

HOW SAFE ARE YOUR VEGGIES PROJECT

February, 2018

Seventy one (71) vegetable samples were collected randomly in the month of February, 2018 from the markets in the areas of Vijayawada, Tirupathi, Hyderabad, and farmer's fields located around Hyderabad.

The samples were analyzed for pesticide residues using validated method with confirmatory analysis on GC-MS/MS and LC-MS/MS at 10 PPB (Parts per Billion) level.

Out of seventy one (71) samples analyzed twenty nine (29) samples found contaminated with nineteen pesticide residues (Table-1) and one sample was found above FSSAI and Codex MRLs (Table-2).

Table -1: Details of pesticides detected in vegetables samples

Sl. No	Collection Point	Sample	Pesticides Detected	Recommended/ Non recommended	Residue (mg/kg)	FSSAI MRL (mg/kg)	Codex MRL (mg/kg)	LOQ (mg/kg)
1	Vijayawada	Coccinia	Imidacloprid	Not recommended	0.12	-	-	0.01
2	Vijayawada	Green chilli	Clothianidin	Not recommended	0.03	-	-	0.01
			Flubendiamide	Recommended	0.03	0.02	-	0.01
3	Tirupathi	Green chilli	Carbendazim	Not recommended	0.05	0.5	-	0.01
			Imidacloprid	Not recommended	0.11	0.3	-	0.01
			Acetamiprid	Recommended	0.19	2.00	-	0.01
			Tebuconazole	Recommended	0.05	0.4	-	0.01
			Pyraclostrobin	Recommended	0.02	0.05	-	0.01
4	Hyderabad	Tomato	Quinalphos	Not recommended	0.01	-	-	0.01
5	CIPMC, Hyd	Brinjal	Quinalphos	Recommended	0.05	-	-	0.01
6	CIPMC, Hyd	Cabbage	Allethrin	Not recommended	0.05	-	-	0.01
7	CIPMC, Hyd	Okra	Acetamiprid	Recommended	0.05	0.1	-	0.01
			Bifentrin	Not recommended	0.04	-	-	0.01
8	CIPMC, Hyd	Greeb chilli	Imidacloprid	Recommended	0.03	0.3	-	0.01
			Quinalphos	Recommended	0.02	0.2	-	0.01
			Ethion	Recommended	0.02	1.00	5.0	0.01
9	CIPMC, Hyd	Tomato	Profenofos	Not recommended	0.01	-	10.0	0.01
10	CIPMC, Hyd	French beans	Acetamiprid	Not recommended	0.04	-	0.4	0.01
11	CIPMC, Hyd	Bittergaurd	Acetamiprid	Not recommended	0.03	-	-	0.01
			Chlorpyrifos	Not recommended	0.02	-	-	0.01
			Bifentrin	Not recommended	0.01	-	-	0.01
12	Farmgate, Chevella	Tomato	Carbendazim	Not recommended	0.03	0.5	0.5	0.01
13	Farmgate, Chevella	French beans	Acetamiprid	Not recommended	0.02	-	0.4	0.01
14	Farmgate, Chevella	Brinjal	Acetamiprid	Recommended	0.02	-	-	0.01
15	Farmgate, Chevella	Brinjal	Acetamiprid	Recommended	0.02	-	-	0.01
16	CIPMC, Hyd	French Beans	Monocrotophos	Not recommended	0.02	-	-	0.01
17	CIPMC, Hyd	Coccinia	Tebuconazole	Not recommended	0.03	-	-	0.01
18	CIPMC, Hyd	Brinjal	Quinalphos	Recommended	0.01	-	-	0.01
19	CIPMC, Hyd	French beans	Carbendazim	Not recommended	0.02	0.5	-	0.01
20	CIPMC, Hyd	Coccinia	Thiamethaxam	Not recommended	0.1	-	-	0.01
21	CIPMC, Hyd	Tomato	Omethoate	Not recommended	0.03	-	-	0.01
			Carbendazim	Not recommended	0.02	0.5	-	0.01
			Dimethoate	Not recommended	0.07	-	-	0.01
			Acephate	Not recommended	0.11	-	-	0.01
22	CIPMC, Hyd	Brinjal	Acephate	Not recommended	0.11	-	-	0.01

23	CIPMC, Hyd	Cauliflower	Quinalphos	Not recommended	0.01	0.1	-	0.01
24	CIPMC, Hyd	Coccinia	Dicofol	Not recommended	0.03	5.00	-	0.01
25	Banjara Hills, Hyd	Okra	Ethion	Not recommended	0.05	1.00	-	0.01
26	CIPMC, Vijayawada	Brinjal	Monocrotophos	Not recommended	0.17	-	-	0.01
			Imidacloprid	Not recommended	0.02	0.2	-	0.01
27	CIPMC, Vijayawada	Bottle gourd	Imidacloprid	Not recommended	0.02	-	-	0.01
28	CIPMC, Vijayawada	Cabbage	Imidacloprid	Not recommended	0.07	-	0.5	0.01
29	CIPMC, Vijayawada	Okra	Imidacloprid	Not recommended	0.02	2.00	-	0.01

Table-2: Details of pesticides detected in vegetables samples above FSSAI and Codex MRLs.

Sl. No.	Collection Point	Sample	Pesticides Detected	Recommended/ Non recommended	Residues (mg/kg)	FSSAI MRL (mg/kg)	Codex MRL (mg/kg)	LOQ (mg/kg)
1	Vijayawada	Green chilli-1	Flubendiamide	Recommended	0.03	0.02	-	0.01