

## NEOSTRONGYLUS LINEARIS FROM MOUFLON IN THE WOODS OF VRANOV NEAR BRNO

Longlasting parasitological investigations have been performed in the woods of Vranov near Brno on a herd of mouflon numbering, especially in the winter when they come to feed to the throughs, several tens of heads including some small groups of older rams. In 1964 worms of the species *Neoststrongylus linearis* (Marotel, 1913) Gebauer, 1932, *Protostrongylidae* (Leiper, 1962), were found as recently as February. The occurrence of this species in Czechoslovakia has been recorded only by KOTRLÝ (Čs. Parasit. 5: 101–110, 1958) from chamois in the Hrubý Jeseník Mts.; generally it is known to infect sheep and goat. In our instance the incidence of this worm in the mouflon occurred in a locality situated at an altitude of 400–450 m above sea-level, covered with mixed forests growing in a granodiorite base.

Our material for examination consisted of viscera and sometimes of lungs from shot mouflon and of numerous feces samples collected regularly during the various seasons of the year from both sexes and different age groups of mouflon. The list of positive findings is based on the results of larvoscopy and post mortem examination: In 1964: of the 15 examined animals 5 were positive. In 1965: 9 of the 17 mouflon examined were positive. In 1966: 17 of the 28 mouflon examined were positive. In comparison with simultaneous findings of the species *Müllerius capillaris*, the incidence of the new species in our mouflon herd was 10-times lower. **Characteristics of the nematodes.** Male: overall length 5–7 mm, width 25–48  $\mu$ , four processes present on the dorsal rib of the bursa copulatrix. Spicules unequal in length, 165–180  $\mu$ , 315–380  $\mu$ . Gubernaculum 45–55  $\mu$ , bifurcating in its posterior portion. Female: considerably larger, overall length 12–16 mm, width 45 to 56  $\mu$ . Anal pore opening approximately at a distance of 40  $\mu$  in front of the posterior end of the body; vulva 95–130  $\mu$  bearing a bell-shap-

ed cuticular ala. First-stage larva: overall length 280–360  $\mu$ , width 13–17  $\mu$ . Colour of body light to translucent. Shape of body typical, forming 2 transverse ligatures with minute bilateral spines. Dorsal spine very little developed. Length of body from anterior ligature to the end of the body 7.5  $\mu$  on the average, length from the posterior ligature to the end of the body approximately 5.7  $\mu$ . Width of tail portion at the level of the ligatures 2.8  $\mu$  on the average. Tail end straight, dagger-shaped. **Origin of the hosts.** In view of the fact that this is the first recording of *Neoststrongylus linearis* in our wild mouflon, some information on the origin of the hosts may be useful. More than 20 years ago the mouflon moved from Pozoříčko to the forests of Vranov and the neighbouring Jezírko and Bilovice/n. Svitavou, mainly by passing through the valley Rakovec nad Jedovnicemi. According to ŽALMAN (Stráž myslivosti 13: 1–35, 1935) the mouflon was introduced to Pozoříčko in 1929 from Blovice nad Plzeň. MOTTL (Moufloní zvěř, Praha, 1960) reported as the first locality, to which the mouflon had been introduced and originally acclimatized, the well-known reservation of Žinkovy. To this place they were brought from Herrnschein (Austria) in 1898. In 1910, because of heavy mortality in the herd, A. Dyk gave orders for selective shooting of the mouflon (V. DYK, Acta univ. agric., C. Facultas silviculturae 36: 73–86, 1967). The frequent transfer of the mouflon herds and the contact with sheep and goat seemed to have been responsible for the permanent retention of these lung parasites in the mouflon in an area, in which cattle had not been pastured for many years.

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