

Ring test

Multi-method pesticides in rapeseeds

P2525-RT



Summary

The entire report is available to participants only.

The ring test was designed, realised, evaluated, and authorised on behalf of PROOF-ACS GmbH by

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The report was approved by

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PROOF-ACS is a DAkkS accredited proficiency testing provider according to DIN EN ISO 17043:2010 (D-EP-22211-01-00). This ring test is covered by the scope of accreditation.

PROOF-ACS GmbH does not have any analytical laboratory facilities of its own. Homogeneity testing and stability testing are subcontracted to laboratories, accredited according to DIN EN ISO 17025. The subcontracted laboratory may also participate in the ring tests. If so, the laboratory is treated in the same way as other participants, and the same rules of confidentiality apply.

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The proficiency test evaluates the performances of laboratories with respect to their ability to quantify common pesticides in rapeseeds by pesticide multi-residue methods. 19 laboratories across six European countries (France, Germany, Italy, Netherlands, Poland, and Spain) took part in the proficiency test.

Whole, non-milled rapeseeds are provided as test material and blank material. Thus, the milling of the seeds, as a crucial part of the sample preparation, is included in the ring test.

Organic rapeseeds are used as raw material. The rapeseeds are homogenised and provided as blank material upon request. The rapeseeds are spiked with 12 common pesticides, which can be quantified with common pesticide multi-residue methods (see table below).

The report contains an assessment related to

- the *correct identification* of the spiked pesticides.
- the *trueness* of the results. The trueness is expressed as the coverage of the spiked level in %. The coverage should be at least between 70 and 120 % of the spiked level. The trueness criterion is applied to all pesticides.
- the *comparability* of the results. The evaluation of the comparability is based on the z-score model. The absolute values of z-scores should be at least ≤ 2 . The comparability criterion is applied to all pesticides.

All labs kept the term of submission of results and are considered for evaluation. The results are summarised in the table below.

Results

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Assigned value in % of the spiked level	No. of results	No. of results with z-score ≤ 2	No. of results within 70-120 % of the spiked level
Azoxystrobin	0.024	0.0236	98	19	19	19
Benzovindiflupyr	0.088	0.0857	97	16	16	15
Cyhalothrin (sum)	0.18	0.149	83	19	18	18
Difenoconazole	0.055	0.0466	85	19	19	19
Fluazifop-p	0.12	0.114	95	18	18	18
Fluxapyroxad	0.065	0.0633	97	18	18	17
Mefentrifluconazole	0.092	0.0915	99	18	18	16
Picloram	0.037	0.0369	100	13	9	9
Saflufenacil	0.16	0.158	99	13	13	13
Sulfoxaflor	0.072	0.0672	93	19	17	14
Tebuconazole	0.045	0.0424	94	18	17	17
Thiamethoxam	0.026	0.0252	97	18	15	14

To summarise:

- 19 laboratories took part in the tests. All labs reported results and are considered for evaluation.
- The most challenging pesticide in the test is picloram. Some of the labs analyse picloram in a separate analytical method, while others failed to identify picloram in the sample.
- False negative results were also reported for thiamethoxam by some of the labs.
- Saflufenacil is not included in the scopes of some of the labs.
- A lab reported a false positive result of acrinathrin.
- Four labs pass the comparability criterion for all 12 spiked pesticides.