

THE PREVALENCE OF GASTROINTESTINAL HELMINTHS IN INDUSTRIAL, CONVENTIONAL AND BACK YARD PIG FARMS IN LITHUANIA

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Summary. The prevalence of gastrointestinal helminths in Lithuania was studied in January 2007 – July 2008. Twenty large industrial farms (LIF) (4000-33000 pigs), 45 conventional farms (CF) (400-4000 pigs) and 26 back yard farms (BY) (1-10 pigs) were randomly selected for sampling. All farms had exclusively indoor facilities, as do almost all Lithuanian swine herds. In total 1422 faecal samples from pigs of 5 age groups (piglets, weaners, fatteners, gilts, sows/boars) were collected individually and examined for helminth eggs. Faecal egg counts were carried out by a concentration McMaster technique (Henriksen & Aagaard, 1976) with a lower detection limit of 20 eggs per gram (EPG). In LIF, CF and BY infections with *Ascaris suum* were found in 6%, 7% and 14% of fatteners and in 10%, 14% and 28% of gilts, respectively. Infections with *Oesophagostomum* spp. were observed in LIF, CF and BY: in 6%, 8% and 14% of fatteners, in 18% and 22% of gilts (no data on BY) and in 12% and 19% of sows (no data on BY), respectively. Eggs of *Trichuris suis* were found in 1% and 5% of gilts in LIF and CF, and in 2% and 6% of sows in LIF and BY, respectively.

The results of this study demonstrated that the main gastrointestinal helminths of pigs in Lithuania are *A. suum* and *Oesophagostomum* spp. and the most heavily infected age groups are the fatteners and the gilts. Pigs on back yard farms were more intensively infected compared to large industrial and conventional farms ($P < 0.05$). Variables concerning anthelmintic strategy, feed and floor type, bedding, cleaning and disinfection deserve further study.

Key words: *Ascaris suum*, *Oesophagostomum* spp., *Trichuris suis*, farms, pig, age.