

Occurrence of tetracyclines, sulphonamides and quinolones residues in chicken meat sample from selected chicken slaughterhouses in Peninsular Malaysia

ABSTRACT

The occurrence of veterinary drug residues in chicken meat originating from 320 small and medium scale chicken slaughterhouses in Peninsular Malaysia was determined. 637 chicken meat samples were examined for tetracycline (TCs), sulphonamide (SAs) and quinolone residues using a microbiological inhibition test and was further confirmed using liquid chromatography mass spectrometry (LC-MS/MS). The presence of TC residues were confirmed in 10 (1.6%) samples, and 1 (0.2%) sample was confirmed in compliance to the established maximum residue limit (MRL) for residues of quinolone. A total of 6 (0.9%) samples were above the MRL for TC. The samples were from Pulau Pinang, Terengganu and Kelantan. Among those tested in compliance, the main analytes found for TC and quinolone were chlortetracyclines (CTC), enrofloxacin and mixture of chlortetracycline (CTC) and oxytetracycline (OTC). No samples were found to contain sulfonamides residues.

Keyword : Chicken meat; Residues; Small and medium scale chicken slaughterhouse