

## Parasites of the captive mallard duck (*Anas platyrhynchos*)

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The mallard (*Anas platyrhynchos*) is a species of duck of the family Anatidae, inhabiting mainly the northern hemisphere. Under natural conditions, it is often present in groups with other waterbirds. Both free-living birds and those kept in captivity are hosts of internal and external parasites. As mixed parasitic coinfections are very common, the clinical significance of many parasite species is not fully known.

The study examined the isolated intestines (jejunum, caecum and rectum) and gizzards of 130 mallard ducks (65 females and 65 males) from birds kept in a breeding farm operated by Lesy and rybničky mesta Ceske Budejovice s.r.o. (Czech Republic).

The birds were slaughtered by quick decapitation. Ten birds from the 1<sup>st</sup> to 28<sup>th</sup> day of life (5 ♂ and 5 ♀) were randomly chosen from the rearing house every seven days. In the period from the 28<sup>th</sup> to 154<sup>th</sup> day of life, ten birds were chosen from the aviary every 14 days. The obtained organs were examined macroscopically and under the light microscope. Scrapings of intestinal mucosa were examined by the flotation method with Darling's solution, and with the sedimentation method according to Żarnowski and Jostowa. The gizzards were examined macroscopically under the magnifier after removal of the grinding pads and lining. The organs were cut into strips of 3 mm.

Using the flotation method, oocysts of coccidia were found in the ileum scrapings from one of five male mallards at the age of 6 weeks, one of five at the age of 10 weeks and three of five at the age of 12 weeks. In female mallards, oocysts were found in two samples from the 12-week-old birds and in two of five 16-week-old birds. No macroscopic lesions were found in the intestinal mucosa. Adult forms of the nematode *Amidostomum anseris* were found in the gizzard of one male and five female mallards at the age of 20 weeks and in two males at the age of 22 weeks.

The obtained results indicate that coccidiosis has a self-limiting nature with the age of the infected mallards. Changes in the lining of the gizzard depend on the intensity of infection with *Amidostomum anseris*. In the experimental birds, lesions were minor, and limited to inflammatory foci at the site of the attachment of the nematode.