

Role of Sample Processing Strategies at the European Union National Reference Laboratories (NRLs) Concerning the Analysis of Pesticide Residues - DTU Orbit (09/11/2017)

Role of Sample Processing Strategies at the European Union National Reference Laboratories (NRLs) Concerning the Analysis of Pesticide Residues

The guidance document SANTE 11945/2015 recommends that cereal samples be milled to a particle size preferably smaller than 1.0 mm and that extensive heating of the samples should be avoided. The aim of the present study was therefore to investigate the differences in milling procedures, obtained particle size distributions, and the resulting pesticide residue recovery when cereal samples were milled at the European Union National Reference Laboratories (NRLs) with their routine milling procedures. A total of 23 NRLs participated in the study. The oat and rye samples milled by each NRL were sent to the European Union Reference Laboratory on Cereals and Feedingstuff (EURL) for the determination of the particle size distribution and pesticide residue recovery. The results showed that the NRLs used several different brands and types of mills. Large variations in the particle size distributions and pesticide extraction efficiencies were observed even between samples milled by the same type of mill.

General information

State: Published

Organisations: National Food Institute, Research Group for Analytical Food Chemistry

Authors: Hajeb, P. (Intern), Herrmann, S. S. (Intern), Poulsen, M. E. (Intern)

Number of pages: 9

Pages: 5759-5767

Publication date: 2017

Main Research Area: Technical/natural sciences

Publication information

Journal: Journal of Agricultural and Food Chemistry

Volume: 65

Issue number: 28

ISSN (Print): 0021-8561

Ratings:

BFI (2017): BFI-level 2

Web of Science (2017): Indexed yes

BFI (2016): BFI-level 2

Scopus rating (2016): CiteScore 3.45 SJR 1.291 SNIP 1.344

Web of Science (2016): Indexed yes

BFI (2015): BFI-level 2

Scopus rating (2015): SJR 1.236 SNIP 1.253 CiteScore 3.23

Web of Science (2015): Indexed yes

BFI (2014): BFI-level 2

Scopus rating (2014): SJR 1.278 SNIP 1.421 CiteScore 3.25

Web of Science (2014): Indexed yes

BFI (2013): BFI-level 2

Scopus rating (2013): SJR 1.423 SNIP 1.479 CiteScore 3.44

ISI indexed (2013): ISI indexed yes

Web of Science (2013): Indexed yes

BFI (2012): BFI-level 2

Scopus rating (2012): SJR 1.43 SNIP 1.471 CiteScore 3.2

ISI indexed (2012): ISI indexed yes

Web of Science (2012): Indexed yes

BFI (2011): BFI-level 2

Scopus rating (2011): SJR 1.384 SNIP 1.446 CiteScore 3.1

ISI indexed (2011): ISI indexed yes

Web of Science (2011): Indexed yes

BFI (2010): BFI-level 2

Scopus rating (2010): SJR 1.408 SNIP 1.392

Web of Science (2010): Indexed yes

BFI (2009): BFI-level 2

Scopus rating (2009): SJR 1.317 SNIP 1.303

Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 1.361 SNIP 1.324
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 1.249 SNIP 1.439
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 1.358 SNIP 1.418
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 1.286 SNIP 1.521
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 1.316 SNIP 1.496
Web of Science (2004): Indexed yes
Scopus rating (2003): SJR 1.158 SNIP 1.479
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 1.236 SNIP 1.537
Web of Science (2002): Indexed yes
Scopus rating (2001): SJR 1.066 SNIP 1.255
Web of Science (2001): Indexed yes
Scopus rating (2000): SJR 1.091 SNIP 1.312
Web of Science (2000): Indexed yes
Scopus rating (1999): SJR 0.859 SNIP 1.256
Original language: English
QuEChERS, SANTE 11945/2015, cereals, extraction efficiency, milling, particle size, pesticides
DOIs:
10.1021/acs.jafc.7b00728
Source: FindIt
Source-ID: 2371325037
Publication: Research - peer-review › Journal article – Annual report year: 2017