-M	mg/kg	BLQ
150.	Methabenzthiazuron	mg/kg	BLQ
151.	Methomyl	mg/kg	BLQ
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	BLQ
154.	Metolachlor	mg/kg	BLQ
155.	Metrafenone	mg/kg	BLQ
156.	Metribuzin	mg/kg	BLQ
157.	Metsulfuron-Methyl	mg/kg	BLQ
158.	Milbemectin	mg/kg	BLQ
159.	Monocrotophos	mg/kg	BLQ
160.	Myclobutanil	mg/kg	BLQ
161.	Novaluron	mg/kg	BLQ
162.	Orthosulfamuron	mg/kg	BLQ
163.	Oxadiargyl	mg/kg	BLQ
164.	Oxadiazon	mg/kg	BLQ
165.	Oxydemeton methyl	mg/kg	BLQ
166.	Oxyflorfen	mg/kg	BLQ
167.	Paclobutrazol	mg/kg	BLQ
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	BLQ
169.	Penconazole	mg/kg	BLQ
170.	Pencycuron	mg/kg	BLQ
171.	Pendimethalin	mg/kg	BLQ
172.	Penoxsulam	mg/kg	BLQ
173.	Permethrin (sum of isomers)	mg/kg	BLQ
174.	Phenthoate	mg/kg	BLQ
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	BLQ
176.	Phosalone	mg/kg	BLQ
177.	Phosphamidon	mg/kg	BLQ
178.	Picoxystrobin	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
179.	Pinoxaden	mg/kg	BLQ
180.	Pirimiphos-methyl	mg/kg	BLQ
181.	Pretilachlor	mg/kg	BLQ
182.	Profenofos	mg/kg	BLQ
183.	Prohexadione calcium	mg/kg	BLQ
184.	Propanil	mg/kg	BLQ
185.	Propaquizafop	mg/kg	BLQ
186.	Propargite	mg/kg	BLQ
187.	Propiconazole (sum of isomers)	mg/kg	BLQ
188.	Propineb	mg/kg	BLQ
189.	Pymetrozine	mg/kg	BLQ
190.	Pyraclostrobin	mg/kg	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ
192.	Pyridalyl	mg/kg	BLQ
193.	Pyriproxyfen	mg/kg	BLQ
194.	Pyriothiobac Sodium	mg/kg	BLQ
195.	Quinalphos	mg/kg	BLQ
196.	Quizalofop Ethyl	mg/kg	BLQ
197.	Quizalofop-P-tefuryl	mg/kg	BLQ
198.	Simazine	mg/kg	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ
202.	Spinosad	mg/kg	BLQ
203.	Spiromesifen	mg/kg	BLQ
204.	Spirotetramat	mg/kg	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ

S. No.	Test Parameter	Unit	Result
			Sample Code
			28
			28BR30SH
			BT Brinjal
206.	Sulfosulfuron	mg/kg	BLQ
207.	Sulfoxaflor	mg/kg	BLQ
208.	Tebuconazole	mg/kg	BLQ
209.	Tembotrione	mg/kg	BLQ
210.	Tetraconazole	mg/kg	BLQ
211.	Thiacloprid	mg/kg	BLQ
212.	Thiamethoxam	mg/kg	BLQ
213.	Thifluzamide	mg/kg	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ
215.	Thiodicarb	mg/kg	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ
218.	Tolfenpyrad	mg/kg	BLQ
219.	Topramezone	mg/kg	BLQ
220.	Triaccontanol	mg/kg	BLQ
221.	Triadimefon	mg/kg	BLQ
222.	Triallate	mg/kg	BLQ
223.	Triasulfuron	mg/kg	BLQ
224.	Triazophos	mg/kg	BLQ
225.	Trichlorfon	mg/kg	BLQ
226.	Tricyclazole	mg/kg	BLQ
227.	Tridemorph	mg/kg	BLQ
228.	Trifloxystrobin	mg/kg	BLQ
229.	Trifluralin	mg/kg	BLQ
230.	Validamycin	mg/kg	BLQ

*BLQ – Below Limit of Quantification.

12. Analysis results of vegetable samples collected on 28.02.2025 from HOPCOMS, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.

S. No.	29	30	31
Sample Code	28CC32HC	28PT33HC	28ON34HC
Latitude-Longitude:	12.999888 77.541344	12.999888 77.541344	12.999888 77.541344
Location:	HOPCOMS, Siddaiah Puranik Road, Near Shanaramath Circle, Rajajinagara, Bengaluru.		
Vegetable	Cucumber	Potato	Onion

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
Pesticide Residues					
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ
2.	2,4-D-Amine salt	mg/kg	BLQ of 0.008	BLQ	BLQ
3.	Abamectin	mg/kg	BLQ of 0.008	BLQ	BLQ
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	BLQ of 0.008	BLQ	BLQ
5.	Acetamiprid	mg/kg	BLQ of 0.008	BLQ	BLQ
6.	Alachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	BLQ of 0.008	BLQ	BLQ
8.	Aldrin	mg/kg	BLQ of 0.008	BLQ	BLQ
9.	Alpha Cypermethrin	mg/kg	BLQ of 0.008	BLQ	BLQ
10.	Alphanaphthyl Acetic Acid	mg/kg	BLQ of 0.008	BLQ	BLQ
11.	Ametoctradin	mg/kg	BLQ of 0.008	BLQ	BLQ
12.	Ametryn	mg/kg	BLQ of 0.008	BLQ	BLQ
13.	Anilofos	mg/kg	BLQ of 0.008	BLQ	BLQ
14.	Atrazine	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
15.	Azimsulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
16.	Azoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ
17.	Benfuracarb	mg/kg	BLQ of 0.008	BLQ	BLQ
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	BLQ of 0.008	BLQ	BLQ
19.	Bensulfuron-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
20.	Bentazone	mg/kg	BLQ of 0.008	BLQ	BLQ
21.	Beta Cyfluthrin	mg/kg	BLQ of 0.008	BLQ	BLQ
22.	Bifenthrin	mg/kg	BLQ of 0.008	BLQ	BLQ
23.	Bispyribac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ
24.	Bitertanol	mg/kg	BLQ of 0.008	BLQ	BLQ
25.	Boscalid	mg/kg	BLQ of 0.008	BLQ	BLQ
26.	Buprofezin	mg/kg	BLQ of 0.008	BLQ	BLQ
27.	Butachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
28.	Captafol	mg/kg	BLQ of 0.008	BLQ	BLQ
29.	Captan	mg/kg	BLQ of 0.008	BLQ	BLQ
30.	Carbaryl	mg/kg	BLQ of 0.008	BLQ	BLQ
31.	Carbendazim	mg/kg	BLQ of 0.008	BLQ	BLQ
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	BLQ of 0.008	BLQ	BLQ
33.	Carbosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ
34.	Carfentrazone-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
35.	Carpropamid	mg/kg	BLQ of 0.008	BLQ	BLQ
36.	Cartap Hydrochloride	mg/kg	BLQ of 0.008	BLQ	BLQ
37.	Chlorantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ
38.	Chlordane (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
39.	Chlorfenapyr	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
40.	Chlorfluazuron	mg/kg	BLQ of 0.008	BLQ	BLQ
41.	Chlorimuron-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
42.	Chlormequat Chloride (CCC)	mg/kg	BLQ of 0.008	BLQ	BLQ
43.	Chlorothalonil	mg/kg	BLQ of 0.008	BLQ	BLQ
44.	Chlorpropham	mg/kg	BLQ of 0.008	BLQ	BLQ
45.	Chlorpyrifos	mg/kg	BLQ of 0.008	BLQ	BLQ
46.	Chromafenozide	mg/kg	BLQ of 0.008	BLQ	BLQ
47.	Cinmethylen	mg/kg	BLQ of 0.008	BLQ	BLQ
48.	Clodinafop-propargyl	mg/kg	BLQ of 0.008	BLQ	BLQ
49.	Clomazone	mg/kg	BLQ of 0.008	BLQ	BLQ
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	BLQ of 0.008	BLQ	BLQ
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	1.177	4.225	0.950
52.	Copper Oxchloride (Copper determined as elemental copper)	mg/kg	1.177	4.225	0.950
53.	Copper Sulphate(Copper determined as elemental copper)	mg/kg	1.177	4.225	0.950
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	1.177	4.225	0.950
55.	Cyantraniliprole	mg/kg	BLQ of 0.008	BLQ	BLQ
56.	Cyazofamid	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
57.	Cyflumetofen	mg/kg	BLQ of 0.008	BLQ	BLQ
58.	Cyhalofop-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ
59.	Cymoxanil	mg/kg	BLQ of 0.008	BLQ	BLQ
60.	Cypermethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
61.	D.D.T	mg/kg	BLQ of 0.008	BLQ	BLQ
62.	Deltamethrin (Decamethrin)	mg/kg	BLQ of 0.008	BLQ	BLQ
63.	Diafenthuron	mg/kg	BLQ of 0.008	BLQ	BLQ
64.	Diazinon	mg/kg	BLQ of 0.008	BLQ	BLQ
65.	Dichlorvos	mg/kg	BLQ of 0.008	BLQ	BLQ
66.	Diclofop (sum of Diclofop-methyl and Dichlofop acid expressed as Diclofop-methyl)	mg/kg	BLQ of 0.008	BLQ	BLQ
67.	Diclosulam	mg/kg	BLQ of 0.008	BLQ	BLQ
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
69.	Dieldrin	mg/kg	BLQ of 0.008	BLQ	BLQ
70.	Difenoconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
71.	Diflubenzuron	mg/kg	BLQ of 0.008	BLQ	BLQ
72.	Dimethoate	mg/kg	BLQ of 0.008	BLQ	BLQ
73.	Dimethomorph	mg/kg	BLQ of 0.008	BLQ	BLQ
74.	Dinocap	mg/kg	BLQ of 0.008	BLQ	BLQ
75.	Dinotefuran	mg/kg	BLQ of 0.008	BLQ	BLQ
76.	Dithianon	mg/kg	BLQ of 0.008	BLQ	BLQ
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	BLQ of 0.010	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
78.	Diuron	mg/kg	BLQ of 0.008	BLQ	BLQ
79.	Dodine	mg/kg	BLQ of 0.008	BLQ	BLQ
80.	Edifenphos	mg/kg	BLQ of 0.008	BLQ	BLQ
81.	Emamectin benzoate	mg/kg	BLQ of 0.008	BLQ	BLQ
82.	Endosulfan	mg/kg	BLQ of 0.008	BLQ	BLQ
83.	Epoxyconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
84.	Ethephon	mg/kg	BLQ of 0.008	BLQ	BLQ
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	BLQ of 0.008	BLQ	BLQ
86.	Ethofenprox	mg/kg	BLQ of 0.008	BLQ	BLQ
87.	Ethoxysulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ
89.	Etoxazole	mg/kg	BLQ of 0.008	BLQ	BLQ
90.	Famxadone	mg/kg	BLQ of 0.008	BLQ	BLQ
91.	Fenamidone	mg/kg	BLQ of 0.008	BLQ	BLQ
92.	Fenarimol	mg/kg	BLQ of 0.008	BLQ	BLQ
93.	Fenazaquin	mg/kg	BLQ of 0.008	BLQ	BLQ
94.	Fenitrothion	mg/kg	BLQ of 0.008	BLQ	BLQ
95.	Fenobucarb (BPMC)	mg/kg	BLQ of 0.008	BLQ	BLQ
96.	Fenoxaprop-P-ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
97.	Fenpropathrin	mg/kg	BLQ of 0.008	BLQ	BLQ
98.	Fenpyroximate	mg/kg	BLQ of 0.008	BLQ	BLQ
99.	Fenthion	mg/kg	BLQ of 0.008	BLQ	BLQ
100.	Fenvalerate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
101.	Ferbam	mg/kg	BLQ of 0.010	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
102.	Fipronil	mg/kg	BLQ of 0.008	BLQ	BLQ
103.	Flonicamid	mg/kg	BLQ of 0.008	BLQ	BLQ
104.	Fluazifop-P-butyl	mg/kg	BLQ of 0.008	BLQ	BLQ
105.	Flubendiamide	mg/kg	BLQ of 0.008	BLQ	BLQ
106.	Flucetosulfurone	mg/kg	BLQ of 0.008	BLQ	BLQ
107.	Fluchloralin	mg/kg	BLQ of 0.008	BLQ	BLQ
108.	Flufenacet	mg/kg	BLQ of 0.008	BLQ	BLQ
109.	Fluopicolide	mg/kg	BLQ of 0.008	BLQ	BLQ
110.	Fluopyram and its metabolites	mg/kg	BLQ of 0.008	BLQ	BLQ
111.	Flupyradifurone and its metabolites (Difluoroacetic acid and Difluoroethylamino-furanone)	mg/kg	BLQ of 0.008	BLQ	BLQ
112.	Flusilazole	mg/kg	BLQ of 0.008	BLQ	BLQ
113.	Fluvalinate (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
114.	Fluxapyroxad	mg/kg	BLQ of 0.008	BLQ	BLQ
115.	Fomesafen	mg/kg	BLQ of 0.008	BLQ	BLQ
116.	Forchlorfenuron	mg/kg	BLQ of 0.008	BLQ	BLQ
117.	Formothion	mg/kg	BLQ of 0.008	BLQ	BLQ
118.	Fosetyl Aluminium	mg/kg	BLQ of 0.008	BLQ	BLQ
119.	Glufosinate ammonium	mg/kg	BLQ of 0.008	BLQ	BLQ
120.	Glyphosate	mg/kg	BLQ of 0.008	BLQ	BLQ
121.	Halosulfuron methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
122.	Haloxyfop-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
123.	Heptachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
124.	Hexaconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
125.	Hexazinone	mg/kg	BLQ of 0.008	BLQ	BLQ
126.	Hexythiazox	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
127.	Hydrogen Cyanamide	mg/kg	BLQ of 0.010	BLQ	BLQ
128.	Imazomox	mg/kg	BLQ of 0.008	BLQ	BLQ
129.	Imazethapyr	mg/kg	BLQ of 0.008	BLQ	BLQ
130.	Imidacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ
131.	Indoxacarb	mg/kg	BLQ of 0.008	BLQ	BLQ
132.	Iodosulfuron Methyl Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ
133.	Iprobenfos (Kitazin)	mg/kg	BLQ of 0.008	BLQ	BLQ
134.	Iprodione	mg/kg	BLQ of 0.008	BLQ	BLQ
135.	Isoprothiolane	mg/kg	BLQ of 0.008	BLQ	BLQ
136.	Isoproturon	mg/kg	BLQ of 0.008	BLQ	BLQ
137.	Kasugamycin	mg/kg	BLQ of 0.008	BLQ	BLQ
138.	Kresoxim Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
139.	Lambda cyhalothrin	mg/kg	BLQ of 0.008	BLQ	BLQ
140.	Lindane (Gamma-HCH)	mg/kg	BLQ of 0.008	BLQ	BLQ
141.	Linuron	mg/kg	BLQ of 0.008	BLQ	BLQ
142.	Lufenuron	mg/kg	BLQ of 0.008	BLQ	BLQ
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaoxon)	mg/kg	BLQ of 0.008	BLQ	BLQ
144.	Mandipropamid	mg/kg	BLQ of 0.008	BLQ	BLQ
145.	Mepiquat Chloride	mg/kg	BLQ of 0.008	BLQ	BLQ
146.	Mesusulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
147.	Metaflumizone	mg/kg	BLQ of 0.008	BLQ	BLQ
148.	Metalaxyl	mg/kg	BLQ of 0.008	BLQ	BLQ
149.	Metalaxyl-M	mg/kg	BLQ of 0.008	BLQ	BLQ
150.	Methabenzthiazuron	mg/kg	BLQ of 0.008	BLQ	BLQ
151.	Methomyl	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	BLQ of 0.008	BLQ	BLQ
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	BLQ of 0.008	BLQ	BLQ
154.	Metolachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
155.	Metrafenone	mg/kg	BLQ of 0.008	BLQ	BLQ
156.	Metribuzin	mg/kg	BLQ of 0.008	BLQ	BLQ
157.	Metsulfuron-Methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
158.	Milbemectin	mg/kg	BLQ of 0.008	BLQ	BLQ
159.	Monocrotophos	mg/kg	BLQ of 0.008	BLQ	BLQ
160.	Myclobutanil	mg/kg	BLQ of 0.008	BLQ	BLQ
161.	Novaluron	mg/kg	BLQ of 0.008	BLQ	BLQ
162.	Orthosulfamuron	mg/kg	BLQ of 0.008	BLQ	BLQ
163.	Oxadiargyl	mg/kg	BLQ of 0.008	BLQ	BLQ
164.	Oxadiazon	mg/kg	BLQ of 0.008	BLQ	BLQ
165.	Oxydemeton methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
166.	Oxyflorfen	mg/kg	BLQ of 0.008	BLQ	BLQ
167.	Paclobutrazol	mg/kg	BLQ of 0.008	BLQ	BLQ
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	BLQ of 0.008	BLQ	BLQ
169.	Penconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
170.	Pencycuron	mg/kg	BLQ of 0.008	BLQ	BLQ
171.	Pendimethalin	mg/kg	BLQ of 0.008	BLQ	BLQ
172.	Penoxsulam	mg/kg	BLQ of 0.008	BLQ	BLQ
173.	Permethrin (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
174.	Phenthoate	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	BLQ of 0.008	BLQ	BLQ
176.	Phosalone	mg/kg	BLQ of 0.008	BLQ	BLQ
177.	Phosphamidon	mg/kg	BLQ of 0.008	BLQ	BLQ
178.	Picoxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ
179.	Pinoxaden	mg/kg	BLQ of 0.008	BLQ	BLQ
180.	Pirimiphos-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
181.	Pretilachlor	mg/kg	BLQ of 0.008	BLQ	BLQ
182.	Profenofos	mg/kg	BLQ of 0.008	BLQ	BLQ
183.	Prohexadione calcium	mg/kg	BLQ of 0.008	BLQ	BLQ
184.	Propanil	mg/kg	BLQ of 0.008	BLQ	BLQ
185.	Propaquizafop	mg/kg	BLQ of 0.008	BLQ	BLQ
186.	Propargite	mg/kg	BLQ of 0.008	BLQ	BLQ
187.	Propiconazole (sum of isomers)	mg/kg	BLQ of 0.008	BLQ	BLQ
188.	Propineb	mg/kg	BLQ of 0.010	BLQ	BLQ
189.	Pymetrozine	mg/kg	BLQ of 0.008	BLQ	BLQ
190.	Pyraclostrobin	mg/kg	BLQ of 0.008	BLQ	BLQ
191.	Pyrazosulfuron ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
192.	Pyridalyl	mg/kg	BLQ of 0.008	BLQ	BLQ
193.	Pyriproxyfen	mg/kg	BLQ of 0.008	BLQ	BLQ
194.	Pyrithiobac Sodium	mg/kg	BLQ of 0.008	BLQ	BLQ
195.	Quinalphos	mg/kg	BLQ of 0.008	BLQ	BLQ
196.	Quizalofop Ethyl	mg/kg	BLQ of 0.008	BLQ	BLQ
197.	Quizalofop-P-tefuryl	mg/kg	BLQ of 0.008	BLQ	BLQ
198.	Simazine	mg/kg	BLQ of 0.008	BLQ	BLQ
199.	Sodium Acifluorfen	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC Cucumber	28PT33HC Potato	28ON34HC Onion
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	BLQ of 0.008	BLQ	BLQ
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	BLQ of 0.008	BLQ	BLQ
202.	Spinosad	mg/kg	BLQ of 0.008	BLQ	BLQ
203.	Spiromesifen	mg/kg	BLQ of 0.008	BLQ	BLQ
204.	Spirotetramat	mg/kg	BLQ of 0.008	BLQ	BLQ
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	BLQ of 0.008	BLQ	BLQ
206.	Sulfosulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
207.	Sulfoxaflor	mg/kg	BLQ of 0.008	BLQ	BLQ
208.	Tebuconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
209.	Tembotrione	mg/kg	BLQ of 0.008	BLQ	BLQ
210.	Tetraconazole	mg/kg	BLQ of 0.008	BLQ	BLQ
211.	Thiacloprid	mg/kg	BLQ of 0.008	BLQ	BLQ
212.	Thiamethoxam	mg/kg	0.022 BLQ of 0.008	BLQ	BLQ
213.	Thifluzamide	mg/kg	BLQ of 0.008	BLQ	BLQ
214.	Thiocyclam Hydrogenoxalate	mg/kg	BLQ of 0.008	BLQ	BLQ
215.	Thiodicarb	mg/kg	BLQ of 0.008	BLQ	BLQ
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	BLQ of 0.008	BLQ	BLQ
217.	Thiophanate-methyl	mg/kg	BLQ of 0.008	BLQ	BLQ
218.	Tolfenpyrad	mg/kg	BLQ of 0.008	BLQ	BLQ

S. No.	Test Parameter	Unit	Result		
			Sample Code		
			29	30	31
			28CC32HC	28PT33HC	28ON34HC
			Cucumber	Potato	Onion
219.	Topramezone	mg/kg	BLQ of 0.008	BLQ	BLQ
220.	Triaccontanol	mg/kg	BLQ of 0.008	BLQ	BLQ
221.	Triadimefon	mg/kg	BLQ of 0.008	BLQ	BLQ
222.	Triallate	mg/kg	BLQ of 0.008	BLQ	BLQ
223.	Triasulfuron	mg/kg	BLQ of 0.008	BLQ	BLQ
224.	Triazophos	mg/kg	BLQ of 0.008	BLQ	BLQ
225.	Trichlorfon	mg/kg	BLQ of 0.008	BLQ	BLQ
226.	Tricyclazole	mg/kg	BLQ of 0.008	BLQ	BLQ
227.	Tridemorph	mg/kg	BLQ of 0.008	BLQ	BLQ
228.	Trifloxystrobin	mg/kg	BLQ of 0.008	BLQ	BLQ
229.	Trifluralin	mg/kg	BLQ of 0.008	BLQ	BLQ
230.	Validamycin	mg/kg	BLQ of 0.008	BLQ	BLQ

*BLQ – Below Limit of Quantification.

List of pesticide residues analysed in vegetable samples along with Limit of Quantification (LOQ).

S. No	Name of the pesticide residue	Unit	LOQ
1.	2,4-Dichlorophenoxy Acetic Acid	mg/kg	0.008
2.	2,4-D-Amine salt	mg/kg	0.008
3.	Abamectin	mg/kg	0.008
4.	Acephate (expressed as mixture of Methamidophos and acephate)	mg/kg	0.008
5.	Acetamiprid	mg/kg	0.008
6.	Alachlor	mg/kg	0.008
7.	Aldicarb (sum of Aldicarb, its sulfoxide and Sulphone expressed as Aldicarb)	mg/kg	0.008
8.	Aldrin	mg/kg	0.008
9.	Alpha Cypermethrin	mg/kg	0.008
10.	Alphanaphthyl Acetic Acid	mg/kg	0.008
11.	Ametoctradin	mg/kg	0.008
12.	Ametryn	mg/kg	0.008
13.	Anilofos	mg/kg	0.008
14.	Atrazine	mg/kg	0.008
15.	Azimsulfuron	mg/kg	0.008
16.	Azoxystrobin	mg/kg	0.008
17.	Benfuracarb	mg/kg	0.008
18.	Benomyl (sum of Benomyl and Carbendazim expressed as Carbendazim)	mg/kg	0.008
19.	Bensulfuron-methyl	mg/kg	0.008
20.	Bentazone	mg/kg	0.008
21.	Beta Cyfluthrin	mg/kg	0.008
22.	Bifenthrin	mg/kg	0.008
23.	Bispyribac Sodium	mg/kg	0.008
24.	Bitertanol	mg/kg	0.008
25.	Boscalid	mg/kg	0.008
26.	Buprofezin	mg/kg	0.008
27.	Butachlor	mg/kg	0.008
28.	Captafol	mg/kg	0.008
29.	Captan	mg/kg	0.008
30.	Carbaryl	mg/kg	0.008
31.	Carbendazim	mg/kg	0.008
32.	Carbofuran (sum of carbofuran and 3-hydroxy carbofuran expressed as carbofuran)	mg/kg	0.008
33.	Carbosulfan	mg/kg	0.008
34.	Carfentrazone-ethyl	mg/kg	0.008
35.	Carpropamid	mg/kg	0.008
36.	Cartap Hydrochloride	mg/kg	0.008
37.	Chlorantraniliprole	mg/kg	0.008
38.	Chlordane (sum of isomers)	mg/kg	0.008

S. No	Name of the pesticide residue	Unit	LOQ
39.	Chlorfenapyr	mg/kg	0.008
40.	Chlorfluazuron	mg/kg	0.008
41.	Chlorimuron-ethyl	mg/kg	0.008
42.	Chlormequat Chloride (CCC)	mg/kg	0.008
43.	Chlorothalonil	mg/kg	0.008
44.	Chlorpropham	mg/kg	0.008
45.	Chlorpyrifos	mg/kg	0.008
46.	Chromafenozide	mg/kg	0.008
47.	Cinmethylen	mg/kg	0.008
48.	Clodinafop-propargyl	mg/kg	0.008
49.	Clomazone	mg/kg	0.008
50.	Clothianidin (Clothianidin and its metabolites Thiazolymethylguanidine (TMG), Thiazolymethylurea (TZMU), Methylnitroguanidine (MNG), TMG.	mg/kg	0.008
51.	Copper Hydroxide (Copper determined as elemental copper)	mg/kg	0.02
52.	Copper Oxychloride (Copper determined as elemental copper)	mg/kg	0.02
53.	Copper Sulphate (Copper determined as elemental copper)	mg/kg	0.02
54.	Cuprous Oxide (Copper determined as elemental copper)	mg/kg	0.02
55.	Cyantraniliprole	mg/kg	0.008
56.	Cyazofamid	mg/kg	0.008
57.	Cyflumetofen	mg/kg	0.008
58.	Cyhalofop-butyl	mg/kg	0.008
59.	Cymoxanil	mg/kg	0.008
60.	Cypermethrin (sum of isomers)	mg/kg	0.008
61.	D.D.T	mg/kg	0.008
62.	Deltamethrin (Decamethrin)	mg/kg	0.008
63.	Diafenthiuron	mg/kg	0.008
64.	Diazinon	mg/kg	0.008
65.	Dichlorvos	mg/kg	0.008
66.	Diclofop (sum of Diclofop-methyl and Dichlofop acid expressed as Diclofop-methyl)	mg/kg	0.008
67.	Diclosulam	mg/kg	0.008
68.	Dicofol (sum of o, p and p, p isomers)	mg/kg	0.008
69.	Dieldrin	mg/kg	0.008
70.	Difenoconazole	mg/kg	0.008
71.	Diflubenzuron	mg/kg	0.008
72.	Dimethoate	mg/kg	0.008
73.	Dimethomorph	mg/kg	0.008
74.	Dinocap	mg/kg	0.008
75.	Dinotefuran	mg/kg	0.008
76.	Dithianon	mg/kg	0.008
77.	Dithiocarbamates as CS2 (Total of Ziram, Zineb, Nabam, Mancozeb, Maneb, Ferbam, Metiram, Tiram, Propineb, Metam)	mg/kg	0.010

S. No	Name of the pesticide residue	Unit	LOQ
78.	Diuron	mg/kg	0.008
79.	Dodine	mg/kg	0.008
80.	Edifenphos	mg/kg	0.008
81.	Emamectin benzoate	mg/kg	0.008
82.	Endosulfan	mg/kg	0.008
83.	Epoxyconazole	mg/kg	0.008
84.	Ethephon	mg/kg	0.008
85.	Ethion (Residues to be determined as Ethion and its oxygen analogue and expressed as Ethion)	mg/kg	0.008
86.	Ethofenprox	mg/kg	0.008
87.	Ethoxysulfuron	mg/kg	0.008
88.	Ethyl Parathion (Ethyl Parathion and Ethyl Paraxon expressed as Ethyl Parathion)	mg/kg	0.008
89.	Etoxazole	mg/kg	0.008
90.	Famaxadone	mg/kg	0.008
91.	Fenamidone	mg/kg	0.008
92.	Fenarimol	mg/kg	0.008
93.	Fenazaquin	mg/kg	0.008
94.	Fenitrothion	mg/kg	0.008
95.	Fenobucarb (BPMC)	mg/kg	0.008
96.	Fenoxaprop-P-ethyl	mg/kg	0.008
97.	Fenpropathrin	mg/kg	0.008
98.	Fenpyroximate	mg/kg	0.008
99.	Fenthion	mg/kg	0.008
100.	Fenvalerate (sum of isomers)	mg/kg	0.008
101.	Ferbam	mg/kg	0.010
102.	Fipronil	mg/kg	0.008
103.	Flonicamid	mg/kg	0.008
104.	Fluazifop-P-butyl	mg/kg	0.008
105.	Flubendiamide	mg/kg	0.008
106.	Flucetosulfurone	mg/kg	0.008
107.	Fluchloralin	mg/kg	0.008
108.	Flufenacet	mg/kg	0.008
109.	Fluopicolide	mg/kg	0.008
110.	Fluopyram and its metabolites	mg/kg	0.008
111.	Flupyradifurone and its metabolites (Difluroacetic acid and Difluroethylamino-furanone)	mg/kg	0.008
112.	Flusilazole	mg/kg	0.008
113.	Fluvalinate (sum of isomers)	mg/kg	0.008
114.	Fluxapyroxad	mg/kg	0.008
115.	Fomesafen	mg/kg	0.008
116.	Forchlorfenuron	mg/kg	0.008
117.	Formothion	mg/kg	0.008
118.	Fosetyl Aluminium	mg/kg	0.008
119.	Glufosinate ammonium	mg/kg	0.008
120.	Glyphosate	mg/kg	0.008
121.	Halosulfuron methyl	mg/kg	0.008

S. No	Name of the pesticide residue	Unit	LOQ
122.	Haloxypop-methyl	mg/kg	0.008
123.	Heptachlor	mg/kg	0.008
124.	Hexaconazole	mg/kg	0.008
125.	Hexazinone	mg/kg	0.008
126.	Hexythiazox	mg/kg	0.008
127.	Hydrogen Cyanamide	mg/kg	0.010
128.	Imazomox	mg/kg	0.008
129.	Imazethapyr	mg/kg	0.008
130.	Imidacloprid	mg/kg	0.008
131.	Indoxacarb	mg/kg	0.008
132.	Iodosulfuron Methyl Sodium	mg/kg	0.008
133.	Iprobenfos (Kitazin)	mg/kg	0.008
134.	Iprodione	mg/kg	0.008
135.	Isoprothiolane	mg/kg	0.008
136.	Isoproturon	mg/kg	0.008
137.	Kasugamycin	mg/kg	0.008
138.	Kresoxim Methyl	mg/kg	0.008
139.	Lambda cyhalothrin	mg/kg	0.008
140.	Lindane (Gamma-HCH)	mg/kg	0.008
141.	Linuron	mg/kg	0.008
142.	Lufenuron	mg/kg	0.008
143.	Malathion (Malathion to be determined and expressed as combined residues of Malathion and Malaoxon)	mg/kg	0.008
144.	Mandipropamid	mg/kg	0.008
145.	Mepiquat Chloride	mg/kg	0.008
146.	Mesusulfuron-Methyl	mg/kg	0.008
147.	Metaflumizone	mg/kg	0.008
148.	Metalaxyl	mg/kg	0.008
149.	Metalaxyl-M	mg/kg	0.008
150.	Methabenzthiazuron	mg/kg	0.008
151.	Methomyl	mg/kg	0.008
152.	Methyl Chlorophenoxy Acetic Acid (MCPA)	mg/kg	0.008
153.	Methyl Parathion (sum of Methyl Parathion and its oxygen analogue expressed as Methyl Parathion)	mg/kg	0.008
154.	Metolachlor	mg/kg	0.008
155.	Metrafenone	mg/kg	0.008
156.	Metribuzin	mg/kg	0.008
157.	Metsulfuron-Methyl	mg/kg	0.008
158.	Milbemectin	mg/kg	0.008
159.	Monocrotophos	mg/kg	0.008
160.	Myclobutanil	mg/kg	0.008
161.	Novaluron	mg/kg	0.008
162.	Orthosulfamuron	mg/kg	0.008
163.	Oxadiargyl	mg/kg	0.008
164.	Oxadiazon	mg/kg	0.008
165.	Oxydemeton methyl	mg/kg	0.008
166.	Oxyflorfen	mg/kg	0.008

S. No	Name of the pesticide residue	Unit	LOQ
167.	Paclobutrazol	mg/kg	0.008
168.	Paraquat Dichloride (determined as Paraquat cations)	mg/kg	0.008
169.	Penconazole	mg/kg	0.008
170.	Pencycuron	mg/kg	0.008
171.	Pendimethalin	mg/kg	0.008
172.	Penoxsulam	mg/kg	0.008
173.	Permethrin (sum of isomers)	mg/kg	0.008
174.	Phenthoate	mg/kg	0.008
175.	Phorate (sum of Phorate, its oxygen analogue and their sulphoxides and sulphones, expressed as phorate)	mg/kg	0.008
176.	Phosalone	mg/kg	0.008
177.	Phosphamidon	mg/kg	0.008
178.	Picoxystrobin	mg/kg	0.008
179.	Pinoxaden	mg/kg	0.008
180.	Pirimiphos-methyl	mg/kg	0.008
181.	Pretilachlor	mg/kg	0.008
182.	Profenofos	mg/kg	0.008
183.	Prohexadione calcium	mg/kg	0.008
184.	Propanil	mg/kg	0.008
185.	Propaquizafop	mg/kg	0.008
186.	Propargite	mg/kg	0.008
187.	Propiconazole (sum of isomers)	mg/kg	0.008
188.	Propineb	mg/kg	0.010
189.	Pymetrozine	mg/kg	0.008
190.	Pyraclostrobin	mg/kg	0.008
191.	Pyrazosulfuron ethyl	mg/kg	0.008
192.	Pyridalyl	mg/kg	0.008
193.	Pyriproxyfen	mg/kg	0.008
194.	Pyriothiobac Sodium	mg/kg	0.008
195.	Quinalphos	mg/kg	0.008
196.	Quizalofop Ethyl	mg/kg	0.008
197.	Quizalofop-P-tefuryl	mg/kg	0.008
198.	Simazine	mg/kg	0.008
199.	Sodium Acifluorfen	mg/kg	0.008
200.	Sodium Para Nitro Phenolate (4-Nitrophenol)	mg/kg	0.008
201.	Spinetoram and its metabolites (Spinosyn- and Spinosyn-L)	mg/kg	0.008
202.	Spinosad	mg/kg	0.008
203.	Spiromesifen	mg/kg	0.008
204.	Spirotetramat	mg/kg	0.008
205.	Sulfentrazone and its metabolite (Desmethyl sulfentrazone and 3-Hydroxymethyl sulfentrazone)	mg/kg	0.008
206.	Sulfosulfuron	mg/kg	0.008
207.	Sulfoxaflor	mg/kg	0.008
208.	Tebuconazole	mg/kg	0.008
209.	Tembotrione	mg/kg	0.008

S. No	Name of the pesticide residue	Unit	LOQ
210.	Tetraconazole	mg/kg	0.008
211.	Thiacloprid	mg/kg	0.008
212.	Thiamethoxam	mg/kg	0.008
213.	Thifluzamide	mg/kg	0.008
214.	Thiocyclam Hydrogenoxalate	mg/kg	0.008
215.	Thiodicarb	mg/kg	0.008
216.	Thiometon (residues determined as Thiometon its sulfoxide and sulphone expressed as Thiometon)	mg/kg	0.008
217.	Thiophanate-methyl	mg/kg	0.008
218.	Tolfenpyrad	mg/kg	0.008
219.	Topramezone	mg/kg	0.008
220.	Triacantanol	mg/kg	0.008
221.	Triadimefon	mg/kg	0.008
222.	Triallate	mg/kg	0.008
223.	Triasulfuron	mg/kg	0.008
224.	Triazophos	mg/kg	0.008
225.	Trichlorfon	mg/kg	0.008
226.	Tricyclazole	mg/kg	0.008
227.	Tridemorph	mg/kg	0.008
228.	Trifloxystrobin	mg/kg	0.008
229.	Trifluralin	mg/kg	0.008
230.	Validamycin	mg/kg	0.008