

rolling proof 2022

Module vegetables and fruits

Cherry P2218-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

Dr. Birgit Schindler
Managing Director PROOF-ACS GmbH
Project coordinator

The report was approved by

A handwritten signature in blue ink that reads 'Schindler'.

Dr. Birgit Schindler
22 July 2022

Participants with any comments or concerns related to this ring test are invited to contact:

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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 exactly the same way as other participants and the same rules of confidentiality apply.

rolling proof is developed to support laboratories in meeting the requirements of accreditation bodies. According to advisory document EA-4/18:2010 analytical laboratories are requested to establish a PT participation plan for accredited analytical methods. **rolling proof** is an on-going scheme of ring tests.

Two commodity groups (according to SANTE 11312/2021, Annex A) are included in **rolling proof** - module “vegetables and fruits”:

- vegetables and fruits (high water content),
- citrus fruits, small fruits and berries (high acid content).

Two test materials are provided related to the module “vegetables and fruits” in each year, one for each of the two commodity groups mentioned above.

In 2022, cherries and black currants are chosen as matrices for **rolling proof** - module “vegetables and fruits”.

A list of pesticides is provided to the participating laboratories, which defines the scope of pesticides, covered by **rolling proof**. The module “vegetables and fruits” covers all in all a minimum of 300 pesticides. All pesticides are tested within a period of six years. Thus, the laboratories that take part in **rolling proof** are able to test their pesticide multi-residue methods for a large number of pesticides and a variety of matrices within one cycle of accreditation.

It is up to the participants to join all tests of the 6-year programme of **rolling proof**, or to book the tests individually. In 2022, 15 laboratories across eight countries (Austria, Bulgaria, Cyprus, Germany, Greece, Italy, South Africa, and Spain) took part in **rolling proof** module “vegetables and fruits” for one or both matrices.

The test materials were prepared of organic cherries resp. black currants. The raw materials were homogenised, tested for incurred residues and spiked with pesticides thereafter.

rolling proof evaluates the performance of the laboratories according to:

- The correct identification of the spiked pesticides.
- The comparability of the results. The evaluation of the comparability is based on the z-score model. The z-score should be at least $\leq |2|$.
- 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.

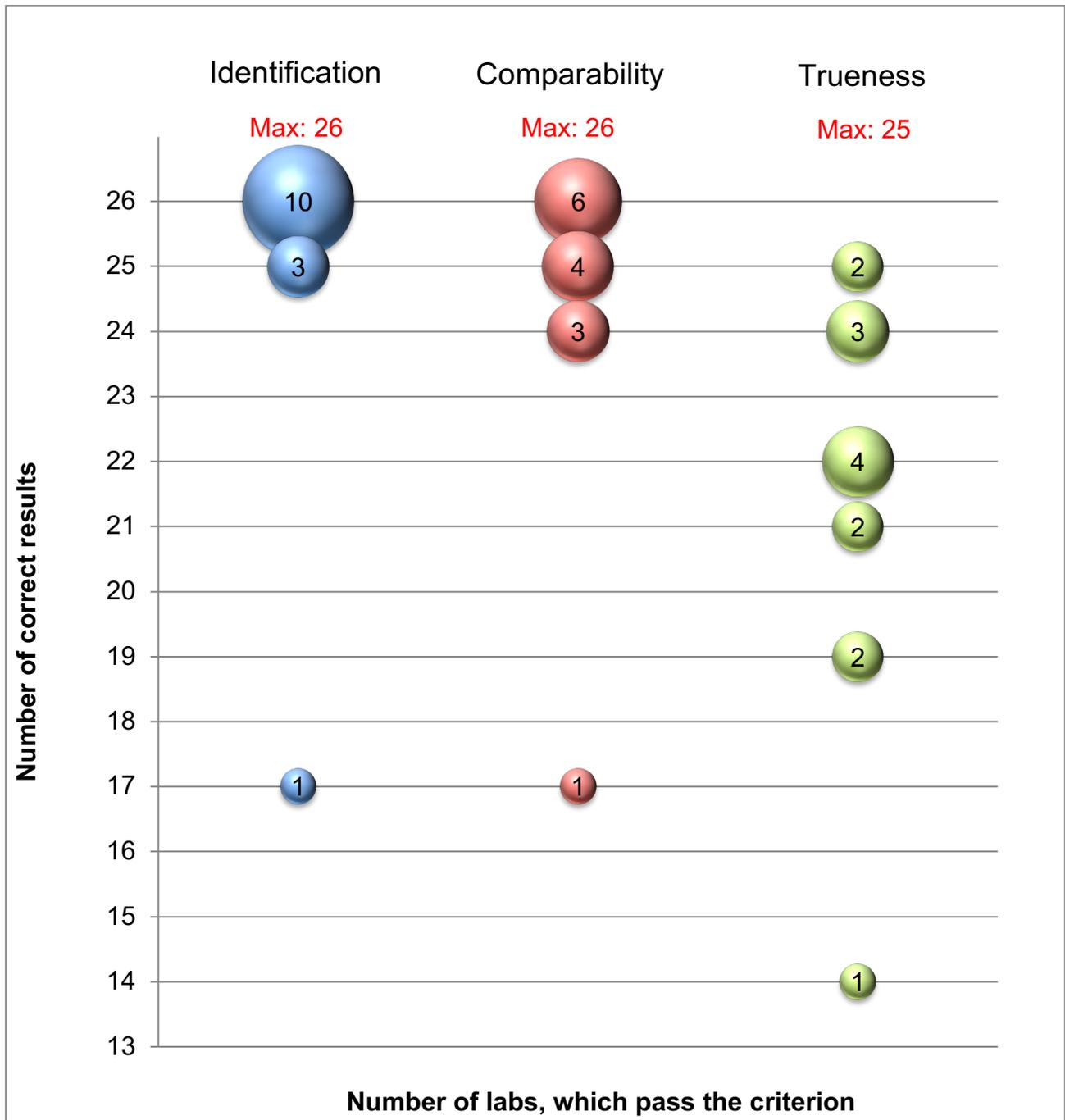
Test material cherry (P2218-RT)

The test material cherry was spiked with 26 pesticides. The analytical challenge was to identify and quantify 26 pesticides in the test material cherry. The identity of the pesticides, the spiked levels and a summary of the overall performance of the laboratories are provided in the table below.

Pesticide	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results	Comparability criterion: no. of participants, which pass the criterion (z-score $\leq 2 $)	Trueness criterion: no. of participants which pass the criterion (70-120 % recovery of the spiked level)
2,4-D	0.046	0.0472	13	13	12
Bitertanol	0.025	0.0243	13	13	12
Carbendazim	0.14	0.114	14	14	9
Chlorpyrifos	0.026	0.0226	14	14	14
λ -Cyhalothrin	0.077	0.0708	13	13	13
α -Cypermethrin	0.17	0.180	13	12	12
Diflubenzuron	0.023	0.0242	14	14	11
Dodine	0.16*	0.105	14	14	Not evaluated
Etofenprox	0.090	0.0831	14	14	13
Fenbuconazole	0.34	0.365	14	13	13
Fenoxycarb	0.087	0.0862	14	14	14
Fenthion (sum)	0.055	0.0458	14	13	10
Fenvalerate	0.037	0.0344	13	12	12
Flonicamid	0.091	0.0893	13	12	12
Flusilazole	0.051	0.0467	14	14	14
Fluvalinate	0.15	0.134	13	11	8
Imidacloprid	0.039	0.0381	14	14	14
MCPA	0.089	0.0847	13	13	11
Omethoate	0.046	0.0444	14	14	13
Phosmet	0.073	0.0662	14	14	13
Pirimicarb-desmethyl	0.11	0.0977	11	11	10
Propargite	0.043	0.0403	13	13	12
Pyridaben	0.022	0.0203	14	14	13
Pyriproxyfen	0.087	0.0802	14	14	14
Thiacloprid	0.14	0.134	14	14	14
Triadimenol	0.019	0.0187	14	14	11

* The spiked level related to dodine is provided for information only.

Cherry - summary of the performance of the laboratories:



Total No. of labs: 14