



ABSTRACT

The HPLC-DAD method has been developed for the detection and determination of selected illicit drugs i.e Tylosin and Furazolidone in animal feed formulations simultaneously. The anticipated method was confirmed to be a simple, rapid and accurate under the optimized chromatographic conditions. The chromatographic separation was achieved on Hibar C18 column using 0.1% formic acid in double- distilled water and acetonitrile (50:50, v/v) flow rate was 1 mL min⁻¹ and column was kept at room temperature.

The linearity of Tylosin and Furazolidone was achieved at 280nm. The limit of detection and limit of quantitation was found to be 19 µg/ml and 58 µg/ml for tylosin and 0.24 and 0.77 µg/ml for furazolidone. respectively.

The developed method was optimized and validated for linearity, accuracy, precision, LOD, LOQ, selectivity and robustness in the light of ICH guidelines and it was successfully employed for the determination of Tylosin and Furazolidone in the animal feed formulations.

Keywords: Furazolidone, Tylosin, HPLC-DAD, Method Validation
