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COPEPODA
SUB-ORDER: MONSTRILLOIDA

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IMPORTANT NOTE

The species *Monstrilla obesa*, *Thaumaleus frondipes*, *T. tumorifrons*, *Monstrillopsis angustipes* and *Strilloma scotti* which are included in the figure and keys under these names, will be described in a later publication. These names as used in this identification sheet should therefore be considered *nomina nuda* until they are actually published. At the proof-reading stage of this sheet it appeared that additional, yet undescribed, species occur in the area. They will be described together with the five mentioned above.

MONSTRILLOIDA

The Monstrilloida are distinguished from the other sub-orders of the Copepoda by the complete absence of second antennae, mouth-parts and gut. SARS (1921) has divided the sub-order into two sections, the Monstrilloida Cyclopimorpha, with one family, the Thespesiopsyllidae, and the Monstrilloida Genuina, also with one family, the Monstrillidae. BRESCIANI and LÜTZEN (1962) and FOSSHAGEN (1970) have since claimed that the Thespesiopsyllidae should be placed in the sub-order Cyclopoida, but the family is included in these keys, since it possesses the characteristics stated above.

The author has not seen all the species in these keys, due to their rarity and/or sporadic appearance, so some of the features are based on the descriptions of other authors. The keys, especially those for the males (Keys 5 and 6) are dependent upon good specimens having been obtained, since otherwise some spines and setae may be missing. Spermatophores protruding from the male genital apparatus should not be confused with the lappets. Some species which have not as yet been found in the area normally covered by this series have been included, since they have been described from nearby localities and may therefore also be present in the area.

KEY 1

1. Body cyclopoid in shape (Fig. 1a); 4th and 5th pairs of legs rudimentary ..... Thespesiopsyllidae 2
   Body not cyclopoid in shape, with the cephalic segment usually more or less cylindrical (Figs 2a & b); 5th pair of legs rudimentary or absent, 4th pair fully developed ..... Monstrillidae 3
2. Last abdominal segment very elongated (Fig. 1a); antennae without hinged articulation ..... *Thespesiopsyllus paradoxus* ♀
   Last abdominal segment not so elongated (Fig. 1b); antennae with hinged articulation between 2nd and 3rd distal segments (Fig. 1c) ... . *Thespesiopsyllus paradoxus* ♂
3. Genital (first abdominal) segment with a pair of spines on the ventral surface (which may be covered with eggs) (Fig. 2b); antennae without any hinged articulation (Fig. 2c) ..... female 4
   Genital segment with a structure other than a pair of spines; antennae with a hinged articulation between the 1st and 2nd distal segments (Fig. 2e) ..... male 5
4.* Two abdominal segments ..... *Thaumaleus* Key 3
   Three abdominal segments ..... *Monstrilla* and *Monstrillopsis* Key 2
   Four abdominal segments ..... *Strilloma* and ?*Thaumatohessia* Key 4
5.* Four abdominal segments ..... *Monstrilla*, *Monstrillopsis* and *Strilloma* Key 5
   Three abdominal segments ..... *Thaumaleus* Key 6

N.B. In the following keys, abdominal length includes the furca, but not the furcal setae. Body length does not include the antennae.

KEY 2

Monstrilla and *Monstrillopsis*, female

1. Third abdominal segment about 3 times the length of the second (Fig. 15) ..... ?*Monstrilla roscovita*
   Third abdominal segment no more than 1.5 times as long as, or shorter than, the second 2
2. Fifth leg with very small inner ramus; 4 furcal setae (Fig. 14) ..... ?*Monstrilla filogranarum*
   Fifth leg with inner ramus relatively well developed or absent 3
3. "Mouth" no more than 0.25 of the way back along the cephalic segment; eyes well developed ..... *Monstrillopsis* 4
   "Mouth" more than 0.25 of the way back along the cephalic segment; eyes poorly developed or absent ..... *Monstrilla* 7
4. Body less than 1 mm long; cephalic segment reticulated; ovigerous spines about the same length as, or slightly longer than, the abdomen (Fig. 32a) ..... *Monstrillopsis reticulata*
   Body more than 1 mm long; cephalic segment not reticulated; ovigerous spines about 3 times the length of the abdomen 5
5. Fifth leg with no inner ramus (Fig. 34); 5 furcal setae ..... *Monstrillopsis angustipes*
   Fifth leg with inner ramus; 3 or 4 furcal setae 6

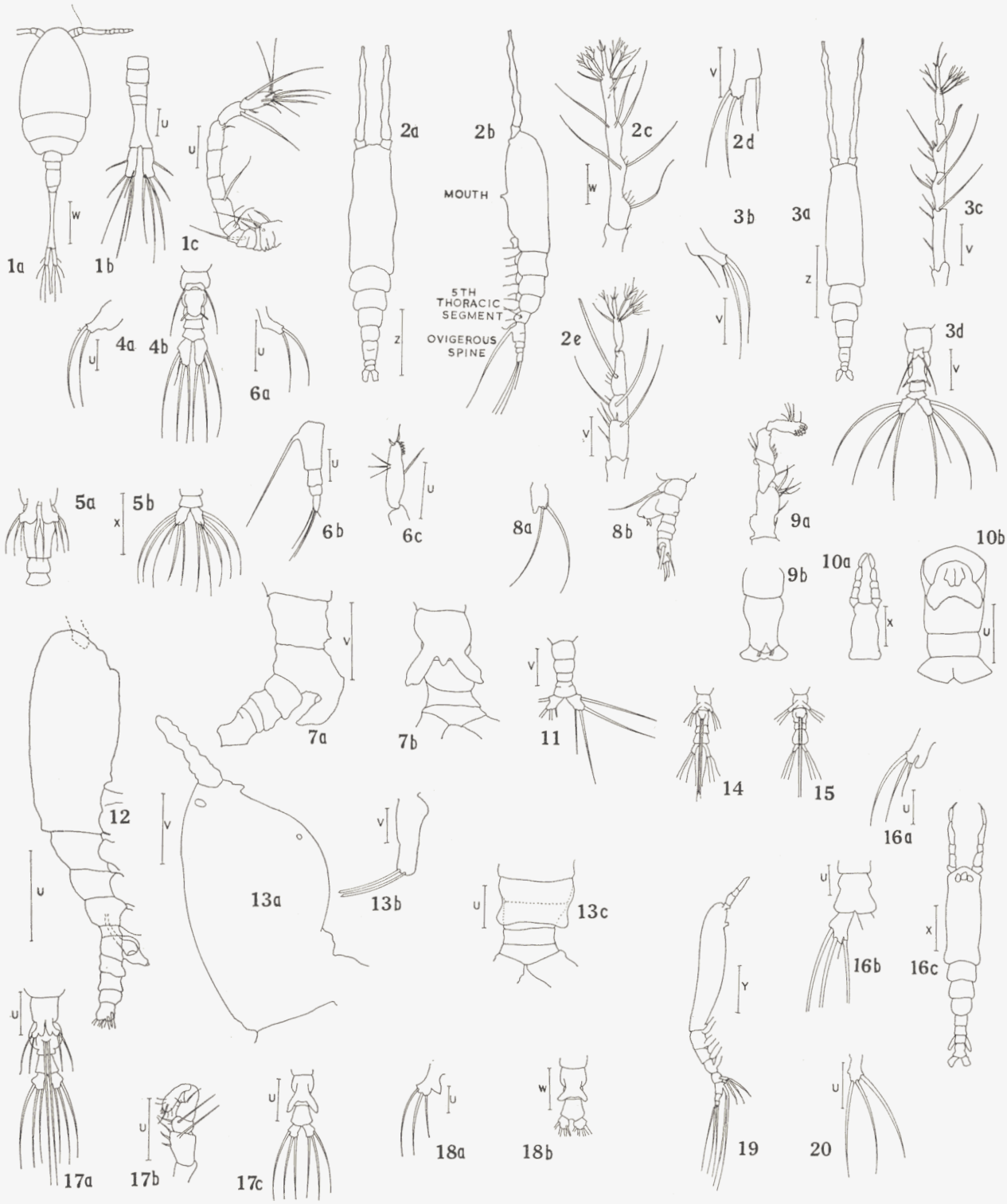
* Some species of *Thaumaleus* have a suture around the last abdominal segment, which may be mistaken for an intersegmental division when viewed from a dorsal or ventral aspect (see Figs 16b & c).

6. Body more than 2.8 mm long; mouth about 0.1 of the way back along the cephalic segment; fifth legs as in Fig. 31a; 4 furcal setae ..... *Monstrillopsis dubia*
   Body less than 2.8 mm long; mouth about 0.2 of the way back along the cephalic segment; fifth legs as in Fig. 35; 3 furcal setae ..... *Monstrillopsis gracilis*
7. Genital segment with dorsal suture (Fig. 2b) 8
   Genital segment without dorsal suture (Fig. 6b) 11
8. Ovigerous spines at least twice the length of the abdomen 9
   Ovigerous spines approximately equal to, or less than, the length of the abdomen 10
9. Antennae slightly shorter than the cephalic segment (Fig. 2a); ovigerous spines 2–3 times length of the abdomen ..... *Monstrilla longicornis*
   Antennae slightly longer than the cephalic segment (Fig. 3a); ovigerous spines more than 3 times length of the abdomen *Monstrilla longiremis*
10. Genital segment slightly longer than the rest of the abdomen (including the furcum); 3 setae on fifth leg (Fig. 5a) .... *Monstrilla gracilicauda*
    Genital segment about $^2/_3$ of the length of the rest of the abdomen; 2 setae on fifth leg (Fig. 13b); cephalic segment squat (Fig. 13a) ..... *Monstrilla obesa*
11. Cephalic segment reticulated; fifth leg with an inner ramus (Fig. 8a) ..... *Monstrilla wandeli*
    Cephalic segment not reticulated; fifth leg without an inner ramus 12
12. Fifth legs narrow, bent in middle (Fig. 6a); genital segment longer than the rest of the abdomen (Fig. 6b); muscles red/brown in colour ..... *Monstrilla helgolandica*
    Fifth legs broad at base and narrow abruptly (Fig. 4a); genital segment shorter than the rest of the abdomen ..... *Monstrilla conjunctiva*

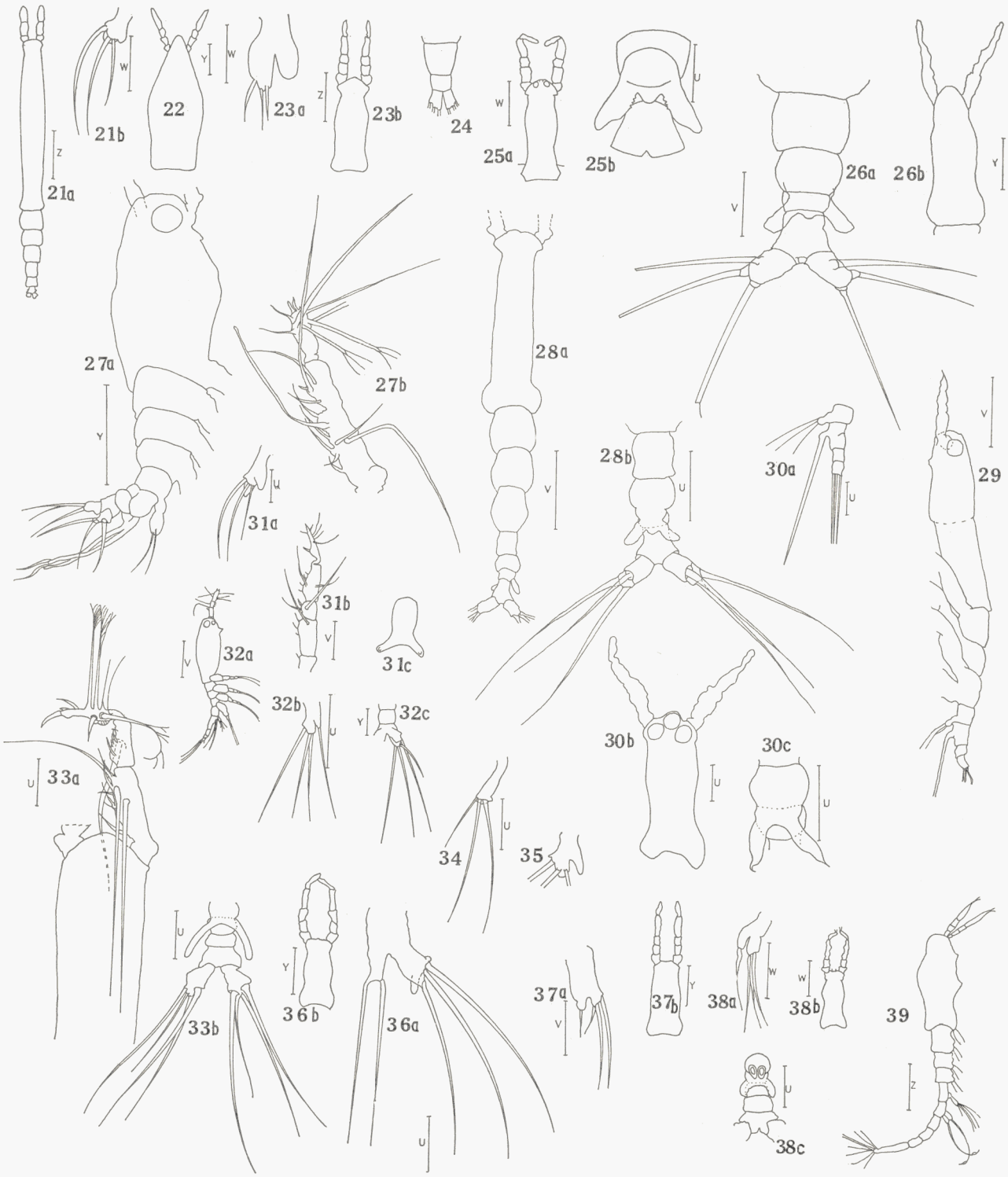
KEY 3

Thaumaleus, female

1. Second abdominal segment with suture (Fig. 16b) 2
   Second abdominal segment without suture (Fig. 17a) 5
2. Cephalic segment very long and narrow; antennae wide, massive and about 0.2 of the length of the cephalic segment (Fig. 21a) ..... *Thaumaleus frondipes*
   Cephalic segment not so elongate; antennae not massive and more than 0.2 of the length of the cephalic segment 3
3. Cephalic segment produced between the antennae (Fig. 22); genital segment about $^1/_2$ the length of the rest of the abdomen *Thaumaleus rostratus*
   Cephalic segment not produced so far between the antennae; genital segment more than $^1/_2$ the length of the rest of the abdomen 4
4. Fifth legs wide (Fig. 23a); genital segment approximately equal in length to the rest of the abdomen; ovigerous spines about $^1/_4$ of the body length ..... *Thaumaleus zetlandicus*
   Fifth legs narrower (Fig. 16a); genital segment shorter than the rest of the abdomen; ovigerous spines about $^1/_2$ the body length ..... *Thaumaleus rigidus*
5. Ovigerous spines $^1/_2$ body length or less 6
   Ovigerous spines at least $^3/_4$ of, or may be even longer than, the body 11
6. Anterior half of the cephalic segment striated, with a depression between the two halves when viewed laterally (Fig. 29). *Thaumaleus striatus*
   Cephalic segment not striated 7
7. No inner ramus on the fifth leg 8
   Fifth leg with inner ramus 9
8. Body less than 1.5 mm; cephalic segment lightly reticulated, genital segment with dorsal suture (Fig. 30a) ..... *Thaumaleus tumorifrons*
   Body more than 1.8 mm; cephalic segment not reticulated; genital segment without dorsal suture (Fig. 19) ..... *Thaumaleus claparedi*
9. Abdomen twisted, with two swellings on genital segment (Fig. 27a); muscles light grey in colour ..... *Thaumaleus pallidus*
   Abdomen not twisted; genital segment without the two swellings 10
10. Body less than 1.5 mm; genital segment swollen (Fig. 17a) ..... *Thaumaleus thompsoni*
    Body more than 2 mm; genital segment not swollen (Fig. 24) ..... *Thaumaleus malaquini*
11. Cephalic segment and antennae reticulated; fifth leg without an inner ramus (Fig. 20) ..... *Thaumaleus reticulatus*
    Cephalic segment and antennae not reticulated; fifth leg with an inner ramus (Fig. 18a) ..... *Thaumaleus longispinosus*



1. *Thespesiopsyllus paradoxus;* a. ♀ dorsal; b. ♂ 5th thoracic segment and abdomen, dorsal; c. ♂ antenna. 2. *Monstrilla longicornis;* a. ♀ dorsal; b. ♀ lateral; c. ♀ antenna; d. ♀ 5th leg; e. ♂ antenna. 3 .*M. longiremis;* a. ♀ dorsal; b. ♀ 5th leg; c. ♂ antenna; d. ♂ fifth thoracic segment and abdomen, ventral. 4. *M. conjunctiva;* a. ♀ 5th leg; b. ♂ 5th thoracic segment and abdomen, ventral. 5. *M. gracilicauda;* a. ♀ 5th thoracic segment and abdomen, ventral; b. ♀ 3rd abdominal segment and furcal rami, dorsal. 6. *M. helgolandica;* a. ♀ 5th leg; b. ♀ abdomen, lateral; c. ♂ tip of antenna. 7. *M. anglica;* a. ♂ 5th thoracic segment and abdomen, lateral; b. same, ventral. 8. *M. wandeli;* a. ♀ 5th leg; b. ♂ 5th thoracic segment and abdomen, lateral. 9. *M. canadensis;* a. ♂ antenna; b. ♂ genital apparatus. 10. *M. rugosa;* a. ♂ cephalic segment, dorsal; b. ♂ abdomen, ventral. 11. *M. floridana;* ♂ 5th thoracic segment and abdomen, dorsal. 12. *M. minuta;* ♂ lateral. 13. *M. obesa;* a. ♀ cephalic segment, lateral; b. ♀ 5th leg; c. ♂ abdomen, ventral. 14. *M. filogranarum;* ♀ 5th thoracic segment and abdomen, ventral. 15. *M. roscovita;* ♀ 5th thoracic segment and abdomen, ventral. 16. *Thaumaleus rigidus;* a. ♀ 5th leg; b. ♀ second abdominal segment and furcum, dorsal; c. ♂ dorsal. 17. *T. thompsoni;* a. ♀ 5th thoracic segment and abdomen, ventral; b. ♂ antenna; c. ♂ abdomen, ventral. 18. *T. longispinosus;* a. ♀ 5th leg; b. ♂ abdomen, ventral. 19. *T. claparedi;* ♀ lateral. 20. *T. reticulatus;* ♀ 5th leg.



21. *Thaumaleus frondipes;* a. ♀ dorsal; b. ♀ 5th leg. 22. *T. rostratus;* ♀ cephalic segment, dorsal. 23. *T. zetlandicus;* a. ♀ 5th leg; b. ♂ cephalic segment, dorsal. 24. *T. malaquini;* ♀ abdomen, dorsal. 25. *T. quadridens;* a. ♂ cephalic segment, dorsal; b. ♂ abdomen, ventral. 26. *T. similirostratus;* a. ♂ 5th thoracic segment and abdomen, ventral; b. ♂ cephalic segment, dorsal. 27. *T. pallidus;* a. ♀ dorso-lateral; b. ♂ antenna. 28. *T. tenuis;* a. ♂ dorsal; b. ♂ 5th thoracic segment and abdomen, ventral. 29. *T. striatus;* ♀ lateral. 30. *T. tumorifrons;* a. ♀ 5th thoracic segment and abdomen, lateral; b. ♂ cephalic segment, dorsal; c. ♂ genital apparatus. 31. *Monstrillopsis dubia;* a. ♀ 5th leg; b. ♂ antenna; c. ♂ genital apparatus. 32. *M. reticulata;* a. ♀ lateral; b. ♀ 5th leg; c. ♂ 3rd and 4th abdominal segments and furcum, dorsal. 33. *M. sarsi;* a. ♂ antenna and anterior part of cephalic segment, dorsal; b. ♂ abdomen, ventral. 34. *M. angustipes;* ♀ 5th leg. 35. *M. gracilis;* ♀ 5th leg. 36. *Strilloma grandis;* a. ♀ 5th leg; b. ♂ cephalic segment, dorsal. 37. *S. scotti;* a. ♀ 5th leg; b. ♂ cephalic segment, dorsal. 38. *S. lata;* a. ♀ 5th leg; b. ♂ cephalic segment, dorsal; c. ♂ abdomen, ventral. 39. *Thaumatohessia armoricana;* ♀ lateral.

Scale: u = 0.1 mm; v = 0.2 mm; w = 0.3 mm; x = 0.4 mm; y = 0.5 mm; z = 1.0 mm.

KEY 4

Strilloma and *?Thaumatohessia,* female

1. Abdomen elongate, approximately equal in length to the cephalic segment (Fig. 39); rudimentary mouthparts possibly present ..... *?Thaumatohessia armoricana*
   Abdomen $^1/_2$ or less of the length of the cephalic segment; rudimentary mouthparts never present ..... *Strillomas* 2
2. Fifth leg with 3 setae and tubercle on outer ramus and 2 setae on inner ramus (Fig. 36a) ..... *Strilloma grandis*
   Fifth leg with 3 setae and no tubercle on outer ramus and one seta on inner ramus 3
3. Body length 4 mm or more; inner ramus of fifth leg reaches beyond outer, innermost seta on outer ramus being approximately $^1/_3$ of the length of the other two (Fig. 37a) ..... *Strilloma scotti*
   Body length 3 mm or less; inner ramus of fifth leg shorter than outer ramus, all three setae on outer ramus being sub-equal (Fig. 38a) ... *Strilloma lata*

KEY 5 (will only work for good specimens)

Monstrilla, Monstrillopsis and *Strilloma,* male

1. Eyes very prominent ..... *Monstrillopsis* 2
   Eyes not very prominent 4
2. Body less than 0.8 mm; ridge across top of furcum (Fig. 32c) ..... *Monstrillopsis reticulata*
   Body more than 0.8 mm; ridge across ventral surface of furcum ..... *Monstrillopsis gracilis*
   Body more than 0.8 mm; no ridge on furcum 3
3. Antennae with very long terminal spine and ridged crescent on the distal end segment (Fig. 33a); genital appendage has two very long thin lappets (Fig. 33b) ..... *Monstrillopsis sarsi*
   Antennae with short terminal spine and no crescent (Fig. 31b); genital appendage has short lappets, but a longer base (Fig. 31c) ..... *Monstrillopsis dubia*
4. 3 furcal setae ..... *Thaumaleus zetlandicus**
   4 furcal setae 5
   5 or 6 furcal setae 9
5. Fifth legs absent; "mouth" about $^1/_3$ of the way back from anterior end of the cephalic segment ..... *Monstrilla floridana*
   Fifth legs present; mouth 0.4 or more of the way back from the anterior end of the cephalic segment 6
6. No bifurcating vibrissae on antennae; 2nd furcal seta shorter than the rest (Fig. 4b) 7
   Bifurcating vibrissae present on antennae (Fig. 2e); 3rd furcal seta shorter (sometimes only slightly) than the rest (Fig. 3d) 8
7. Cephalic segment reticulated; genital apparatus with a pair of pincer-like appendages (Fig. 8b) ..... *Monstrilla wandeli*
   Cephalic segment not reticulated; genital apparatus with a pair of simple appendages (Fig. 4b) ..... *Monstrilla conjunctiva*
8. 2nd proximal segment of antenna about 1.5 times the length of the 1st (Fig. 2e); fifth leg with 1 or 2 setae ..... *Monstrilla longicornis*
   2nd proximal segment of antenna about 2.75 times the length of the 1st (Fig. 3c); fifth leg with 1 seta ..... *Monstrilla longiremis*
9. Fifth legs absent or without any setae 10
   Fifth legs have at least, and usually only, one seta each 16
10. Antennal tip developed into a hood-like process (Fig. 9a); genital apparatus with about 6 spines on the edge of a notch (Fig. 9b) ..... *Monstrilla canadensis*
    No spines on genital apparatus 11
11. Antenna with 5 short spines or denticles on the inner edge near the tip (Fig. 6c); normally 5 furcal setae ..... *Monstrilla helgolandica*
    Antennae without the denticles; usually 6 furcal setae 12
12. Fifth legs represented by a pair of protuberances, without setae, on the ventral surface of the last thoracic segment (Fig. 7a); genital apparatus has two, long, unserrated lappets, with a shorter protuberance between them (Fig. 7b) ..... *Monstrilla anglica*
    Fifth legs completely lacking; genital apparatus not as above 13
13. Genital apparatus with an extremely short pair of, or no, lappets (Figs 12, 13c) 14
    Genital apparatus with 2 toothed or serrated lappets (Figs 10b, 38c) 15
14. Body length less than 0.75 mm; genital apparatus small and globular, with one backwardly-pointing protuberance (Fig. 12) *Monstrilla minuta*
    Body length more than 1.6 mm; genital appendage with a suggestion of lappets only (Fig. 13c) ..... *Monstrilla obesa*
15. Antennae equal to, or slightly longer than, the cephalic segment, which has a slight notch each side near the posterior end (Fig. 10a); abdominal segments sub-equal (3rd segment may be slightly shorter) (Fig. 10b) ..... *Monstrilla rugosa*
    Antennae shorter than cephalic segment, which has no posterior notches (Fig. 38b); abdominal segments as in Fig. 38c ..... *Strilloma lata*

* *Thaumaleus zetlandicus* may key out here, since, according to Scott (1904), the suture around the third abdominal segment looks very much like an intersegmental division.

16. Antennae longer than the cephalic segment (Fig. 36b); one of the furcal setae slightly shorter than the rest ..... *Strilloma grandis*
Antennae shorter than the cephalic segment (Fig. 37b); one furcal seta very much shorter than the rest (or may be absent) .. *Strilloma scotti**

KEY 6 (will only work for good specimens)

Thaumaleus, male

1. 3rd abdominal segment with suture (Fig. 16c) 2
3rd abdominal segment without suture 4
2. Cephalic segment greatly produced between the antennae (Fig. 26b); swelling present between the lappets on the genital apparatus (Fig. 26a) ..... *Thaumaleus similirostratus*
Cephalic segment slightly or not produced between the antennae; no swelling between the genital lappets 3
3. Cephalic segment with marked indentation near the anterior end (Fig. 23b); 3 furcal setae ..... *Thaumaleus zetlandicus*
Cephalic segment without the indentation (Fig. 16c); usually 4 furcal setae ..... *Thaumaleus rigidus*
4. Genital apparatus with a swelling between the lappets 5
Genital apparatus without the swelling between the lappets 6
5. 2 fine hairs between the eyes, and 2 hairs laterally at the base of the posterior enlargement of the cephalic segment (Fig. 25a); 4 teeth on the inside of the base of each genital lappet (Fig. 25b) ..... *Thaumaleus quadridens*
Body elongate (Fig. 28a); no hairs on cephalic segment; no teeth on genital lappets (Fig. 28b) ..... *Thaumaleus tenuis*
6. Genital lappets short and diverging, not reaching as far as $^1/_2$ way along the 3rd abdominal segment (Fig. 18b) .... *Thaumaleus longispinosus*
Genital lappets longer and more or less backwardly directed, reaching to, or beyond, $^1/_2$ way along the 3rd abdominal segment (Figs 17c, 30c) 7
7. Genital lappets with sharply pointed tips (Fig. 30c); 4 furcal setae ..... *Thaumaleus tumorifrons*
Genital lappets with more rounded tips (Fig. 17c); 3 furcal setae 8
8. Body less than 1 mm long; antennae thick with a swollen tip and no bifurcating vibrissae (Fig. 17b) ..... *Thaumaleus thompsoni*
Body more than 1 mm long; antenna with bifurcating vibrissae and without a noticeably swollen tip (Fig. 27b); muscles a pale grey colour ..... *Thaumaleus pallidus*

NOTES ON THE SPECIES AND THEIR DISTRIBUTION

MONSTRILLOIDA CYCLOPIMORPHA

Family Thespesiopsyllidae

1. *Thespesiopsyllus paradoxus* (Sars 1913) Wilson, 1932 = *Thaumatopsyllus paradoxus* Sars. Sars, 1921 pp. 4–6, pl. 1 (as *Thaumatopsyllus*); Wilson, 1932, p. 604 (footnote); Bresciani & Lützen, 1962, pp. 387–390, Fig. 5; Fosshagen, 1970. Length ♀ 1.51–1.65 mm; ♂ 0.76–1.08 mm. Larvae are gut parasites of the ophiuroids *Ophiopholis aculeata* (L.), *Ophiothrix fragilis* (Abildgaard) and *Ophiura albida* (Forbes).
Reported distribution: deep fjords of Norway and Sweden and the Skagerak.

MONSTRILLOIDA GENUINA

Family Monstrillidae

Genus *Monstrilla* Dana

2. *Monstrilla longicornis* Thompson, 1890 = *M. intermedia* Aurivillius = *M. clavata* Sars. Sars, 1921 pp. 11–13, pls. 2, 3, & 6. Length: ♀ 3.0–4.5 mm; ♂ 1.8–2.3 mm. Female varies considerably in size, which led Sars to believe there were two species; the larger he called *M. clavata.* Specimens have since been found which are intermediate between the two extremes.
Reported distribution: Pacific, N. Atlantic, Indian Ocean, Mediterranean, Indonesia.
3. *Monstrilla longiremis* Giesbrecht, 1892. Giesbrecht, 1892 pp. 589–590, pl. 46 Figs 10, 14, 22, 37 & 41; Sars, 1921 pp. 13–14, pls. 4 & 5. Length: ♀ 3–3.7 mm; ♂ 1.6–2.0 mm. This species is similar in structure to *M. longicornis*, but is distinguished in both sexes by the much longer antennae, whilst the fifth legs of the female differ slightly in structure (compare Figs 2d and 3b).
Reported distribution: North Sea, Atlantic, Mediterranean, N.E. Pacific.

* *Monstrilla conjunctiva* may occassionally key out here, since it sometimes has 5 furcal setae. It can be distinguished from *Strilloma scotti* thus:—
5 furcal setae present, one of which is shorter than the rest ..... *Monstrilla conjunctiva*
5 sub-equal furcal setae present, usually (but not always) with a much shorter sixth seta ..... *Strilloma scotti*

4. *Monstrilla conjunctiva* Giesbrecht, 1902 = *M. anglica* T. Scott = *M. leucopsis* Sars. Sars, 1921 pp. 15–16, pl. 7 (as *M. leucopsis*); Sewell, 1949, pp. 136–139, Fig. 38. Length: ♀ 3.3–3.85 mm; ♂ 1.5–1.6 mm.
   Reported distribution: North Sea, Indian and Antarctic Oceans.
5. *Monstrilla gracilicauda* Giesbrecht, 1892. Giesbrecht, 1892, p. 589, pl. 46 Figs 9, 16, 18, 29, 32 & 43; Sars, 1921, pp. 16–17, pl. 8. Length: ♀ 2.7–3.55 mm. Male unknown; possibly this species is the female of *M. anglica* Lubbock.
   Reported distribution: N. Atlantic, Arctic, Mediterranean, Indian Ocean, Pacific, Indonesia.
6. *Monstrilla helgolandica* Claus, 1863 = *M. serricornis* Sars. Sars, 1921, pp. 18–19, pls. 9 & 10 Fig. 1 (♂ as *M. serricornis*); Pelseneer, 1914, pp. 8–14, pl. 3; Gallien, 1934; Park, 1967, pp. 149–150, Fig. 3. Length: ♀ 1.4–2.31 mm; ♂ 1.75 mm or less. Larvae are parasites of the gastropod *Brachystomia scalaris* (Macgillivray) (= *Odostomia rissoides* Hanley).
   Reported distribution: more or less world-wide.
7. *Monstrilla anglica* Lubbock, 1857. Bourne, 1890, p. 576, pl. 37 Figs 5, 6, 7, 9. Length: ♂ 1.25–1.7 mm. Female unknown—but is possibly *M. gracilicauda*. Reported distribution: more or less world-wide.
8. *Monstrilla wandeli* Stephensen, 1913. Park, 1967, pp. 144–149, Figs 1 & 2. Length: ♀ 1.98–2.46 mm, ♂ 1.63 mm. Cephalic segment is reticulated in both sexes.
   Reported distribution: W. Greenland, N.W. coast of America.
9. *Monstrilla canadensis* McMurrich, 1917. McMurrich, 1917, pp. 47–50, Figs 1–6. Length: ♂ 1.4–1.5 mm. Female unknown.
   Reported distribution: Hudson Strait, N.E. Atlantic.
10. *Monstrilla rugosa* Davis, 1947. Davis, 1947, pp. 391–393, pl. 1. Length: ♂ 1.3 mm. Female unknown. Chitin wrinkled just posterior to the "mouth".
    Reported distribution: Florida.
11. *Monstrilla floridana* Davis, 1949. Davis, 1949, p. 254, pl. 1 Fig. 10. Length: ♂ 1.05–1.74 mm. Female unknown. Abdominal segments 3 and 4 partly fused (Fig. 11).
    Reported distribution: Florida.
12. *Monstrilla minuta* Isaac, 1974a. Isaac, 1974a, pp. 129–130, Fig. 2. Length: ♂ 0.49 mm. Female unknown. "Mouth" forward facing (Fig. 12).
    Reported distribution: Irish Sea.
13. *Monstrilla obesa* sp.n. Isaac, 1974b, pp. 43–45, Sect. 2 Figs 3 & 4. Length: ♀ 3.06 mm, ♂ 2.3 mm.
    Reported distribution: Channel Islands.
14. ?*Monstrilla filogranarum* (Malaquin, 1896) = *Thaumaleus filigranarum* Malaquin = *Haemocera filogranarum* Malaquin. Malaquin, 1901, pp. 110, 195, Fig. 3 (as *Haemocera*). Length unknown. Male unknown. Larvae are parasites of the serpulid polychaete *Filograna implexa* Berkely.
    Reported distribution: English Channel.
15. ?*Monstrilla roscovita* (Malaquin, 1901) = *Haemocera roscovita* Malaquin. Malaquin, 1901, pp. 110, 195–196, Fig. 5 (as *Haemocera*). Length unknown. Male unknown. Larvae are parasites of *Filograna setosa* Langerhans.
    Reported distribution: British waters.

Genus *Thaumaleus* Kröyer

16. *Thaumaleus rigidus* (Thompson, 1888) = *Cymbasoma rigidum* Thompson = *Thaumaleus germanicus* Timm = *T. danae* Claparède = *Monstrilla ostroumowi* Karavaev. Malaquin, 1901, pp. 109–110, 124–195, Figs 2, 6, 7, 8, pls. 2–8 (as *Haemocera danae*); Sars, 1921, pp. 21–22, pls. 10 & 11 (as *Cymbasoma rigidum*); Caullery & Mesnil, 1914, pp. 17–21, Fig. 1 (as *Thaumaleus germanicus*). Length: ♀ 2.2–3 mm, ♂ to 1.75 mm. Larvae are parasites of the polychaetes *Polydora giardi* Mesnil and *Salmacina dysteri* Huxley.
    Reported distribution: most seas and oceans of the northern hemisphere.
17. *Thaumaleus thompsoni* Giesbrecht, 1892 = *Monstrilla danae* Moebius. Giesbrecht, 1892, pp. 584, 585, pl. 46 Figs 7, 27, 31, 36 & 40; Sars, 1921, pp. 23–24, pl. 12 (as *Cymbasoma*). Length: ♀ 0.8–1.2 mm, ♂ 0.65–0.8 mm.
    Reported distribution: more or less world-wide.
18. *Thaumaleus longispinosus* (Bourne, 1890) = *Monstrilla longispinosa* Bourne = *Monstrilla danae* Clève = ?*Monstrilla longissima* Kriczagin. Bourne, 1890, p. 575, Figs 1, 2, 3, 4 & 10 (as *Monstrilla*); Giesbrecht, 1892, pp. 583, 585, pl. 5 fig. 10, pl. 46 Figs 1, 4, 6, 12, 13, 23, 30, 38 & 42; Sars, 1921, pp. 24–25, pl. 13 (as *Cymbasoma*). Length: ♀ 2.3–3.16 mm, ♂ 1.8–2.3 mm. Ovigerous spines sometimes longer than the body.
    Reported distribution: more or less world-wide.
19. *Thaumaleus claparedi* Giesbrecht, 1892. Giesbrecht, 1892, p. 585, pl. 46 Figs 5, 15, 21 & 26. Length: ♀ 2.25 mm. Male unknown.
    Reported distribution: Mediterranean, North Sea.
20. *Thaumaleus reticulatus* Giesbrecht, 1892. Giesbrecht, 1892, p. 585, pl. 46 Figs 3, 20, 28, 33 & 34. Length: ♀ 2.1 mm. Male unknown. Cephalic segment reticulated.
    Reported distribution: Mediterranean, North Sea.
21. *Thaumaleus frondipes* (T. Scott, 1904) sp. n. = *T. thompsoni* Scott. Scott, 1904, p. 248, pl. 14 Figs 1–4 (as *T. thompsoni*). Length: ♀ 4.8 mm. Male unknown. Fifth leg of female "moderately large and foliaceous". (Fig. 21b), antennae massive.
    Reported distribution: East coast of Britain.

22. *Thaumaleus rostratus* T. Scott, 1904. Scott, 1904, p. 250, pl. 14 Figs 5–8. Length: ♀ 3.9 mm. Male unknown, but may be *T. similirostratus*. There may be three abdominal segments in the female, but Scott probably mistook a suture on the second abdominal segment for an intersegmental division.
Reported distribution: Shetlands.
23. *Thaumaleus zetlandicus* T. Scott, 1904. Scott, 1904, pp. 249–250, pl. 13 Figs 18 & 19, pl. 14 Figs 20–22, pl. 15, Figs 3 & 4. Length: ♀ 4.8 mm, ♂ 2.6 mm. Scott probably mistook a suture for an intersegmental division, but his figure of the male shows what are possibly setae on a pair of fifth legs, in which case the species will probably be *Monstrilla*, with four abdominal segments in the male.
Reported distribution: Shetlands, English Channel.
24. *Thaumaleus malaquini* (Caullery & Mesnil, 1914). Caullery & Mesnil, 1914, pp. 21–25, Figs 2–5 (as *Cymbasoma*). Length: ♀ 2.5–4.0 mm. Male unknown. Larvae are parasites of the polychaete *Syllis gracilis* Grube.
Reported distribution: English Channel.
25. *Thaumaleus quadridens* (Davis, 1947). Davis, 1947, pp. 393–395, pl. 2 (as *Cymbasoma*). Length: ♂ 1.14 mm. Female unknown.
Reported distribution: Florida.
26. *Thaumaleus similirostratus* Isaac, 1974a. Isaac, 1974a, pp. 131–132, Fig. 3. Length: ♂ 2.8 mm. Female unknown; possibly this species is the male of *T. rostratus*.
Reported distribution: Bristol Channel.
27. *Thaumaleus pallidus* Isaac, 1974a. Isaac, 1974a, pp. 132–134, Figs 4 & 5. Length: ♀ 1.8 mm, ♂ 1.5–1.7 mm.
Reported distribution: Bristol Channel.
28. *Thaumaleus tenuis* Isaac, 1974a. Isaac, 1974a, pp. 134–135, Fig. 6. Length: ♂ 1.1 mm. Female unknown.
Reported distribution: Bristol Channel.
29. *Thaumaleus striatus* Isaac, 1974a. Isaac, 1974a, pp. 135–136, Fig. 7. Length: ♀ 0.95 mm. Male unknown.
Reported distribution: Bristol Channel, Channel Islands.
30. *Thaumaleus tumorifrons* sp.n. Isaac, 1974b, pp. 59–61, Sect. 2 Figs 17 & 18. Length: ♀ 0.76–1.03 mm, ♂ 0.69–0.95 mm. Male has very prominent eyes, the central one of which is partly in a prominence between the antennae (Fig. 30b).
Reported distribution: Mediterranean.

Genus *Monstrillopsis* Sars

31. *Monstrillopsis dubia* (T. Scott, 1904) = *Monstrilla dubia* Scott. Sars, 1921, pp. 26–27, pl. 14. Length: ♀ 2.7–3.8 mm, ♂ 2.1 mm.
Reported distribution: North Sea, North Atlantic, Mediterranean.
32. *Monstrillopsis reticulata* (Davis, 1949) = *Monstrilla reticulata* Davis. Davis, 1949, pp. 251–252, pl. 1 Figs 1–9 (as *Monstrilla*). Length: ♀ 0.67–0.74 mm, ♂ 0.56 mm. Cephalic segment of female reticulated, male not reticulated. Last abdominal segment fused dorsally and ventrally with furcum (Fig. 32b).
Reported distribution: Florida.
33. *Monstrillopsis sarsi* Isaac, 1974a. Isaac, 1974a, p. 137, Fig. 8. Length: ♂ 1.2 mm. Female unknown. Reported distribution: Bristol Channel.
34. *Monstrillopsis angustipes* sp.n. Isaac, 1974b, pp. 63–64, Sect. 2 Fig. 20. Length: ♀ 1.44 mm. Male unknown.
Reported distribution: Mediterranean.
35. *Monstrillopsis gracilis* (Gurney, 1927). Vilela, 1968, p. 45, pl. 17 Fig. 3a–e (as *M. dubia*); Isaac, 1974b, pp. 64–65, Sect. 2 Fig. 21. Length: ♀ 1.4–2.3 mm.
Reported distribution: Bristol Channel, Channel Islands, Portuguese coast, Suez, Red Sea.

Genus *Strilloma* Isaac

36. *Strilloma grandis* (Giesbrecht, 1891) = *Monstrilla grandis* Giesbrecht = *M. intermedia* Kriczagin. Giesbrecht, 1892, pp. 588–589, pl. 46 Figs 2, 8, 11, 17, 19, 24, 25, 35, & 39 (as *Monstrilla*); Isaac, 1974a, pp. 128–129, Fig. 1 (as *Monstrilla*). Length: ♀ 1.8–3.75 mm, ♂ 0.65–1.9 mm. Normally six furcal setae, but one is often missing from the smaller males.
Reported distribution: more or less world-wide.
37. *Strilloma scotti* (T. Scott, 1904) sp. n. = *Monstrilla grandis* Scott. Scott, 1904, pp. 243–244, pl. 13 Figs 11 & 12, pl. 14 Figs 9–11, pl. 15 Figs 1 & 2 (as *Monstrilla grandis*). Length: ♀ 4.25 mm, ♂ 2.0 mm.
Reported distribution: Firth of Clyde.
38. *Strilloma lata* (Desai & Bal, 1963) = *Monstrilla lata* Desai & Bal. Desai & Bal, 1963. Length: ♀ 1.6 mm, ♂ 1.1 mm.
Reported distribution: Indian coast (Bombay), Firth of Forth.

Genus *Thaumatohessia* Giard

39. ?*Thaumatohessia armoricana* (Hesse) Giard = *Thaumatoëssa armoricana* Hesse. Hesse, 1868, pp. 362–370, pl. 19 Figs 20–34; Giard, 1900, pp. 395–396. Length: ♀ 5 mm. Male unknown. One specimen seen by Hesse in 1849 in a tuft of seaweed, so the species may not be planktonic. The description shows rudimentary mouthparts.
Reported distribution: Brest.

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Hesse, 1868, fig. 39; Giesbrecht, 1892, Figs 19, 20, 36b; Malaquin, 1901, Figs 14, 15; Scott, 1904, Figs 21a & b, 22, 23b, 37a & b; Caullery & Mesnil, 1914, Fig. 24; Mcmurrich, 1917, Figs 9a & b; Sars, 1921, Figs 1a, 2a–e, 3a–d, 4a & b, 5a & b, 6a–c, 16a–c, 17a–c, 18a & b, 31a–c; Davis, 1947, Figs 10a & b, 25a & b; Davis, 1949, Figs 11, 32a & b; Desai & Bal, 1963, Figs 38b & c; Park, 1967, Figs 8a & b; Vilela, 1968, Fig. 35; Fosshagen, 1970, Figs 1b & c.

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