

INDIAN TEA ASSOCIATION



Phone: 2210-2474/75
Fax: 91(033) 2243-4301
Email: ita@indiatea.org
Website: www.indiatea.org

ROYAL EXCHANGE
6 NETAJI SUBHAS ROAD
KOLKATA 700 001

Circular No. 6/2024-25

22nd April, 2024

TO : ALL MEMBER COMPANIES

MRL Compliance

With the growing awareness on MRL compliance, members' attention is invited to the following protocols with regard to pesticides in tea in India :

1. Protocol for Use

- a. There are presently 33 pesticides for which Maximum Residue Levels (MRLs) have been gazetted by the FSSAI. The list is attached as **Annexure – 1**.
- b. In addition, the undernoted pesticides have been granted label claim on Tea by the Central Insecticides Board & Registration Committee (CIB&RC).

| SI No. | PPFs |
|--------|-----------------|
| 1 | Abamectin |
| 2 | Flufenzine |
| 3 | Pyridaben |
| 4 | Dimethoate |
| 5 | Flupyradifurone |
| 6 | Spirotetramat |
| 7 | Tetraconazole |
| 8 | Trifloxistrobin |
| 9 | Tebuconazole |
| 10 | Indaziflam |
| 11 | Saflufenacil |
| 12 | Triasulfuron |

- c. The above 12 pesticides are in the approved list of the Plant Protection Code of Tea Board (**Annexure – 2**). Pending assignment of MRLs by the FSSAI for the 12 pesticides, these would have to be kept at LOQ (0.01ppm) level.

- d. Members may note that apart from the above referred 45 pesticides, no other pesticides are approved for use in Tea and therefore the application of pesticides in Tea should be limited to the following :

- ✓ 33 pesticides for which MRLs have been set by the FSSAI.
- ✓ 12 pesticides as stated above for which label claim on Tea has been assigned by the Central Insecticides Board & Registration Committee (CIB&RC). The MRLs for these 12 pesticides would be at LOQ level i.e. 0.01 ppm.

2. Protocol for Testing

- a. The FSSAI vide a Circular dated 29th November, 2023 has banned 20 chemicals for use in Tea. The banned list of pesticides is attached as **Annexure – 3**.
- b. In addition, the FSSAI vide a directive dated 4th March 2024 (**Annexure 4**) has included the following six pesticides in the testing protocol for Tea –
- i. Cypermethrin
 - ii. Acephate
 - iii. Imidacloprid
 - iv. Acetamiprid
 - v. Dinotefuran
 - vi. Fipronil

Therefore, although the use of pesticides in Tea would be limited to the 45 pesticides referred above, the testing protocol for Tea pursuant to the recent FSSAI Directives would include the following :

- ✓ 33 pesticides for which MRLs have been notified by the FSSAI – ref. Annexure 1
- ✓ 20 pesticides banned by the FSSAI – ref. Annexure 3
- ✓ 6 pesticides stipulated by the FSSAI for testing in tea – ref. Point 2b above.

The above is for members' information and necessary action. For any clarification, members may kindly revert.


Arijit Raha
Secretary General

Encl : As above

Copy to : Chairman, Vice Chairman and Addl. Vice Chairman, ITA
All Regional Committees, ITA
All Branch and Zone Secretaries, ITA

Annexure 1**List of 33 Chemicals with MRL notified by FSSAI**

| Sl No | Name of the chemical | MRL (ppm) |
|-------|----------------------|-----------|
| 1 | Bifenthrin | 30 |
| 2 | Bitertanol | 0.05 |
| 3 | Carbendazim | 0.5 |
| 4 | Carfentrazone ethyl | 0.02 |
| 5 | Chlorpyrifos | 2 |
| 6 | Chlothianidin | 0.7 |
| 7 | Deltamethrin | 5 |
| 8 | Dicofol | 40 |
| 9 | Mancozeb | 3 |
| 10 | Zineb as CS2 | 0.1 |
| 11 | Emamectin Benzoate | 0.06 |
| 12 | Ethion | 5 |
| 13 | Etoxazole | 15 |
| 14 | Fenazaquin | 3 |
| 15 | Fenpropathrin | 2 |
| 16 | Fenpyroximate | 6 |
| 17 | Flubendiamide | 50 |
| 18 | Fluvalinate | 0.01 |
| 19 | Glufosinate Ammonium | 0.01 |
| 20 | Glyphosate | 1 |
| 21 | Hexaconazole | 5 |
| 22 | Hexythiazox | 15 |
| 23 | Lambda cyhalothrin | 0.05 |
| 24 | Oxyfluorfen | 0.2 |
| 25 | Paraquat dichloride | 0.2 |
| 26 | Propargite | 10 |
| 27 | Propiconazole | 6 |
| 28 | Quinalphos | 0.7 |
| 29 | Spiromesifen | 70 |
| 30 | Thiacloprid | 5 |
| 31 | Thiamethoxam | 20 |
| 32 | 2,4-D Amine Salt | 0.05 |
| 33 | Cyflumetofen | 0.05 |

List of CIB&RC approved Plant Protection Formulations for use in Tea plantations along with their MRLs fixed by FSSAI [Food Safety and Standards (Contaminants, Toxins and Residues), Third Amendment Regulations, 2018 (effective from 3.1.2019)]

| Type of PPFs | Sl. No. | Name of PPFs | MRL (ppm) |
|--------------|---------|--|--|
| Acaricides | 1 | Cyflumetofen 20 SC | 0.05* |
| | 2 | Ethion 50 EC | 5.0 |
| | 3 | Etiozazole 10 SC | 15.0 |
| | 4 | Etiozazole 6% + Abamectin 1.5% SC | Etiozazole=15.0 Abamectin= MRL yet to be notified |
| | 5 | Fenazaquin 10 EC | 3.0 |
| | 6 | Fenazaquin 18.3% SC | |
| | 7 | Fenpyroximate 5 EC/SC | 6.0** |
| | 8 | Flufenazine 20 SC | MRL yet to be notified |
| | 9 | Fenazaquin 10% + Bifenthrin 4% EC | Fenazaquin= 3.0 Bifenthrin= 30.0 |
| | 10 | Hexythiazox 5.45 EC | 15.0 |
| | 11 | Propargite 57 EC | 10.0 |
| | 12 | Propergite 42% +Hexythiazox 2%EC | Propergite= 10.0 Hexythiazox= 15.0 |
| | 13 | Pyridaben 20% WP | MRL yet to be notified |
| | 14 | Sulphur 80 WP | Not required |
| | 15 | Sulphur 40 WP | |
| | 16 | Sulphur 52 SC | |
| | 17 | Spiromesifen 22.9 SC | 70.0 |
| Insecticides | 18 | Azadirachtin 1 EC | - |
| | 19 | Azadirachtin 5 EC | |
| | 20 | Bifenthrin 8 SC | 30.0 |
| | 21 | Clothianidin 50 WDG | 0.7 |
| | 22 | Deltamethrin 2.8 EC | 5.0 |
| | 23 | Deltamethrin 11 EC | |
| | 24 | Dimethoate 30 % EC*** | MRL yet to be notified |
| | 25 | Emamectin Benzoate 5 SG | 0.06** |
| | 26 | Emamectin Benzoate 3% +Thiamethoxam 12% WG | Emamectin Benzoate= 0.06 Thiamethoxam = 20.0 |
| | 27 | Fenpropathrin 30 EC | 2.0 |
| | 28 | Flubendiamide 20 WG | 50.0 |
| | 29 | Flubendiamide 19.92% w/w + Thiacloprid 19.92% w/w SC | Flubendiamide = 50.0 Thiacloprid = 5.0 |
| | 30 | Flupyradifurone 17.09% w/w SL | MRL yet to be notified |
| | 31 | Quinalphos 25 EC | 0.7** |
| | 32 | Spirotetramat 15.31% w/w OD | MRL yet to be notified |
| | 33 | Thiacloprid 21.7 SC | 5.0 |
| | 34 | Thiamethoxam 25 WG | 20.0 |
| | 35 | Thiamethoxam 12.6% + L-Cyhalothrin 9.5% | Thiamethoxam= 20.0 L-Cyhalothrin= 0.05* |

| | | | |
|------------|----|--|---|
| Fungicides | 36 | Carbendazim 12% + Mancozeb 63% WP | Carbendazim= 0.5 Mancozeb= 3.0 |
| | 37 | Copper Oxychloride | 150.0 (as elemental copper) |
| | 38 | Hexaconazole 4% + Zineb 68% WP | Zineb= 0.1* |
| | 39 | Hexaconazole 5 EC | 5.0** |
| | 40 | Propiconazole 25 EC | 6.0** |
| | 41 | Tetraconazole 3.8% w/w (4% w/v) | MRL yet to be notified |
| Herbicides | 42 | Trifloxystrobin 25% + Tebuconazole 50% WG | MRL yet to be notified |
| | 43 | Glyphosate 41 SL | 1.0 |
| | 44 | Glyphosate 71 SG | |
| | 45 | Glyphosate Ammonium Salt 5 SL | |
| | 46 | Glufosinate Amonium 13.5 SL | 0.01 |
| | 47 | Oxyfluorfen 23.5 EC | 0.2 |
| | 48 | Paraquat Dichloride 24 WSC | 0.2 |
| | 49 | Paraquat Dichloride 24% + Oxyfluorfen 5% SC | Paraquat Dichloride=0.2 Oxyfluorfen=0.2 |
| | 50 | Oxyfluorfen 2.5% + Isopropyl aminesalt of Glyphosate 41% w/w SC | Oxyfluorfen=0.2 Glyphosate=1.0 |
| | 51 | Carfentrazone Ethyl 0.43% + Glyphosate 30.82% EW | Carfentrazone Ethyl= 0.02* Glyphosate= 1.0 |
| | 52 | Indaziflam 1.65% w/w + Glyphosate-isopropyl ammonium 44.63% w/w SC | MRL of Indaziflam is yet to be notified |
| | 53 | Saflufenacil 70 % WG | MRL yet to be notified |
| | 54 | Triasulfuron 20% WG | MRL yet to be notified |
| | 55 | 2,4-D amine salt 58 % WSC | 0.05 |
| | 56 | Glufosinate Ammonium 13.4% + Oxyfluorfen 4.8% w/w | Glufosinate Amonium=0.01 Oxyfluorfen=0.2 |

The above list is dynamic and may change from time to time based on the CIB approved list of pesticides for use in tea and this may be seen from the website of Tea Board.

* Maximum Residue Limit fixed at Limit of Quantification (LOQ). Tolerance limit of 0.01 mg/kg shall apply in cases of pesticides for which MRL have not been fixed

** Revised and operational vide FSSAI order No. F. No.SS-T007/1/2023-Standard-FSSAI dated 27th April, 2023

*** Ad-hoc approval given by CIB-RC under national exigency for one year.

Copper Hydroxide, Profenophos and Bitertanol have been removed from this list following gazette notification of Ministry of Agriculture S.O. 2486 (E) dated 24th September, 2014 although MRL of Bitertanol in tea is fixed by FSSAI.

Note: This list does not contain extremely and highly hazardous chemicals classified under World Health Organization (WHO) 1a & 1b and are fully aligned with the Rotterdam and Stockholm conventions.

| Sl.No. | Name of Banned Insecticide |
|--------|--|
| 1 | Aldicarb (sum of Aldicarb its sulfoxide and sulphone) |
| 2 | Aldrin, Dieldrin |
| 3 | Chlordane (Total of α - and β -chlordane) |
| 4 | Heptachlor (heptachlor metabolite, heptachlor epoxide) |
| 5 | Lindane (Gamma (γ) HCH), Alpha HCH, Beta HCH & delta-HCH) |
| 6 | Endosulfan (Total of alpha endosulfan & beta endosulfan and endosulfan sulphate) |
| 7 | Carbofuran |
| 8 | Methomyl |
| 9 | Phosphamidon |
| 10 | Captan |
| 11 | Carbam |
| 12 | Formothion |
| 13 | Simazine |
| 14 | Diazinon |
| 15 | D.D.T (Total of p,p'-DDT, o,p'-DDT, p,p'-DDE, o,p'-DDE, p,p'-DDD and o,p'-DDE) |
| 16 | Fenitrothion |
| 17 | Fenthion (sum of fenthion, its oxygen analogue and their sulfoxides and Sulphones) |

| | |
|----|--|
| 18 | Methyl Parathion (Methyl Parathion and its oxygen analogue i.e. methyl paraoxon) |
| 19 | Ethyl Parathion (Ethyl Parathion and its oxygen analogue i.e. ethyl paraoxon) |
| 20 | Monocrotophos |

Note : The Extraneous MRL of the above mentioned banned insecticides shall be 0.01 mg/kg except for DDT for which it shall be 0.05 mg/kg. ”

Food Safety and Standards Authority of India

(A statutory Authority established under the Food Safety and Standards Act, 2006)

(Quality Assurance Division)

FDA Bhawan, Kotla Road, New Delhi – 110002

Dated 04 March, 2024

Subject: Direction to all notified laboratories regarding testing of pesticide in Tea samples

1. Following the directives outlined in direction vide File No. QA/3/2021/FSSAI - Part(3) dated 29.11.2023, regarding testing of banned pesticides in Tea, FSSAI hereby directs all the laboratories notified under section 43 (1) and 43 (2) of The Food Safety and Standards Act, 2006, to test the following pesticides namely:
 - a. *Cypermethrin*
 - b. *Acephate*
 - c. *Imidacloprid*
 - d. *Acetamiprid*
 - e. *Dinotefuran*
 - f. *Fipronil*
2. Testing for these parameters are to be conducted in addition to the 20 banned pesticides and pesticides specified for Tea as per FSS (Contaminants, Toxins and Residues) regulations, 2011.
3. Tolerance Limit of 0.01 mg/kg shall be applicable for the above mentioned 06 pesticides/insecticides (Point 1, a-f).

Dr. SATYEN
KUMAR
PANDA

Digitally signed by Dr.
SATYEN KUMAR PANDA
Date: 2024.03.02
12:44:43 +05'30'

(Dr. Satyen Kumar Panda)
Advisor (Quality Assurance)

To,

All FSSAI Notified Laboratories under section 43(1) and 43(2) of FSS Act, 2006.

Copy to:

1. Office of CEO, FSSAI
2. Additional Secretary, Plantation, Department of Commerce
3. Deputy Chairman, Tea Board India
4. CITO- to upload on FSSAI website