

OUTBREAK OF EIMERIOSIS IN AN ESTONIAN RABBIT FARM

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Abstract. Eimeriosis in rabbits is a disease that can result in high numbers of mortalities especially at indoor rabbit farms. This study is an investigation of an outbreak in an Estonian commercial rabbit farm in 2011. Rabbits found dead in their cages were taken to the laboratory and necropsied (N=15). In addition, faecal samples were taken from cages (N=65). All autopsied young rabbits (N=14) were infected with *Eimeria*, high infection intensities were found in 53% of the intestinal contents. Higher infection intensities were observed in samples scored diarrhoeic (P=0.04). Association between higher infection intensities and increasing age of the dead rabbits was observed (P=0.02) as were days post weaning (P=0.01). Samples collected from cages were mainly light infections and *E. magna*, *E. media*, *E. exigua*, *E. perforans*, and *E. vej dovskyi* were found more frequently in the high infections. Only *E. irresidua* was found more commonly in necropsied animals with high infection intensities (P=0.004). In total 10 *Eimeria* species were identified, and samples were dominated by *E. media* and *E. magna*. The findings indicate that mortalities were likely due to eimeriosis acquired in cages post weaning and *E. irresidua*, possibly in combination with *E. magna* and *E. media*, may have been the main contributing species. Insufficient hygiene is a likely assisting factor for the outbreak.

Keywords: rabbits, *Eimeria* spp, prevalence, necropsy, eimeriosis.