Facing analytical quality.

Ring test
Polar pesticides in wheatgrass
P2209-RT

Summary

The entire report is available to participants only.

Designed, realised and evaluated by

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The proficiency test evaluates the performances of laboratories with respect to their ability to quantify polar pesticides in dried wheatgrass.

26 laboratories across six European countries (Bulgaria, Germany, Italy, Netherlands, Spain, and Switzerland) took part in the test. It was up to the participants to analyse all parameters or a selection of them only.

A powder of organic dried wheatgrass is used as raw material. The wheatgrass powder is homogenised and tested for incurred residues. Incurred residues were detected of chlorate and perchlorate, while all other parameters were not detected in the raw material.

In order to prepare the test material, the wheatgrass powder is spiked with

chlormequat chloride, mepiquat chloride, glyphosate, and AMPA.

The performance of laboratories in the test is evaluated according to

- the *comparability* of the results. The evaluation of the comparability is based on the z-score model. The z-score should be at least ≤ |2|. The comparability criterion is applied to all parameters.
- 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 parameters, except chlorate and perchlorate.

Results

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results	**Comparability criterion:** no. of participants, with z-score ≤ |2|	**Trueness criterion:** no. of participants with results within 70-120 % recovery of the spiked level
Chlorate	incurred	0.0779	24	23	not applicable
Perchlorate	incurred	0.268	24	24	not applicable
Chlormequat chloride	0.068	0.0684	26	25	24
Mepiquat chloride	0.054	0.0543	26	25	24
Glyphosate	0.082	0.0887	25	24	20
AMPA	0.035	0.0383	23	22	16