

[175] MOLECULAR CHARACTERIZATION OF *SALMONELLA* TYPHIMURIUM ISOLATES FROM WILD BIRDS AND THEIR RELATIONSHIP WITH SALMONELLOSIS IN PIGS

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Salmonella Typhimurium (and its monophasic variant) isolates from wild birds (n=29) captured in pig farms with high prevalence of salmonellosis were compared by Pulse-Field Gel Electrophoresis (PFGE) with those strains isolated from faecal (n=36) and mesenteric lymph nodes (n=46) samples from pigs and faecal samples from small rodents (n=8). Eight PFGE clusters were discernible (90% similarity) among bird isolates. Three clusters (65% of the strains) corresponded mostly to samples from 3 farms, evidencing that same *Salmonella* isolates circulated among bird species within each of these farms. In 3 clusters the isolates were collected at different locations and dates, indicating that these strains circulated freely among the wild bird population in the region. All but one (96%) of the *Salmonella* strains from birds were closely related (within the same cluster) to those from pig samples, and 17 (59%) to those from rodents. Among the 20 isolates from birds analysed for antimicrobial resistance (AR), 11 (55%) showed AR to at least one drug. The most common AR pattern was Aminopenicillins-Aminoglycosides-Sulfonamides-Tetracyclines (60%), similar to what was found in pig isolates (49%). These results show that *S. Typhimurium* and the monophasic variant are widespread in the area and wild birds have an important role on its maintenance among pig herds. Biosecurity measures aimed at keeping birds out of pig premises is of utmost importance for the control of this infection.

