Organizing Committee

Fagerholm Hans Peter, Åbo Akademi University, Turku, Finland
Haukisalmi Voitto, University of Helsinki, Helsinki, Finland
Henttonen Heikki, Natural Resources Institute Finland, Vantaa, Finland
Huitu Otso, Natural Resources Institute Finland, Suonenjoki, Finland
Huldén Larry, University of Helsinki, Helsinki, Finland
Huldén Lena, University of Helsinki, Helsinki, Finland
Jokelainen Pikka, Estonian Univ. of Life Sciences, Tartu, Estonia and Univ. of Helsinki (FINPAR), Helsinki, Finland
Lassen Brian, Estonian University of Life Sciences, Tartu, Estonia
Meri Seppo, University of Helsinki, Helsinki, Finland
Niemelä Pekka, University of Turku, Turku, Finland
Näreaho Anu, University of Helsinki (FINPAR), Helsinki, Finland
Oksanen Antti, Finnish Food Safety Authority Evira (FINPAR), Oulu, Finland
Rantala Markus, University of Turku, Turku, Finland
Sukura Antti, University of Helsinki (FINPAR), Helsinki, Finland
Taskinen Jouni, University of Jyväskylä, Jyväskylä, Finland
Ugglar Arvid, Swedish University of Agricultural Sciences, Uppsala, Sweden

Partners
The Organizing Committee of EMOPXII wishes to thank the following organizations for their contribution in making the congress a success:

University of Turku
The Scandinavian-Baltic Society for Parasitology
European Federation of Parasitologists
Federation of Finnish Learned Societies
City of Turku
Visit Turku
Åbo Akademi University
Turku University Foundation

Nordenskiöld Foundation
Elsevier
Zoetis
LDBIO Diagnostics
GSK
Vetcare
Orion Pharma
IAFWP
GnosisGIS
NOSOVE
Strongylids (Nematoda: Strongylida) of domestic horses: influence of age, breed and horse management on the parasite community structure

Tetiana Kuzmina, Vitaliy Kharchenko, Igor Dzeverin
I. I. Schmalhausen Institute of Zoology NAS of Ukraine, Kyiv, vul. B. Khmelnitskogo, 15., Ukraine

Strongylids are the most species-rich group of horse parasites worldwide. The aim of our study was to analyze the influence of horse age, breed and type of anthelmintic treatment programs of their infection with strongylids. Totally, 197 domestic horses of 7 breeds from 5 months to 22 years old were examined. Horses were kept in 15 farms with different anthelmintic treatment programs: rare or no treatment; 1–2 treatments or 3–4 and more treatments per year. Levels of horse infection (EPG) were examined by the McMaster method. Strongylids (82,767 specimens) were collected from horses after their deworming with the macrocyclic lactone drug “Univerm” (0.2% avermectin C). Effects of various factors on the horse infections were analyzed using a model of multiple regressions with dummy variables.

Thirty-three strongylid species were found in horses examined: 8 species of Strongylinae and 25 of Cyathostominae. The highest number of species (32) was found in horses of 1.5–4 years old; the lowest (17) – in horses older than 16 years. The effect of age on the horse infection was significant – young horses were more infected than older ones. Anthelmintic treatment programs also significantly influenced their infection, as well as on the species composition of strongylid community: horse with rare or no treatments had the highest strongylid biodiversity. The effect of breeds on horse infection was insignificant. Our results suggest that frequency of anthelmintic treatments has the greatest impact on their infection and on the strongylids community structure comparing to age or breed of horses.