OCCURRENCE OF SALMONELLA SPP. AND ENTEROPATHOGENIC YERSINIA SPP. IN SWEDISH WILD BOAR (SUS SCROFA)

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The Swedish, as well as the European wild boar (Sus scrofa) population, is increasing in numbers, spreading continuously to new areas. Does this constitute a problem for humans and/or domestic animals? The estimated hunting bag in Sweden 2010-2011 was 60 000 wild boar. There are few previous studies on the presence of various presumptive, human pathogens in the Swedish wild boar population while European studies show that wild boar have the potential to harbour a wide range of pathogens that may cause serious illness among humans. Among these, Salmonella spp., Yersinia (Y.) enterocolitica, Y. pseudotuberculosis and E. coli O157:H7 are of particulate importance. Samples collected from the tonsils, ileocecal lymph nodes and feces from 88 wild boar were analysed using a combination of cultivation and PCR targeting these four pathogens. Results showed that 10%, 20% and 20 % of the sampled animals carried Salmonella spp., Y. enterocolitica and Y. pseudotuberculosis respectively, while no E. coli O157:H7 was found. In all, 34 (38,6%) individuals carried at least one of the pathogens and eight of these 34 carried two or three of the pathogens simultaneously. The three pathogens were found in a variable degree in all of the three sample types. This indicates that wild boar may be a source of human infection. Moreover, the epidemiological significance of wild boar in the maintenance of the pathogens in pastures and spread to domestic animals is not clearly elucidated To evaluate these risks, further studies are needed.

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