

CON-PRA-044

CONFIRMATORY METHODS

The special case of pesticides

• Context

Some pesticides such as fipronil are known to be persistent in the environment and finally in food from animal origin such as eggs or milk by-products. Residues are present at ultra-trace levels, and need hyphenated analytical development to be measured.

• General objective(s)

The aim of this practical module is to present the establishment of an efficient acquisition method in tandem mass spectrometry fulfilling analytical criteria as given by the 2002/657/EC decision.

• Main items

Scan mode/Product ion mode/MRM Mode /Dwell Time

• Pedagogical objectives

- ✓ To learn how to create an efficient acquisition method in the SRM mode
- ✓ To understand the strategy for optimisation of acquisition parameters

• Pedagogical tools

- ✓ GC-MS/MS
- ✓ Chromatogram and associated spectra in SCAN, Product ion and MRM modes in EI
- ✓ Masslynx software or other instrument software

• Duration

- ✓ 1 hour

• Pre-requisite

- ✓ MS part I: Ionisation (CON-THE-010)
- ✓ MS part II: Detection and acquisition (CON-THE-020)
- ✓ Chromatographic-MS coupling (CON-THE-030)
- ✓ Smattering on European Criteria