

PREVALENCE OF ENDOPARASITES INFECTION IN FATTENERS DEPENDING ON MAINTENANCE SYSTEM AND SEASON

Anna Jankowska-Mąkosa, Damian Knecht

*Department of Pig Breeding, Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences
Chelmońskiego 38 C, 51 630 Wrocław, Poland*

Corresponding author A. Jankowska-Mąkosa:

Tel.: +48 71 320 58 21, E-mail: anna.jankowska-makosa@up.wroc.pl

Abstract. The study was conducted on four farms localized in Wielkopolska Province, Poland, leading an intense pigs farming in closed cycle (all production groups were housed on the farm). The fatteners were maintained in conventional indoor herds for the whole fattening period, and the farms did not lead organic farming. McMaster method was used for eggs isolation from feces, while flotation was applied in cysts diagnostics from feces.

The infection level of fatteners (n=320), kept on shallow and deep litter in the summer (July/August) and winter (January/February) period in 2013, was established. The occurrence of three varieties of parasites was observed: *Oesophagostomum* spp., *Ascaris suum* and one protozoan – *Balantidium coli*. The most abundant parasite was *Oesophagostomum* spp. The study also demonstrated an increased prevalence on the farms maintaining the animals on shallow litter as compared to deep one. Higher values of selected parasitological indices were noted in the summer (farm C shallow litter 62.5 %, 764 EPG; farm B shallow litter 50 %, 267.5 EPG) as compared to the winter period (farm C 35%, 194.4 EPG, farm B 40%, 215.6 EPG). *Ascaris suum* was the next nematode of the highest extensiveness, i.e. on the level of 20 %. The study also demonstrated the presence of *Ascaris suum* exclusively in two farms – B and C, on shallow litter. The rarest was protozoan *Balantidium coli*. It was isolated and identified only on one farm, during the summer on a shallow litter (12.5 % once 39 mean number of cyst per sample).

Keywords: endoparasites, maintenance system, season, fatteners