The rate of trematode infections in wild ungulates in Naryn State Nature Reserve of the Kyrgyz Republic

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Parasitic infections of wild ungulates frequently occur in mixed host populations. To study this, helminthological research has been carried in the Naryn State Nature Reserve in Kirgisia since 2001.

Complete helminthological necropsy of liver and digestive tract of ungulates was performed. In addition to this, 1,325 domestic animals from households surrounding the nature reserve were examined for trematodes.

Wild ungulates in the Naryn State Nature Reserve have the following trematode fauna: *Fasciola hepatica, Dicrocoelium lanceatum* and *Parafasciolopsis fasciolaemorpha*. The long-term investigations show that both the prevalence and intensity of *Dicrocoelium* are increasing in wild ungulates. In some years, prevalence in red deers was 100% and in roe deers 85%. On average, prevalence of *D. lanceatum* according to the last data is 53.7% and intensity 64.3 specimens.

Investigations of domestic animals which feed on highland pastures surrounding the nature park revealed that dominant helminths are *Dicrocoelium lanceatum* and *Fasciola hepatica* and less common are *Fasciola hepatica* and *Parafasciolopsis fasciolaemorpha*. Trematode prevalence in domestic cattle was 59.0%. The prevalence of *Fasciola* in cattle was 25-38% and intensity 62, dicroceliasis in sheep 80% and 79-117.

In the Naryn State Nature Reserve the main trematodosis of wild ungulates are dicroceliasis, fasciolosis and seldom paramphistomatosis. Multispecies infections are common. Epizootological situation of Naryn State Nature Reserve indicates that trematode infections afflict considerable number of wild and domestic animals in the nature reserve and in the surroundings. A special hazard is the flow of trematodes between wild and domestic species, like *D. lanceatum* from domestic animals to wild ungulates and *P. fasciolaemorfa vice versa.*