

Reference Material of  
***rolling proof 2025***  
Multi-method pesticides in red currants

P2522-RMRc



Summary

Reference material P2522-RMRc is validated in the ring test P2522-RT. P2522-RT is part of the on-going scheme **rolling proof**. P2522-RT is organised, performed, and evaluated according to the requirements of DIN EN ISO/IEC 17043 and the “International Harmonized Protocol”. 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 P2522-RMRc consists of 120 g of homogenised red currants, which are spiked with 32 pesticides, covered by common pesticide multi-residue methods (see table 1).

The corresponding unspiked homogenate of red currants (120 g) is available as blank material P2522-BLRc. The blank material is free from pesticides covered by common pesticide multi-residue methods at levels > 0.01 mg/kg.

The reference material is validated in ring test P2522-RT with 7 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the ring test P2522-RT, are summarised in table 1. The accepted ranges are provided with respect to the comparability criterion ( $|z\text{-scores}| \leq 2$ ) and the trueness criterion (70 to 120 % recovery of the spiked level). The comparability criterion is not applicable to 4,4-DDD, clopyralid, trans-heptachlor epoxide, and pentachloroanisole due to the limit number of reported results in P2522-RT.

*Table 1. Spiked levels and assigned values*

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results
4,4-DDD	0.035	-	6
Acephate	0.028	0.0236	7
Alachlor	0.043	0.0473	7
Aldicarb sulfone	0.051	0.0437	7
Bendiocarb	0.024	0.0242	7
Boscalid	0.21	0.227	7
Clopyralid	0.15	-	5
Cyprodinil	0.14	0.138	7
Dementon-S-methyl sulfone	0.028	0.0278	7
Dichlofenthion	0.031	0.0344	7
Diethofencarb	0.056	0.0571	7
Dimoxystrobin	0.035	0.0374	7
Endrin	0.022	0.0242	7
Fenchlorphos	0.033	0.0321	7
Fenhexamid	0.16	0.170	7
$\alpha$ -HCH	0.044	0.0495	7
trans-Heptachlor epoxide	0.026	-	6
Imidacloprid	0.021	0.0214	7
Kresoxim-methyl	0.19	0.191	7
Methacrifos	0.038	0.0396	7
Methoxychlor	0.027	0.0259	7
Mevinphos	0.075	0.0700	7
Novaluron	0.026	0.0280	7
Oxyfluorfen	0.066	0.0674	7
Paraoxon-ethyl	0.021	0.0222	7
Pencycuron	0.073	0.0741	7
Pentachloroanisole	0.055	-	6
Profenofos	0.037	0.0399	7
Rotenone	0.044	0.0423	7
Sulfotep	0.029	0.0288	7
Tebufenpyrad	0.19	0.191	7
Trifloxystrobin	0.27	0.272	7