Section Entomobryomorpha

Family ISOTOMIDAE

The Nordic members of this family are recognised by their slender body with an abundant cover of setae. Scales are never present. Abdominal segment 4 not or only slightly longer than segment 3. Prothorax without dorsal setae. An unlobed roundish or elongate postantennal organ is usually present (absent in two species). Most species have a long and well-developed furca, but the furca may also be completely or partly reduced.

The family has traditionally been split into three subfamilies: Anurophorinae, Proisotominae and Isotominae (Stach, 1947). Gisin’s (1960) concept of Isotominae covers the three above subfamilies. The single genus Actaletes, not considered as belonging to Isotomidae by Stach, was included by Gisin as a second subfamily (Actaletinae). Potapov (2001), in the most recent survey of the family, abandoned the taxon Proisotominae, erected a new subfamily Pachyotominae, redefined Anurophorinae and kept the classical concept of Isotominae. Still the distinctions between the two latter subfamilies are not clear, with some genera or groups of species falling in between. In the present volume the subfamilies are left out, awaiting further phylogenetic analysis using new molecular methods in addition to traditional morphology.

For a modern review of the Palaearctic species of the family, Potapov (2001) may be consulted.

### Key to genera

1. PAO present. All dark and some white species go here ........................... 3
   - PAO absent. Only white species without eyes ................................. 2

2. Mucro 3-toothed. Abd.5–6 fused, abd.4 free ........................ Isotomiella Bagnall (p. 49)
   - Mucro with a single apical hook. All segments of abd.4–6 fused .............. Folsomina Denis (p. 46)

3. All segments of abd.4–6 fused (Fig. 2A) ........................................... Folsomia Willem (p. 25)
   - Abd.4 demarcated from abd.5 ........................................... 4

4. Manubrium with at least 8 setae in the mid-ventral group .......................... 22
   - Manubrium at most with 5 mid-ventral setae (Fig. 48E) ........................ 5

5. Tip of abdomen without spines. Or, if spines or spine-like structures are present, then manubrium with some ventroapical setae ........................................ 6
   - Tip of abdomen with 4 heavy spines (Fig. 2B). Manubrium without ventroapical setae .......................... Tetracanthella Schött (p. 8)

6. Furca and retinaculum completely absent 7
   - Furca and retinaculum present, but often more or less reduced .................. 10

7. Ocelli at most 3 + 3. White species, or pigment very diffuse ..................... 8
   - Ocelli 8 + 8, dark species ........................................... Anurophorus Nicolet (p. 20)

8. Abd.5 with uniform cover of setae .......................... 9
   - Abd.5 with reduced setal cover. Dorsomedian part with 4–5 very short setae on each side of the midline (Fig. 2C) ......................... Micranurophorus Bernard (p. 24)

9. Abd.5–6 fused (Fig. 2D). Body very slim and tubular .......................... Jesenikia Rusek (p. 17)
   - Abd.5–6 clearly demarcated. Body less slender (Fig. 2E) ......................... Pseudanurophorus Stach (p. 12)

10. Skin mostly smooth, never with coarse granulation all over body. Mostly slender species, often with long macrochaetae differentiated from the ground cover of short setae ................................. 11
    - Skin with strong granulation all over the body (Fig. 2G). Body plump (Fig. 2F), with uniform cover of short se-
Fig. 2. (A) *Folsomia fimetarioides*, posterior part of body; (B) *Tetracanthella arctica*, abd.3–6; (C) *Micranurophorus musci*, abd.4–6 with groups of microsetae on abd.5 (arrow); (D) *Jesenikia filiformis*, posterior part of body; (E) *Pseudanurophorus binoculatus*, ditto; (F–G) *Pachyotoma crassicauda*, habitus (F) and details of skin structure on abd.5 (G); (H) *Folsomides angularis* with abdominal bend (arrow); (I) *Archisotoma megalops*, macro; (J–L) *Archisotoma besselsi*, maxilla (J), labrum (K) and tip of abdomen (L) with trichobothria marked (arrows); (M) *Isotomodes productus*, tip of abdomen; (N) *Isotomodes bisetosus*, ventral side of head and th.1.

<table>
<thead>
<tr>
<th>Condition</th>
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<tbody>
<tr>
<td>tae, macrochaetae absent</td>
<td>11</td>
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<tr>
<td><em>Pachyotoma</em> Bagnall (p. 77)</td>
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<tr>
<td>Manubrium with 1 + 1 or more ventral setae</td>
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<td>Manubrium without ventral setae</td>
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<tr>
<td>Abd.5 with uniform cover of setae. Th.1 without ventral setae. Both white and dark species</td>
<td>13</td>
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