Isospora schoenobaeni sp. n. (Protozoa: Eimeriidae) from the Sedge Warbler (Acrocephalus schoenobaenus)

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Faeces from Acrocephalus schoenobaenus caught on the Courish spit (Baltic Sea) were examined for coccidia. 9 of 15 birds (60%) had undescribed isosporan oocysts in their faeces. Sporulation took 72 hours at 20 °C. Sporulated oocysts of Isospora schoenobaeni sp. n. are spherical, 27.0 (24.3-29.0) µm, with oocyst wall ca. 1.5 µm thick; a polar granule is present, but no oocyst residuum or micropyle occurred. Sporocysts are ovoid, 20.7 (18.2-22.4) x 12.8 (12.0-13.8) µm, with a nipple-like Stieda body and a medium sub-stieda body. A sporocyst residuum was present in the form of numerous minute globules, and 4 sporozoites 6.7 x 4.6 µm in average were lying in the sporocysts. This is the first description of Isospora from the genus Acrocephalus.

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In July and August 1997 15 Sedge Warblers (Acrocephalus schoenobaenus) were trapped by mistnets in the time between 5 p.m. and 7 p.m. on the Courish spit of the Baltic Sea. Faecal samples were collected immediately, put in 2.5% K2Cr2O7 solution and left at 20 ± 2 °C for oocyst sporulation. Sporulation took 72 hours at 20 °C. Samples were examined by flotation using NaCl. Sporocysts were found in 9 (60%) of 15 birds examined. The new species of Isospora revealed is described below. In all measurements size ranges in parentheses follow the means. Photographs are kept in the Zoological Institute, St. Petersburg.

Isospora schoenobaeni sp. n.
(Figs 1-2)

Host type: Acrocephalus schoenobaenus (Passeriformes: Sylviidae).
Location in host: unknown; oocysts were found in faeces.

Type locality: Courish spit of the Baltic Sea, Russia.

Description. Sporulated oocysts spherical, 27.0 (24.3-29.0) µm. Oocyst wall ca. 1.5 µm thick, without a micropyle. One polar granule is present, but no oocyst residuum occurs. Sporocysts ovoid, 20.7 (18.2-22.4) x 12.8 (12.0-13.8) µm, with a nipple-like Stieda body and a medium substieda body. Sporocyst residuum present in the form of numerous minute globules; 4 sporozoites 6.7 x 4.6 µm in average are lying in the sporocysts.

Discussion. No Isospora species have been described previously from Acrocephalus. As all species of Isospora are genus-specific parasites, it is obvious that the species described above is new.

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Fig. 1. Isospora schoenobaeni sp. n. from Acrocephalus schoenobaenus. Magnification 1000×.

Fig. 2. Line drawing of sporulated oocyst of Isospora schoenobaeni sp. n. Scale 10 µm.