

HOW SAFE ARE YOUR VEGGIES PROJECT

November, 2017

Fifty (50) vegetable samples were collected randomly in the month of November, 2017 from the markets in the areas of Vijayawada, Tirupathi, Hyderabad, farmer's fields located around Hyderabad and Vijayawada.

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

Out of fifty (50) samples analyzed, nineteen samples found contaminated with nineteen pesticide residues (Table-1) and three samples were found above FSSAI MRLs (Table-2).

Table -1: Details of pesticides detected in vegetables samples

Sl. No	Collection Point	Sample	Pesticides Detected	Recommended/ Non recommended	Residues (mg/kg)	FSSAI MRL (mg/kg)	Codex MRL (mg/kg)	Limit of Quantification (mg/kg)
1	Vijayawada	Little gourd	Dicofol	Non recommended	0.04	5	-	0.01
2	CIPMC, Vijayawada	Little gourd	Acetamiprid	Non recommended	0.02	-	-	0.01
3	CIPMC, Vijayawada	Cauliflower	Lufenuron	Recommended	0.14	0.1	-	0.01
4	CIPMC, Vijayawada	Bitter gourd	Carbendazim	Non recommended	0.15	0.5	-	0.01
5	CIPMC, Vijayawada	Little gourd	Acephate	Non recommended	0.04	-	-	
6	CIPMC, Vijayawada	Okra	Acephate	Non recommended	0.14	-	-	0.01
			Monocrotophos	Non recommended	0.07	0.2	-	0.01
			Bifenthrin	Non recommended	0.02	-	-	0.01
7	CIPMC, Vijayawada	Little gourd	Thiamethoxam	Non recommended	0.04	-	-	0.01
			Carbendazim	Non recommended	0.01	-	-	0.01
8	CIPMC, Vijayawada	Okra	Thiamethoxam	Recommended	0.06	-	-	0.01
			Monocrotophos	Non recommended	0.02	0.2	-	0.01
			Carbendazim	Non recommended	0.22	0.2	-	0.01
			Clothianidin	Non recommended	0.01	-	-	0.01
			Bifenthrin	Non recommended	0.03	-	-	0.01
9	CIPMC, Vijayawada	Ridge gourd	Thiamethoxam	Non recommended	0.02	-	-	0.01

10	Hyderabad	Okra	Acephate	Non recommended	0.23	-	-	0.01
			Profenofos	Non recommended	1.03	-	-	0.01
11	Hyderabad	Brinjal	Carbendazim	Recommended	0.02	0.5	-	0.01
12	Hyderabad	Green Chilli	Acephate	Non recommended	0.09	-	-	0.01
			Chlorantraniliprole	Recommended	0.01	-	-	0.01
			Bifenthrin	Non recommended	0.01	-	-	0.01
13	Farmgate, NIPHM	Green chilli	Tebuconazole	Recommended	0.01	NA	NA	0.01
14	Farmgate, NIPHM	French beans -I	Imidacloprid	Non recommended	0.04	-	-	0.01
			Acetamiprid	Non recommended	0.38	-	-	0.01
			Metalaxyl	Non recommended	0.02	-	-	0.01
			Tebuconazole	Recommended	0.43	-	-	0.01
			Trifloxystrobin	Non recommended	0.13	-	-	0.01
15	Farmgate, NIPHM	Okra	Acetamiprid	Recommended	0.08	0.1	-	0.01
16	Farmgate, NIPHM	Brinjal	Triazophos	Non recommended	0.08	-	-	0.01
17	Banjara Hills, Hyd	Bottle gourd	Beflubutamid	Non recommended	0.01	-	-	0.01
18	Banjara Hills, Hyd	European Cucumber	Monocrotophos	Non recommended	0.65	0.2	-	0.01
			Imipothrin	Non recommended	0.01	-	-	0.01
19	Banjara Hills, Hyd	Okra	Buprofezin	Recommended	0.12	-	-	0.01

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

Sl. No.	Collection Point	Sample	Pesticides Detected	Recommended/ Non recommended	Residues (mg/kg)	FSSAI MRL (mg/kg)	Codex MRL (mg/kg)	Limit of Quantification (mg/kg)
1	CIPMC, Vijayawada	Cauliflower	Lufenuron	Recommended	0.14	0.1	-	0.01
2	CIPMC, Vijayawada	Okra	Carbendazim	Non recommended	0.22	0.2	-	0.01
3	Banjara Hills, Hyd	European Cucumber	Monocrotophos	Non recommended	0.65	0.2	-	0.01