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Rapid Multi-residue method for the determination of six coccidiostats at cross contamination level in animal poultry feed and eggs: a challenge

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Different coccidiostats are used as feed additives to control coccidiosis in poultry. For consumer protection, maximum levels (ML's) have been set by the European Union (regulation 124/2009 and directive 2009/8/EC) and monitoring has to be performed. Different methods exist but are



majoritarily based on hyphenated chromatographic techniques. In the frame of an European funded project, CONffIDENCE, a rapid method, i.e. a five-plex flow cytometry-based immunoassay (FCIA) was developed and single-laboratory validated for the simultaneous detection of six frequently used coccidiostats. The fitness for purpose of this new method for the routine control of coccidiostats in poultry feed and eggs, by official control laboratories, has been assessed through an inter-laboratory validation exercise. The method concepts and validation aspects will be presented when applied for the simultaneous detection of narasin, salinomycin, diclazuril, lasalocid, monensin and nicarbazine in feed and egg extracts.

Keywords coccidiostats;feed;eggs;Immunoassay;validation;confidence

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