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FIRST RECORD OF EIMERIA CHRISTIANSENI WALDÉN, 1961 IN SWANS IN CZECHOSLOVAKIA

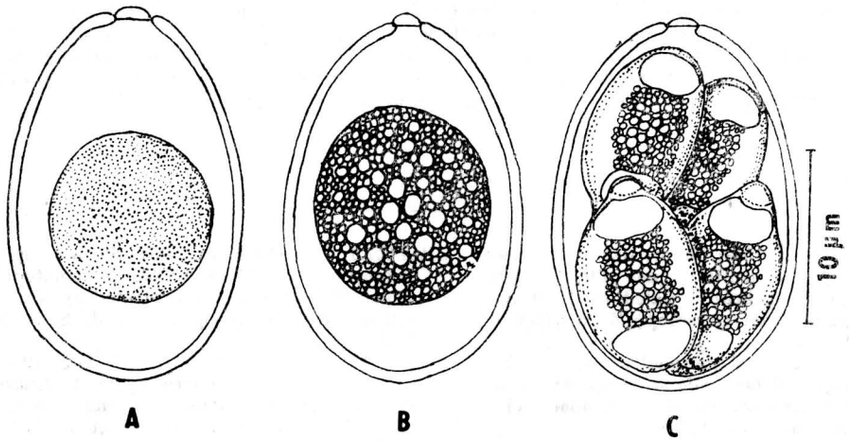

Fig. 1. *Eimeria christianseni* Waldén, 1961. A — original illustration of *E. christianseni* oocyst after Waldén (1961). B — *E. christianseni* — immature oocyst. C — *E. christianseni* — sporulated oocyst.

In the years 1980—1981, excrements of swans, *Cygnus olor* L., nesting in four localities of the pond region in the vicinity of Třeboň (South Bohemia) were examined. The samples were collected during ringing of swans and were kindly provided by Ing. Stanislav Přibil, Head of the Department of Hydrobotany, Institute of Botany, Czechoslovak Academy of Sciences, Třeboň.

Five of the 29 samples examined (i.e. 17.2 %) were positive for coccidia. All of the found coccidia belonged to the species *Eimeria christianseni* Waldén, 1961. This species was found for the first time in swans (in kidneys) by Christiansen (Christiansen M., 1952: Nyrecoccidiose hos vildtlevende andefugle (Anseriformes), Nord. Vet. Med. 4: 1173—1191) in Denmark. Waldén (Waldén H. W., 1961: Observation on renal coccidia in Swedish anseriform birds with notes concerning two species, *Eimeria boschadis* and *Eimeria christianseni* (Sporozoa, Telosporidia), Ark. Zool. 15: 97—104) described under the name *Eimeria christianseni* oocysts of *Eimeria* found in the kidneys of two swans, *Cygnus olor* L., in Sweden and identical with those reported by Christiansen. The nonsporulated oocysts were similar to those of *Eimeria truncata*, but they were smaller (13.5—21.5×9.6—13.5 µm and 17×11 µm in diameter). The surface of the oocysts was smooth, the micropyle did not markedly protrude beyond it and was less flattened than in *E. truncata*. No other data were given by Waldén (Fig. 1A).

The oocysts found in our material conform in the shape and measurements with Waldén's description. Since a large number of oocysts were available, we managed to reach their complete sporulation (using 2 % potassium bichromate).

Description of the oocysts: Oocysts oval to slightly ovoid, thin-walled, size 17—24×11 to 15 µm. Micropyle measuring 2.5—3 µm situated on their anterior pole. Contents of immature oocysts spherical (Fig. 1 B). Sporulated oocysts containing four widely oval sporocysts measuring 11—14×8—12 µm. Large residual body present in their middle part. Refractile bodies of sporozites oval or kidney-shaped, size 3 to 6×1.5—3.5 µm. Stieda bodies slightly visible (Fig. 1 C). Sporulated oocysts not containing either residual bodies of oocysts or polar granules. Sporulation of oocysts lasting 48—72 h at 18 °C.

This is the first record of *Eimeria christianseni* in swans in Czechoslovakia. Our observations of sporulated oocysts of this species supplement the original description by Waldén, who described only non-sporulated oocysts of the species.

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