Antimicrobial susceptibility a*ssessment of Campylobacter on outdoor iberian pig sows*

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Both *Campylobacter* and *Salmonella* are considered the most frequent bacterial causes of human enteritis in industrialized countries. The consumption of raw or undercooked poultry and pork contaminated meat products are the main sources of human infection. The prevalence of *Campylobacter* and *Salmonella* was determined in the present work for extensive production Iberian pig sows, *Sus mediterraneus*. Samples were collected at the maternity area of a creator from, water drinkers, feed and feed containers as well as from sows faecal matter. Of 42 samples, 31 and 23 carried *Campylobacter* spp. and *Salmonella* spp. respectively. Only *Salmonella* spp. was found in all 3 tested water and feed containers. Of the 58 isolated *Campylobacter* strains only one was identified, by multiplex-PCR, as *Campylobacter jejuni*, all other were *C. coli*. Antibiotic susceptibility was performed by disc diffusion method with Nalidixic acid, Ciprofloxacin, Erythromycin, Tetracycline, Chloramphenicol and Ampicilin. While 95% of the tested strains were susceptible to chloramphenicol, 66% and 53% were resistant to the tested fluoroquinolones, Ciprofloxacin and Nalidixic acid respectively. Erythromycin resistance was fairly low in comparison to previous publications with 14% of resistant strains. 38% were resistant to Tetracycline and 57% to Ampicilin. Seven of the 58 *Campylobacter* strains were entirely susceptible and none were resistant to all the antimicrobials tested. Multiple drug resistance was found in 88% of strains. Cross contamination may occur between sows inside maternity facilities and piglets may become infected in an early age by their mothers. New and better control measures are therefore necessary to minimize transmission between animals reducing the number of contaminated individuals and the potential transmission to human handlers and consumers.

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