



# *Testing Quali Tea*





The tea industry today faces severe global competition and its sustainability has to be attuned to the needs, preferences and quality perceptions of the consumers. Quality requirement of tea has undergone considerable changes over the years.

Pesticide residues in tea has been a major challenge to the industry in recent times due to ever increasing global demand for quality. Use of agrochemicals in tea plantations therefore, needs to be reviewed in the face of growing concerns for health, food safety and environment which is reflected in stringent regulations. Pesticide use in tea has to be in sync with these regulations. TRA has been highlighting the need for safer plant protection schedules for minimizing residues so that tea continues to be a health drink.

## TLABS

A Network of TRA Laboratories, comprising the ISO/IEC 17025:2005 accredited laboratory at Tocklai and our newly set-up Tea Board Funded Pesticide Residue Laboratory at Kolkata under 11th Plan Project will assist the industry in conforming to the required norms and produce clean teas. Another laboratory is coming up at North Bengal to add to this network.

TLABS at Kolkata is geared with world class equipment like triple quadruple LC-MS/MS and ion trap GC-MS/MS that runs 24x7 with uninterrupted power supply. The testing is carried out by a team of experienced residue chemists following Quality Management System (QMS).





## List of Pesticides which can be tested at Tlabs:

### 1. Organochlorines

$\alpha$ ,  $\beta$ ,  $\gamma$  &  $\delta$ -HCH, p,p & o,p-DDT, DDD & DDE, Aldrin, Dieldrin, Heptachlor, Heptachlor Epoxide, Endrin,  $\alpha$ - &  $\beta$ -Endosulfan, Endosulfan sulphate.

### 2. Organophosphates

Ethion, Monocrotophos, Dimethoate, Omethoate, Phosphamidon, Quinalphos, Profenophos, Methamidophos, Acephate, Malathion, Diazinon, Chlorpyrifos, Phosalone.

### 3. Carbamates

Carbaryl, Carbufuran.

### 4. Synthetic pyrethroids

Alphamethrin, Cypermethrin, Deltamethrin, Fenprothrin, Bifenthrin,  $\beta$ -Cyfluthrin, Fluvalinate, Lambda-cyhalothrin, Etofenprox.

### 5. Neonicotinoids

Imidacloprid, Thiamethoxam, Thiacloprid, Acetamiprid, Clothianidin.

### 6. Others

Paraquat, Emamectin Benzoate, Tebuconazole, Abamectin, Diflubenzuron, Hexythiazox, Fenpyroximate, Fenazaquin, Propargite, Hexaconazole, Propiconazole, Tebuconazole, Spiromesifen, Indoxacarb, Trifloxystrobin, Diuron, 2,4-D, Oxyflourfen, Azadirachtin, Cartap, Carbendazim, Simazine, Thiophanate methyl, Flubendiamide, Glyphosate, AMPA, Nicotine.

Apart from above, other product testing also can be done at Tlabs, Kolkata.



## Stakeholders can send their tea samples for testing as per the following details:

- Minimum amount of sample: 100g
- Packing material: Double polythene bags and sealed.
- Labelling: Samples should carry adequate labelling (one inside and another outside the second polythene bag) – Type of tea, Grade, Date of manufacture, Batch No., Lot No., Code No.
- Forwarding letter with sample: Should indicate target pesticides to be tested.
- Sample receiving time : 9 am to 6pm (Monday to Friday).



Tabls, Kolkata & Jorhat is associated in the global Proficiency Tests of FAPAS, an agency under The Food and Environment Research Agency of UK.



Tabls, Tocklai, Jorhat of TRA is a NABL accredited Laboratory. Tabls, Kolkata is in the process of being accredited by the NABL of Govt. of India.



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