

## Efficiency of parenteral and oral ivermectin treatment on parasites in reindeer

Soveri, T., Nikander, S. and \*Nieminen, M.

College of Veterinary Medicine, PL 6, SF-00581 Helsinki, Finland.

\* Finnish Game and Fisheries Research Institute, Koskikatu 33 A, SF-96100 Rovaniemi, Finland.

*Summary:* The effect of subcutaneously and orally administered ivermectin on ecto- and endoparasites were studied in 93 reindeer. Ivo-mec<sup>R</sup> vet inj. was given 200 ug/kg in late December subcutaneously to 46 adult reindeer and 12 calves and the pasta formula orally to 25 adults and 10 calves. Twenty five reindeer (18 ad and 7 juv) acted as untreated controls. In April, the reindeer treated with ivermectin harboured no larvae of the warble fly (*Oedemagena tarandi*) while the prevalence of the larvae in the control group was 92 %. Faecal samples from 49 of the animals were examined for eggs of gastro-intestinal nematodes. The prevalence of nematodes in the subcutaneously and orally treated animals was 26.9 % (7/26) and 76.5 % (13/17) respectively. Both formulas of ivermectin are highly effective against larvae of the warble fly but ivermectin injected subcutaneously seemed to be more effective against the gastro-intestinal nematodes ( $p < 0.05$  in chi-square test) than the pasta administered orally.