

# Phenotypic Characterization and Serotyping of *Salmonella* spp. and *Listeria Monocytogenes* Isolates From Feed Samples

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**Phenotypical confirmation and AMR screening of 15 strains of *Salmonella* spp. and 9 strains of *L. monocytogenes* in feed samples, through microbiological analysis, biochemical and serological testing**



☼ Strains of *Salmonella* spp. were susceptible to tetracycline, norfloxacin, ciprofloxacin, gentamicin, meropenem, while showed resistance to ampicillin, cefotaxime and ceftazidime, without any MDR being recorded

☼ *L. monocytogenes* strains were only susceptible to erythromycin and ampicillin, while one strain was MDR to the remaining antibiotics (tetracycline, penicillin, sulfamethoxazole, ciprofloxacin, meropenem)

☼ The recorded AMR of *L. monocytogenes* isolates was tetracycline, penicillin, sulfamethoxazole, ciprofloxacin, meropenem

Multiplex PCR was utilized to assign the isolated strains to the most prevalent and important public health-related *Salmonella* serotypes and *L. monocytogenes* PCR-serogroups

☼ *Salmonella* isolates were classified into serotypes Thompson (60%), Typhimurium (6.7%) and Enteritidis (6.7%), whereas (26.6%) were identified as *Salmonella* spp.

☼ *L. monocytogenes* isolates were classified into the PCR-serogroups IIa (44.5%), IIb (11.1%), IIc (11.1%) and Ivb (33.3%)

**The results of the present study demonstrate the presence of important foodborne pathogenic bacteria with increased AMR to antibiotics caused at the primary production and at the farm level by the inappropriate use of pharmacological substances used to treat animal diseases, resulting in the potential detection of resistant bacterial strains of the pathogens to animal-originated food products**

