

## PD 076

### EU Proficiency test EUPT-CF10 - Incurred and Spiked Pesticide Residues in a Rye Flour

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The EURL for pesticide residues in Cereals and Feeding stuff in Copenhagen (EURL-CF) organised in March/April 2016 a proficiency test (PT) on rye flour with incurred and spiked pesticides. The Test Items were shipped to the laboratories on 7 March 2016. All EU NRLs and Official laboratories in the field of cereals and feeding stuff were invited to participate in the PT. Also third countries were invited. In total, 161 EU and EFTA laboratories, representing 30 countries (28 EU member states), agreed to participate in this proficiency test. Additionally, 18 non-European laboratories registered for the PT.

The rye flour Test Item was produced from rye grain grown by the Danish Centre for Food at Agriculture University of Aarhus in 2015. The rye was sprayed in the field with a number of pesticides. Additionally, pesticides were also spike in the laboratory after harvest. One kilogram of the field treated wheat was spiked with a number of pesticide standards or formulations and was subsequently mixed thoroughly with 29 kg field treated rye and homogenised. The 30 kg of mixed wheat grain was milled in portions of four kilograms. Each 4 kilograms portion was mixed thoroughly and added to another portion of 4 kilograms and this 8 kilogram portion was then also mixed thoroughly. One hundred portions of twenty-five gram were weighed out into screw-capped polyethylene plastic bottles, sealed, numbered, and stored in a freezer at about -20 °C prior to homogeneity testing and distribution to participants. The Target Pesticide List included 134 compulsory pesticides, of which 17 were new on the list. For the first time also 7 voluntary compounds were added to the list. These pesticides are especially relevant for control analysis of feed in relation to Directive 2002/32/EC.

The presentation will cover the production of test material including results of homogeneity and stability test as well as the main results, i.e. the number of incurred and spiked pesticides, assigned values, number and identity of false positives and false negatives as well as the average Alg A standard deviation (robust RSD). Also the percentage of acceptable results obtained by the participants will be presented. The laboratories were asked to report information on the methods used and also report the differences in ion ratios and retention times between standard and sample. This information will also be included in the presentation.