

## A New Species of *Proisotoma* (Order Collembola) from India

BY JAMES MEIKLE BROWN, B.S.C., F.L.S., F.E.S., SHEFFIELD, ENGLAND

(Presented by Dr. F. X. Williams at the Meeting of April 2, 1931)

Three specimens of a species of Collembola were forwarded by Dr. F. X. Williams of the Experimental Station of the Hawaiian Sugar Planters' Association for determination, and as they do not appear to conform in structure to any recognized species, a description is appended. The specimens were intercepted in quarantine at Molokai, Hawaiian Islands, from "seed pieces" of sugar cane packed in moist charcoal in metal containers that were received from Coimbatore, India, in early December, 1930.

I have to thank Dr. Imms of Rothamsted for the opportunity of examining and describing the specimens.

### *Proisotoma (Isotomina) indica* sp. n.

Colour greyish-white, with very little bluish-black pigment in the form of small round spots at the front and sides of the head, and as faint patches dorsally on the posterior segments. Eye patch only partially pigmented, densely so in front, more sparsely so elsewhere. Fig. 1.

Hairs short and uniformly scattered, very slightly curved and almost adpressed. The posterior segments with a few slightly longer ones. All the hairs simple.

Antennae slightly longer than the head, as 11 : 9. Antennal segments approximately as 11 : 6 : 7 : 5. Segment I without specialized olfactory hairs. Antennal organ II typical.

Eyes five on each side, the anterior ones obscured by the pigment of the eye-patch.

Mandibles with four apical teeth, and strong masticatory ridges.

Postantennal organ oval, slightly contracted at about the middle, with thickened margins, and a projecting curved ridge reaching from the middle of the posterior margin across the centre of the organ to near the anterior border, and tapering to a point. Figs. 1 and 2.

Legs without tenent hairs. Claw with one very small tooth slightly beyond the middle. Empodial appendage narrow and pointed, reaching to the tooth of the claw, the outer lamella narrow, the inner lamella wider but without a strongly rounded inner angle. Fig. 3.

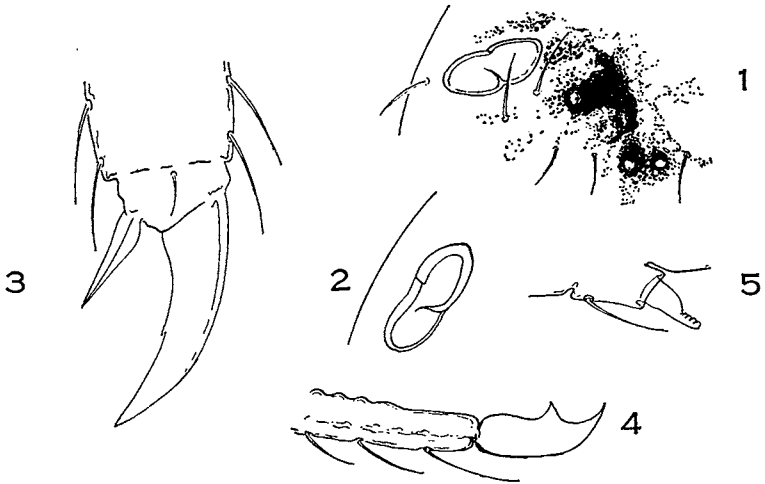
Fork not reaching to the ventral tube. Dentes about twice the length of the manubrium. Manubrium with two strong ventral bristles on each side of the apex, dorsally with a few scattered hairs. Dentes ringed dor-

sally except at the extreme base and apex, with several dorso-lateral hairs. Ventrally with the usual arrangement of adpressed hairs, about nine in number, the last not reaching beyond the middle of the mucro. Mucrones with two almost equal teeth. Fig. 4.

Tenaculum with four barbs on the rami and a strong curved bristle on the corpus. Fig. 5.

Abdominal segment IV slightly longer than segment III, as 6 : 5. Segments V and VI combined and together about equal to segment III.

Size from .8 to .9 mm.



*Proiostoma (Isotomina) indica*

FIG. 1. Side of head, showing postantennal organ and pigmentation of eye-patch.

FIG. 2. Post-antennal organ.

FIG. 3. Apex of leg.

FIG. 4. Apex of spring, showing mucro.

FIG. 5. Tenaculum.

Locality: Three specimens, on cane cuttings, Coimbatore, India.

The type slide will be deposited in the British Museum (South Kensington).

This species bears a strong likeness to *Proiostoma (Isotomina) thermophila* (Axels.), a species which is found occasionally in hothouses in Europe; but differs from it essentially in the number of eyes, the structure of the post-antennal organ, the number of bristles at the apex of the manubrium, and in other minor details.