**Supplementary material**

**Quantification of multiclass antibiotics by UHPLC-MS/MS analysis combined with salt-assisted acetonitrile extraction: Comparative evaluation of dairy and poultry manure**

Serap Karaca1, Erol Kabil2, Işıl Akmehmet Balcıoğlu1\*

*1Bogazici University, Institute of Environmental Sciences, 34342 Bebek-Istanbul, Turkey*

*2Pendik Veterinary Control and Research Institute, 34890 Pendik-Istanbul, Turkey*

\*Corresponding author. Email: *balcioglu@boun.edu.tr*

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| Mobile Phase (A) 1 0.2% HCOOH, 1 mM HCOONH4 in waterMobile Phase (A) 2 0.2% HCOOH, 1 mM HCOONH4 and 1 mM oxalic ocid in waterMobile Phase A2Mobile Phase A1 |

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| Antibiotic  | Mobile Phase A1Retention Time (min) | Mobile Phase A2Retention Time (min) |
| sulfadiazine | 3.6 | 3.6 |
| sulfathiazole | 4.5 | 4.6 |
| sulfamethazine | 10.8 | 11.4 |
| sulfamethizole | 7.6 | 8.1 |
| sulfamonomethoxine | 9.6 | 6.8 |
| sulfamethoxipyridazine | 9.6 | 6.8 |
| sulfachloropyridazine | 9.9 | 10.4 |
| sulfadimethoxine | 10.8 | 11.4 |
| sulfadoxine | 10.8 | 11.4 |
| sulfamethoxazole | 11.1 | 11.5 |
| sulfaquinoxaline | 13.2 | 7.9 |
| sulfisoxazole | 11.8 | 10.9 |
| difloxacin | 10.5 | 11.4 |
| marbofloxacin | 6.0 | 7.3 |
| oxolinic acid | 14.6 | 15.5 |
| flumequine | 14.6 | 15.5 |
| sarafloxacin | 10.3 | 11.3 |
| norfloxacin | 7.0 | 7.3 |
| enrofloxacin | 9.0 | 10.3 |
| danofloxacin  | 8.6 | 6.0 |
| ciprofloxacin | 7.5 | 7.5 |
| spiramycin | 11.6 | 12.7 |
| erythromycin | 17.5 | 14.2 |
| tylosin | 13.9 | 14.0 |
| josamycin | 15.6 | 15.8 |
| tilmicosin | 12.8 | 13.0 |
| oxytetracycline | 6.7 | 7.4 |
| tetracycline  | 6.2 | 7.3 |
| doxycycline | 6.2 | 7.3 |
| chlortetracycline | 11.5 | 11.4 |
| thiamphenicol | 6.8 | 6.3 |
| florfenicol | 11.2 | 11.7 |
| chloramphenicol | 12.4 | 13.1 |
| trimethoprim | 5.8 | 7.0 |
| lincomycin | 4.2 | 5.3 |

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**Figure S1** Ion Chromatograms of mixed antibiotic standards for mobile phase Aqua I and Aqua II (antibiotic concentration=100 µg/L)

**Matrix Effect (%)**

**Figure S2** Matrix effect in determination of antibiotics (n=3, 25-100 µg/kg) in dairy manure (a) and poultry manure (b) by using two different mobile phase in LC-MS/MS analysis. The antibiotics with ME>150 are not shown.

**Recovery (%)**

**Figure S3** Effect of agitation type on the extraction performance of antibiotics (each 100 µg/kg) in dairy (a) and poultry (b) manure samples (n=3).