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**BIODIVERSITY OF INTESTINAL PARASITES IN DOMESTIC MOUNTAIN
HORSES ON STARA PLANINA**

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Abstract: The domestic mountain horse is an autochthonous breed of horse that originated in the Balkans, which, with the support of the fund for the protection of genetic resources, began to restore the population of this breed, primarily in the area of Stara Planina. Intestinal parasite tests were performed on domestic mountain horses on Stara Planina. A total of 124 horses were examined by coprological diagnostics, and The Clayton-Lane method was used to count parasite eggs. Identification of parasite eggs was done by morphometric characteristics. The following parasites were found: *Trichostrongylus axei* in 66.67%, *Strongylus edentatus* in 83.33%, and *Parascaris equorum* 33.33%.

• **Introduction**

The domestic mountain horse is an autochthonous breed of horse that originated in the Balkans, which ensured the survival of people in the hilly and mountainous area for centuries. Mountain horses were among the first to disappear in the mountainous areas of the Balkans, so ten years ago, with the support of the fund for the protection of genetic resources, the restoration of the population of this breed began, primarily in the area of Stara Planina.



• **Material and method**

A total of 124 horses from three herds were tested. In Izatovac we tested 44 horses, in Boljev Dol 30 and in Borovsko polje 50 horses. Examinations were performed by sedimentation and flotation Methods. The Clayton-Lane method was used to count parasite eggs. The determination of the parasite eggs was performed according to its morphological characteristics. The level of infection was defined according to Upjohn et al as none, mild (<500 egg per gram (EPG)), moderate (500–1000 EPG) and high (>1000 EPG).

• **Results and discussions**

- During our examination at horses at all location were found: *Strongylus edentatus*, *Parascaris equorum* and *Trichostrongylus axei*.
- At the horse from Izatovac *S.edentatus* was found in 83.33%, *T.axei* in 66.67% and *P.equorum* in 33.33%.
- At the horse from Boljev Dol *S.edentatus* was found in 89.83%, *T.axei* in 77.67% and *P.equorum* in 39.33%.
- At the horse from Borovsko polje *S.edentatus* was found in 97.33%, *T.axei* in 59.67% and *P.equorum* in 41.33%.
- The intensity of infection with all found types of parasites was mild (<500 egg per gram (EPG)).

During our examination all observed horses were clinically healthy, with no visible symptoms of the disease, regardless of the type of parasites identified and the intensity of the infection.

• **Conclusions**

The key factors that influence the diversity and prevalence of certain types of parasites in domestic mountain horses are: the absence of planned control of endoparasites in the horse population, keeping horses in a semi-free system on infected pastures, in cohabitation with other types of animals, inadequate diagnostics and therapy with partial deworming, which does not include all animals in the herd thus maintaining reservoirs of infection for other animals, as well as non-compliance with biosecurity measures when introducing newly acquired individuals into the herd.

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