

## **Routine analysis of pesticide residues in foodstuffs: One year of practical experience with QuEChERS method**

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QuEChERS method which has been recently adopted by the European Committee for Standardization (CEN) as a European Standard<sup>1</sup> represents nowadays a versatile methodology employed globally for pesticide residue analysis. Since August 2008 the QuEChERS method has been being used by Czech Agriculture and Food Inspection Authority for routine analysis of 272 pesticides and its metabolites in fruit, vegetables, baby food and cereals. Target analytes are extracted by use of buffered QuEChERS methodology. Contrary to this methodology final extract is prepared by an additional step with a second portion of MgSO<sub>4</sub> as a drying agent and without PSA clean-up to achieve full scope of pesticide residues including phenoxyalcanoic acids. A clean solution/final extract is in the next step analyzed directly by LC-MS/MS and GCxGC-TOFMS with PTV injection. Based on a one year of practical experience with the QuEChERS method authors present innovative variation between employed and original QuEChERS method as well as results of validation procedure obtained for different plant matrices.

<sup>1</sup> EN 15662:2008 Foods of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS-method