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ABSTRACTS

Parasites of Polish primitive horses (*Equus caballus gmelini* Ant.): influence of age, sex and horse management on the parasite community

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An extensive analysis of the relationship between age, sex, and different types of management strategies were compared to the gastrointestinal parasite community of Polish primitive horses was performed in 124 horses maintained in nine farms from four regions of Poland. The horses (96 females and 28 males) were housed in three types of management strategies: stabled (ST), free-ranging (FR) and semi-free (SF). These horses also were divided into three age groups: < 3 years, 3–10 years and >10 years old. The gastrointestinal parasites were collected following deworming of all horses with anthelmintics containing the macrocyclic lactones and praziquantel. Totally, 66,192 parasite specimens were collected and identified. The analysis of dependence of infection with intestinal nematodes using sex, age and management strategies demonstrated that females had significantly heavier infections of strongylids. Young horses (< 3 years old) had higher infections of *Parascaris equorum* and *Strongyloides westeri*. Free ranging horses were more heavily infected with strongylids, *Oxyuris equi* and *Gasterophilus intestinalis*. Thirty-five nematode species, one cestode and one species of the botfly larvae of *Gasterophilus* were found. Diagnostic deworming examination revealed presence of *Parascaris equorum* in 27.4%, *Oxyuris equi* in 38.7%, *Habronema muscae* in 16.9%, *Anoplocephala perfoliata* in 42.7% and *Gasterophilus intestinalis* in 46.8% in the Polish primitive horses examined. *Strongyloides westeri* infection was confirmed only by fecal samples examination. In the strongylid community, 31 species (6 of subfamily Strongylinae and 25 of Cyathostominae) were found. Significant differences in prevalence of separate strongylid species or their proportions in the communities were not observed between females and males, or between age groups ($p>0.05$). The highest species diversity (n=30 or 31) was observed in the FR horses, the lowest (n=15) was in ST horses.