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Reference Material Multi-method pesticides in cardamom

P2623-RMCa



Summary

Reference material P2623-RMCa is validated in ring test P2623-RT, which is organised, performed, and evaluated according to the requirements of DIN EN ISO/IEC 17043 and the “International Harmonized Protocol”. DIN ISO 13528 is considered during the evaluation of the submitted results and during homogeneity testing. Details related to the applied statistics are summarised in the full specification, which is provided after purchase of the reference material.

Reference material P2623-RMCa consists of a ground cardamom (50 g), which is spiked with 33 pesticides, covered by common pesticide multi-residue methods (see table 1).

The corresponding unspiked ground cardamom (50 g) is available as blank material P2623-BLCa. The blank material is free from incurred residues of all spiked parameters and contains an incurred residue of permethrin. The incurred residue is not specified.

The reference material is validated in ring test P2623-RT with 8 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the ring test P2623-RT, are summarised in table 1. The accepted ranges with respect to the comparability (|z-score| ≤ 2) are not available for dichlofluanid, fluazifop-p-butyl, and pirimicarb-desmethyl due to the limited number of reported results in P2623-RT. The accepted ranges with respect to the trueness criterion (70 to 120 % of the spiked level) are available for all parameters in table 1.

Table 1. Spiked levels and assigned values

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results
2,4-DDE	0.075	0.0745	8
4,4-DDD	0.12	0.116	8
Aldicarb sulfoxide	0.063	0.0632	8
Bromopropylate	0.088	0.0845	8
λ-Cyhalothrin	0.16	0.157	8
α-Cypermethrin	0.088	0.0876	8
Demeton-S-methyl (sum)	0.040	0.0339	8
Dichlofluanid	0.028	-	6
Diuron	0.031	0.0288	8
β-Endosulfan	0.25	0.250	8
Fenamiphos-sulfone	0.093	0.0871	8
Fenoxycarb	0.087	0.0818	8
Fluazifop-P-butyl	0.11	-	6
Flucythrinate	0.069	0.0651	8
Fluopicolide	0.099	0.0936	8
β-HCH	0.057	0.0546	8
γ-HCH	0.027	0.0264	7
Imidacloprid	0.075	0.0745	8
Malathion	0.033	0.0321	8
Metamitron	0.088	0.0740	8
Methidathion	0.16	0.158	8
Oxyfluorfen	0.12	0.111	8
Parathion-methyl	0.077	0.0740	8
Pentachloroaniline	0.18	0.161	8
Piperonyl butoxide	0.15	0.142	8
Pirimicarb-desmethyl	0.034	-	4
Propamocarb	0.11	0.100	8
Prothiofos	0.079	0.0765	8
Pyriproxyfen	0.083	0.0793	8
Tebuconazole	0.069	0.0650	8
Tecnazene	0.13	0.123	8
Tetradifon	0.097	0.0941	8
Vinclozolin	0.075	0.0770	8