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RESULTS

OF THE

SWEDISH ZOOLOGICAL EXPEDITION

TO

EGYPT AND THE WHITE NILE

1901

UNDER THE DIRECTION

OF

*Edward Axel*  
L. AXEL JÄGERSKIÖLD

PART I

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# Terrestrial Isopoda

from Egypt

by

**G. Budde-Lund**

of Copenhagen.

(With a plate.)



The first list of the Egyptian terrestrial Isopods is contained in the great work "Description de l'Égypte" Paris 1826. SAVIGNY there published with extraordinary beautiful drawings a number of ten species, those are: 1. *Ligia italica* FABR., 2. *Tylos Latreillei*, 3. *Porcellio (Oniscus) Olivieri*, 4. *Metoponorthus (Porcellio) Clairvillei*, 5. *Hemilepistus (Porcellio) Reaumuri*, 6. *Porcellio lævis* LATR. (P. DEGEERII), 7. *Metoponorthus (Porcellio) Swammerdami*, 8. *Leptotrichus (Porcellio) Panzeri*, 9. *Armadillidium vulgare* LATR. (*Armadillo* sp.), 10. *Armadillidium badium* B.-L.? (*Armadillo* sp.). The species are delineated with some enlargement and the most part of them with details, so that it is sufficient for recognition of almost all the species.

Since then several species have been brought home to different European museums by several collectors, so that I could enumerate in "Crustacea Isopoda Terrestria" 1885 26 species as found in Egypt.

The Swedish Expedition has again found some of the already known species and two new species added to the fauna, which also amounts to 28 species in all. I give in the present paper a list of all the Egyptian Terrestrial Isopods hitherto found and their distribution in other countries.

Besides the new species, No. 20—21, *Angara lenta* and *A. obtusa*, which I wish on this occasion to describe because my earlier description of the first species made after very bad material is not sufficient and the other is hitherto unknown, the Expedition has brought back specimens of two species No. 25 & No. 26, *Periscyphis convexus* and *P. albescens*, each of which have previously occurred in a single specimen, and I have made use of this material in combination with materials from other parts to give a new description over the characters for the genus *Periscyphis*.

The Egyptian Fauna of Terrestrial Isopods is entirely Mediterranean, all the species below mentioned have their nearest allies in South Europe, N. Africa and Asia Minor, only the two species of *Periscyphis* are typical African, and all the other species of this genus, as I have here limited it, are found in the middle of Africa.

Familia: ***Oniscidae***.

Genus: ***Armadillo***.

1. ***Armadillo officinalis***.

*Armadillo officinalis* DESM. — B.-L. Rev. Crust. Isop. Terr. p. 98. Tb IX. f. 8—16.

Patria: Egypt (Mus. Berlin; Mus. St. Petersburg). This species is very widely distributed over all the countries round about the Mediterranean Sea, and seems to be very abundant in many localities.

2. ***Armadillo sodalis***.

*Armadillo sodalis* B.-L. Crust. Isop. Terr. p. 286. — Rev. Cr. Is. Ter. p. 114.

Patria: Egypt. I have only seen the type specimen of this species in the Museum at Berlin.

Genus: ***Armadillidium***.

3. ***Armadillidium decorum***.

*Armadillidium decorum* BRANDT. — B.-L. Crust. Is. Terr. p. 64.

Patria: Egypt (Mus. Berlin); this species is also found in Sicily.

4. ***Armadillidium mareoticum***.

*Armadillidium mareoticum* B.-L. Crust. Is. Terr. p. 59.

Patria: Egypt (Mus. St. Petersburg), not known anywhere else.

**5. Armadillidium granulatum.**

*Armadillidium granulatum* BRANDT. — B.-L. Crust. Is. Terr. p. 57.

Patria: Egypt. (Mus. St. Petersburg); this species is widely distributed over all the countries round about the Mediterranean Sea, and lives principally on the shores.

**6. Armadillidium frontirostre.**

*Armadillidium granulatum* VOGL. Verh. Zool.-bot. Ges. Wien. XXV. p. 509. Tb. XI. f. 3.

„ *frontirostre* B.-L. Crust. Is. Terr. p. 52.

Patria: Egypt (sec. VOGL). A common species in Italy and Dalmatia, also found in Corfu.

**7. Armadillidium badium.**

? *Armadillo* sp. AUD. & SAV. l. c. XXII. p. 290. Tb XIII. f. 9.

*Armadillidium badium* B.-L. Crust. Is. Terr. p. 60.

Patria: Egypt (Mr. FISCHER in Mus. St. Petersburg); occurs also commonly in Sicily and S. Italy.

**8. Armadillidium fallax.**

*Armadillidium fallax* BRANDT. — B.-L. Crust. Is. Terr. p. 65.

Patria: Egypt (Mus. Berlin); also found in Palestine (sec. DOLLFUS).

**9. Armadillidium Ehrenbergi.**

*Armadillidium Ehrenbergii* BRANDT. — B.-L. Crust. Is. Terr. p. 66.

Patria: Egypt (Mus. Berlin).

**10. Armadillidium Hemprichi.**

*Armadillidium Hemprichii* BRANDT. — B.-L. Crust. Is. Terr. p. 66.

Patria: Egypt (Mus. Berlin).

Remarks. Perhaps this and the preceding species are a little doubtful.

**11. Armadillidium vulgare.**

*Armadillo* sp. AUD. & SAV. l. c. XX. 290. Tb. XIII. f. 8.

*Armadillidium vulgare* LATR. — B.-L. Crust. Is. Terr. p. 66.

Patria: Egypt (SAVIGNY). An almost cosmopolitan species.

**12. Armadillidium sanctum.**

*Armadillidium sanctum* DOLLF. Rev. biolog. Nord-Fr. 1892. Tb. I. f. 2.

Patria: Egypt (Mr. LETOURNEUX in coll. DOLLFUS); also in Palestine.

Genus: **Porcellio.**Subgenus: **Porcellio.****13. Porcellio lævis.**

*Porcellio Degeerii* AUD. & SAV. l. c. XXII. 289. Tb. XIII. f. 5.

„ *lævis* LATR. — B.-L. Crust. Is. Terr. p. 138.

Patria: Egypt (SAVIGNY; Mus. St. Petersburg). Cairo, many specimens collected the 6 Jan. 1901; the 4 Jan. 1901 one specimen (Swedish Exped. in Mus. Stockholm & Göteborg). A cosmopolitan species.

**14. Porcellio Olivieri.**

*Oniscus Olivieri* AUD. & SAV. l. c. XXII. 289. Tb. XIII. f. 2.

*Porcellio Olivieri* B.-L. Crust. Is. Terr. p. 141.

Patria: Egypt (SAVIGNY; Mus. St. Petersburg; Mus. Schaufuss, Dresden; Mr. LETOURNEUX in coll. DOLLFUS). This species is distributed throughout N. Africa from Tunis to Palestine.

Subgenus: **Hemilepistus.****15. Hemilepistus Reaumuri.**

*Porcellio Reaumurii* AUD. & SAV. l. c. XXII. 289. Tb. XIII. f. 4.

*Hemilepistus Reaumurii* B.-L. Crust. Is. Terr. p. 155.

Patria: Egypt (SAVIGNY); distributed in desert localities from Algeria throughout N. Africa to Asia Minor.

**16. Hemilepistus brevicaudatus.**

*Porcellio brevicaudatus* BR. Consp. 18.

*Hemilepistus* „ B.-L. Crust. Is. Terr. p. 159.

Patria: Egypt; I have only seen the type specimen in the museum at Berlin.

Subgenus: **Metoponorthus.****17. Metoponorthus pruinus.**

? *Porcellio Clairvillii* AUD. & SAV. l. c. XXII. 289. Tb. XIII. f. 3.

„ *pruinus* BR. Consp. 19.

*Metoponorthus pruinus* B.-L. Crust. Is. Terr. p. 169.

Patria: Egypt, at Cairo the 18 May Dr. I. TRÄGÅRDH has taken 6 specimens and on the 4 Jan. 1901 many specimens. A cosmopolitan species (Mus. Stockholm & Göteborg).

**18. Metoponorthus Swammerdami.***Porcellio Swammerdamii* AUD. & SAV. l. c. XXII. 289.*Metoponorthus* „ B.-L. Crust. Is. Terr. p. 172.

Patria: Egypt (Mus. St. Petersburg); at Mansurah (Mr. K. HOLTEN in Mus. Kjøbenhavn); also in Palestine (Dr. BARROIS in coll. DOLLFUS).

Remarks. This species is very closely allied to *M. pruinosus*.

Subgenus: **Leptotrichus.****19. Leptotrichus Panzeri.***Porcellio Panzerii* AUD. & SAV. l. c. XXII. 290.*Leptotrichus* „ B.-L. Crust. Is. Terr. p. 193.

Patria: Egypt (SAVIGNY; Mus. Berlin; Coll. E. SIMON); Cairo, many specimens collected the 4—6 Jan. 1901 (Swedish Exped. in Mus. Stockholm & Göteborg). This species is widely distributed in S. Europe, N. Africa and Asia Minor.

Subgenus: **Angara.**

In this new subgenus I collect some small species of *Porcellio* and I give below the reasons for this separation and a survey over the few known forms. Two species are found in Egypt:

**20. Angara lenta.***Lyprobius lentus* B.-L. Crust. Is. Terr. 230.*Leptotrichus lentus* DOLLF. Mém. soc. zool. Fr. IX. 542. 1896.

Patria: Egypt; at Cairo Dr. I. TRÄGÅRDH has taken some specimens in Januar and May 1891 (Mus. Stockholm).

**21. Angara obtusa** n. sp.

Patria: Among some specimens of the preceding were also some of this new species (Mus. Stockholm).

Subgenus novum: **Angara.**

Superficies minute squamata et setigera, vix vel rarissime minute granulata.

Oculi parvi, ocelli pauci.

Antennae breves, tertiam corporis partem vix superantes; flagelli articulus prior altero duplo vel triplo brevior.

Frons ante saltem in lateribus lobata; linea marginalis verticalis utrinque ad lobos laterales frontales producta et cum eis conjuncta, non in pleuras capitis decurrens.

Mandibularum lacinia interior penicillis tribus in mandibula dextra, penicillis quinque in mandibula sinistra.

Maxillarum prioris paris lamina exterior dentibus 10 (4+6), omnibus apice integris; lamina interior spina posteriore brevi, penicillis ambobus longis, subæqualibus.

Maxillipedum mala spina longiore et aculeis 3 majoribus, anteriore quam duobus posterioribus paululo minore.

Trunci segmentum 1. area articulari capitis lata, profundiore, integra, utrinque ante linea ordinaria, laterali, decurrente nulla; margo posterior curvatus. Segmentum 2. pronoto mediocri, in lateribus non prominente, processu laterali nullo; margo posterior curvatus vel subtransversus.

Caudæ pleopodum exopodita primi et secundi paris tracheis magnis, in femina inter se longe distantia.

Telson breve, triangulum.

Uropodum scapus latere exteriori subintegro, sutura longitudinali, post levissime incisa, divisa.

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In addition to the above given generic characters I shall bring forward a character by which the species of this subgenus are easily recognized among the *Porcelliones*, the peculiar shape of the articulation between the head and the first truncal segment. The hindermost part of the head has on the under side a large articular plane divided only in the front in a narrow plate with shelving direction toward the large foramen capitis. The marginal line of the head ordinarily runs down on each side, and divides the pleuræ of the head, but here it is produced forward and connected with the marginal line of the front and the pleuræ are divided by an infraverticall suture. An other peculiar character is the form of the scapus of the uropods, having the exterior side without the deep incisure, common in the most forms among the *Porcelliones*.

I know in all four species of *Angara*, exclusively inhabitants of the countries around the Mediterranean, they are:

1. *Angara lenta* B.-L.

(Tab. I Fig. 1—16.)

Ovalis, convexiuscula; superficies dense et minute squamata et setigera, vix granulata.

Ocelli numero c. 10, paulum inter se distantes.

Antennarum flagelli articulus prior duplo vel paulo plus longior quam articulus alter.

Lobi frontales laterales majores, paulum oblique rotundati et leviter extro versi; frons media sublobate producta. Epistoma crista transversa inter lobos laterales in media semicirculari producta munitum.

Trunci segmentum 1. margine postico curvato, angulis externis late rotundatis; segmentum 2. margine postico subtransverso, ad angulos externos, rotundatos levissime incurvo; segmentum 3. margine postico subtransverso, ad angulos externos, subrectos, paulum retroductos leviter incurvo; segmenta sequentia margine postico in medio leviter incurvo, angulis lateralibus acutius retroductis.

Caudae segmenta 3. 4. 5. epimeris mediocribus; epimera segmenti 5. telsum non superantia.

Telsum triangulum, paulo latius quam longius, lateribus subrectis, ad basin utrinque incurvis, supra leviter excavatum, apice obtusiore.

Uropodum scapus satis brevior quam telsum; endopoditum telsum paulum superans.

Color e griseo brunneus, lateribus albidis cum serie longitudinali macularum rotundarum nigra fusca.

Long. 5—6 mm. Lat. 2,5—3 mm.

Patria: Algeria, at Msila (E. SIMON), at Biskra and at Touggourt (sec. DOLLFUS); Italy, at Aspromonte (H. J. HANSEN in Mus. Kjøbenhavn). Egypt (vide supra).

2. *Angara hirta*.

*Lucasius hirtus* AUB. & DOLLF. Soc. d'étud. sc. Paris 1890, p. 8 (sep.).  
Tb. I, f. 3.

Ovalis, convexiuscula; superficies maxime ante minute granulata, dense squamata et crinita.

Antennarum flagelli articulus prior altero fere triplo brevior.

Lobi frontales laterales breviores, æqualiter rotundati; frons medio prominens, non lobata. Crista epistomatis minus manifesta.

Trunci segmenta 1. et 2. margine postico curvato, angulis externis late rotundatis; segmentum 3. margine postico subtransverso angulis externis vix retroductis; segmentum 4. margine postico subtransverso, angulis externis paulum retroductis.

Telsum triangulum, lateribus leviter incurvis, apice acutiore.

Color griseus, in medio corpore obscurior, in lateribus delete obscure maculatus.

Long. 3,5—4 mm. Lat. 1,7—2 mm.



Patria: I have taken a single specimen at Genova and also at Roma in the neighbourhood of a little Formica; Mr. FIL. SILVESTRI has taken some specimens at Palermo. Mr. DOLLFUS says it is frequent at Marseille, living with the ants.

### 3. *Angara obtusa* n. sp.

(Tab. I Fig. 17—18.)

Breviter ovalis, convexiuscula; superficies minute et dense squamata.

Ocelli numero c. 10.

Lobi frontales laterales breviores, late rotundati; linea marginalis frontalis in medio leviter procurva, nullum lobum formans. Crista semicircularis epistomatis manifesta.

Trunci segmenta tria priora margine postico valde curvato, angulis externis late rotundatis, obtusis; segmenta 4. et 5. margine postico subtransverso vel utrinque ad angulos externos levissime incurvo, angulis paululum retroductis.

Caudæ segmentum 5. epimeris brevibus, quam telso satis brevioribus.

Telsum breve triangulum, multo latius quam longius, lateribus ad basin utrinque incurvis, supra leviter excavatum, apice acutiore.

Uropodum endopoditum telsum satis superans.

Subunicolor, albida, post paulum obscurior.

Long. 3 mm. Lat. 1,6 mm.

Patria: Egypt (vide supra).

### 4. *Angara minuta* n. sp.

(Tab. I Fig. 19.)

Breviter ovalis, convexiuscula; superficies transverse maxime ante scabrius granulata, granulis dense squamatis, et sparse setigera.

Ocelli numero c. 10.

Antennarum flagelli articulus prior minimus, articulo altero triplo vel fere quadruplo brevior.

Lobi frontales laterales mediocres, late et æqualiter rotundati; linea frontalis marginalis in medio paulum obtuse producta. Crista semicircularis epistomatis magna et manifesta.

Trunci segmentum 1. margine postico curvato, angulis externis late rotundatis; segmenta 2. et 3. margine postico subtransverso vel leviter curvato, angulis rotundate obtusis; segmenta 4. et 5. margine postico subtransverso, angulis paulum retroductis; omnia segmenta margine laterali paulum prominente.

Telsum latum, triangulum, satis latius quam longius, lateribus ad basin utrinque leviter incurvis, apice acutiore.

Uropodum endopoditum telsum paulum superans.

Unicolor, grisea.

Long. 2—2,5 mm. Lat. 1—1,5 mm.

Patria: Tunis, at Porto Tunis and at "Sidi Bel Akaren" (FIL. SILVESTRI).

Genus: **Philoscia.****22. Philoscia muscorum.**

*Oniscus muscorum* SCOPOLI, Ent. Carn. 415.

*Philoscia muscorum* B.-L., Crust. Is. Terr. 207.

Patria: Egypt (Mus. Berlin); this species is widely distributed over Europe, N. Africa and Asia Minor, also found in N. America.

**23. Philoscia Ehrenbergi.**

*Philoscia Ehrenbergii* BRANDT. — B.-L. Crust. Is. Terr. 216.

Patria: Egypt (EHRENBERG in Mus. Berlin). Suez (E. SIMON in coll. DOLLEFUS).

**24. Philoscia longicornis.**

*Philoscia longicornis* B.-L. Crust. Is. Terr. 221.

Patria: Egypt at Alexandria (Mr. LETOURNAUX in coll. DOLLEF.).

Remarks. Not all the localities enumerated in the Crust. Is. Terr. pag. 222 are belonging to this species. The localities from the South coasts of the Mediterranean Sea certainly are to refer to this species while the localities from France belong to *Ph. Couchi* KINAH., a species very different from *Ph. longicornis* B.-L. and perhaps identical with *Ph. cellaria* DOLLEF. — The description in l. c. is made after genuine specimens of *Ph. longicornis* B.-L.

Genus: **Periscyphis.****25. Periscyphis convexus.**

(Tab. I Fig. 20—25.)

(*Cercocytonus*) *Periscyphis convexus* B.-L. Crust. Is. Terr. 44 & 293.

Patria: Egypt (Mr. FISCHER in Mus. St. Petersburg). Eleven specimens were taken at the railway between Luxor and Assuan under stones the 23 Januar 1901 (Swedish Exped. in Mus. Stockholm & Göteborg). Also taken at Philæ, Assuan, Karnak (Jan. 1896, Dr. W. MICHAELSEN in Mus. Hamburg), at Luxor (17/3 1899, Prof. KRAEPELIN, *ibid.*), at Assiut and at Luxor (March 1904, Dr. R. SCHÜTT, *ibid.*).

**26. Periscyphis albescens.**

(Tab. I Fig. 26—28.)

(*Cercocytonus*) *Periscyphis albescens* B.-L. Crust. Is. Terr. 43 & 293.

Patria: Egypt (Mr. FISCHER in Mus. St. Petersburg 1852). In the month of Februar 1901, the Swedish Expedition took

two specimens at Khartum under decaying leaves, and in the month of May five specimens at Cairo under stones (Mus. Stockholm).

The genus *Periscyphis* to which the two above quoted species belong is instituted by Gerstaecker in the year 1873<sup>1</sup>. He refers it in his paper in the Fam. *Oniscidæ* to the *Tribus Armadillini*, and describes the species *P. trivialis* from East-Africa. I myself have also placed the two species near *Armadillo*. Now I am not sure of the justness of this opinion but I cannot here give reason for an alteration.

The species I later have brought in this genus<sup>2</sup> are not all rightly placed here, some seem to be more akin to the genus *Synarmadillo* DOLLF.

I give below the characters over the genus *Periscyphis*, as I have now restricted it, and in the tabula illustrations over the most important details.

### Periscyphis.

Antennarum flagellum articulo priore altero longiore.

Oculi magni; ocelli numerosi, c. 25—30.

Mandibularum lamina interior penicillis duobus in mandibula dextra, penicillis tribus in mandibula sinistra. Seta inferior radice longo, solido, inferiore, supra ramis et setulis numerosis instructo.

Maxillæ primi paris lamina exterior in apice dentibus 9; lamina interior post spina apicali nulla, penicillo superiore quam inferiore brevior.

Maxillipedum articulus labialis perlatus; mala brevis, spina longa, aculeis nullis vel perparvis; palpus angustus, articulo 3. multis partibus longiore quam latiore, spina apicali singula longa instructo.

Epistoma linea superiore in medio sæpissime deleta a fronte discretum. Foramina antennarum mediocra, tubercula antennaria parva, sæpe subdeleta. Clypeus brevis, subfornicatus, in lateribus lobatus. Pleuræ capitis concretæ; linea marginalis verticalis utrinque fere ad marginem frontalem producta.

<sup>1</sup> Die Gliederthier-Fauna des Sansibar-Gebietes, nach dem Material der v. D. DECKEN'schen Expedition. Leipzig 1873.

<sup>2</sup> G. BUDDE-LUND: Die Land-Isopoden Ost-Afrikas in Deutsch Ost-Afrika IV.

Trunci segmentum 1. epimero ante crasso, reflexo, post tenui, plerumque sulco suturali a medio segmenti discreto, angulo postico integro. Segmentum 2. epimeris integris, pronoto satis longo. Margo posterior segmentorum priorum utrinque leviter incurvus, angulis posticis rotundatis, non retroductis. Marsupium nullum?

Caudæ segmenta 3. 4. 5. epimeris mediocribus; epimera segmenti 5. post subparallela, telsum non superantia. Pleopodes primi et secundi paris trachea parva muniti.

Telsum medio anguste triangulo producto.

Uropodum scapus magnus, oblique rotundate tetragonus. Exopoditum parvum vel perparvum, fossæ lateris posterioris prope angulum internum insertum. Endopoditum mediocre, telsum rarissime superans.

Familia: *Ligiidae*.

Genus: *Ligia*.

27. *Ligia italica*.

*Ligia italica* FALR. Suppl. Ent. Syst. II. 302.

" " AUD. & SAV. l. c. XXII. 285. Tb. XII. f. 7.

" " B.-L. Crust. Is. Terr. 269.

Patria: Egypt (SAVIGNY). A common species on the sea-shore in almost all the countries adjacent to the Mediterranean Sea, also found in the Madeira and Canary Islands.

Familia: *Tylidae*.

Genus: *Tylos*.

28. *Tylos Latreillei*.

*Tylos Latreillei* AUD. & SAV. l. c. XXII. 285—287. Tb. XIII. f. 1.

" " B.-L. Crust. Is. Terr. 273. — Deutsche S.-Polar-Exped. IX. Zool. I p. p. 74. Tb. IV. f. 1—13.

Patria: Egypt (SAVIGNY). This species seems to be widely distributed on the sea-shores of all the countries around the Mediterranean Sea; it burrows in the sand on the beaches to a depth of few centim. and seems to come up in the evening; in such manner I have collected many specimens at Pisa Marina in Italy by turning the sand over. I can also refer to my remarks l. c. of *Tylos capensis* KRAUSS that Prof. VANHÖFFEN has found at the Cape under similar circumstances.

## Tabula I.

Fig. 1—16. *Angara lenta* B.-L.

1. Antenna dextra.  $\frac{25}{1}$ .
2. Antennula dextra.  $\frac{75}{1}$ .
3. Caput, pronum.  $\frac{25}{1}$ .
4. Caput, a latere sinistro exhibitum.  $\frac{12}{1}$ .
5. Caput, vertice supino.  $\frac{35}{1}$ .
6. Mandibula sinistra, supina.  $\frac{135}{1}$ .
7. Mandibula sinistra: seta inferior pressa.  $\frac{250}{1}$ .
8. Maxilla sinistra: lamina exterior, supina.  $\frac{250}{1}$ .
9. Trunci segmentum primum, pronum.  $\frac{12}{1}$ .
10. Trunci segmentum secundum, pronum: latus dextrum.  $\frac{25}{1}$ .
11. Pleopus sinister primi paris maris, supinus.  $\frac{25}{1}$ .
12. Pleopus sinister secundi paris maris, supinus.  $\frac{25}{1}$ .
13. Pleopus sinister primi paris feminae, supinus.  $\frac{25}{1}$ .
14. Pleopus sinister secundi paris feminae, supinus.  $\frac{25}{1}$ .
15. Pleopus sinister secundi paris feminae, pronus.  $\frac{50}{1}$ .
16. Uropus sinister, a latere exteriori exhibitus.  $\frac{50}{1}$ .

Fig. 17—18. *Angara obtusa* B.-L.

17. Maxillipes sinister, supinus.  $\frac{135}{1}$ .
18. Pleopus dexter primi paris maris.  $\frac{35}{1}$ .

Fig. 19. *Angara minuta* B.-L.

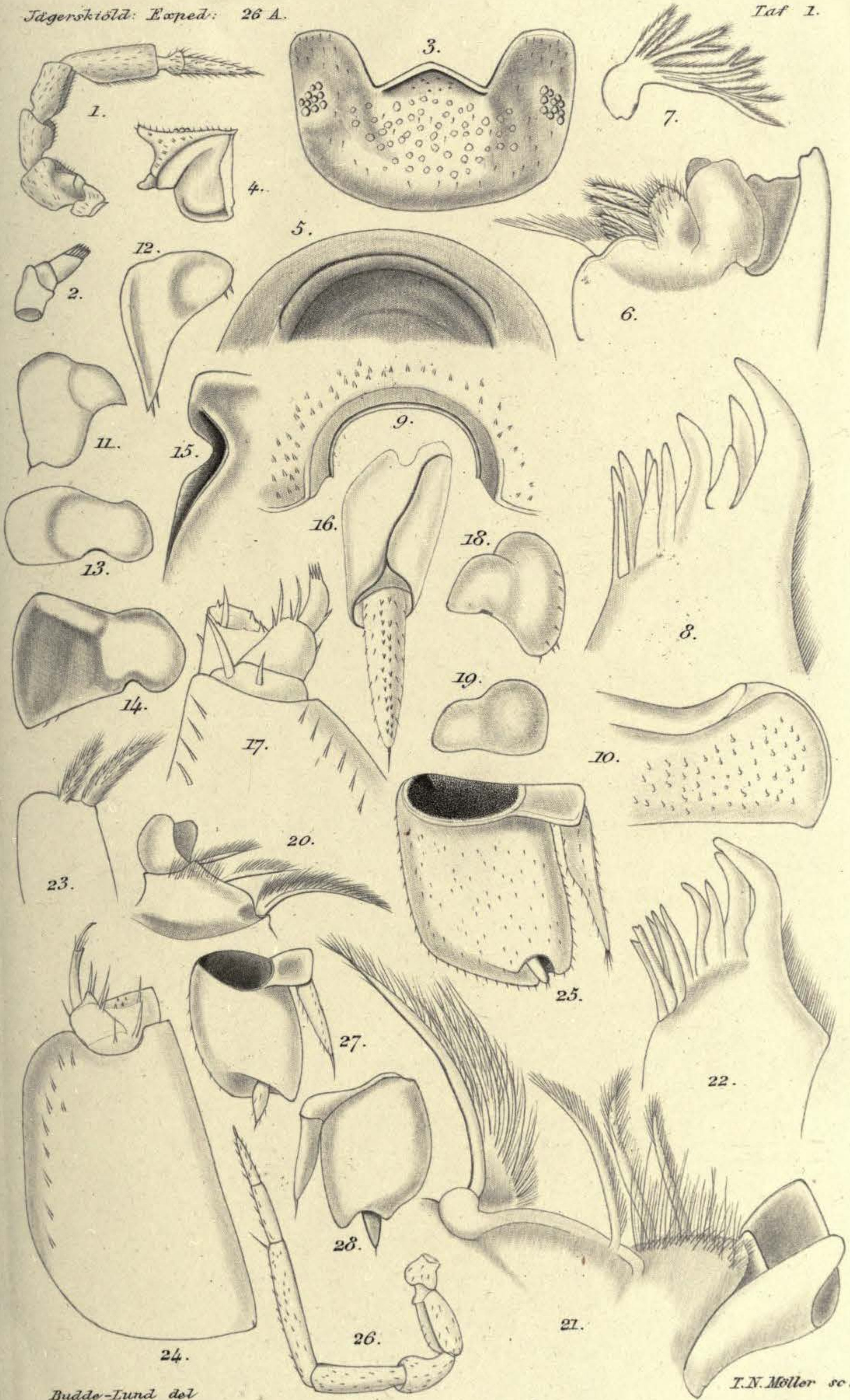
19. Pleopus dexter primi paris maris.  $\frac{75}{1}$ .

Fig. 20—25. *Periscyphis convexus* B.-L.

20. Mandibula dextra, lacinia interior.  $\frac{75}{1}$ .
21. Mandibula sinistra, lacinia interior.  $\frac{250}{1}$ .
22. Maxilla sinistra: lamina exterior, supina.  $\frac{135}{1}$ .
23. Maxilla sinistra: lamina interior.  $\frac{135}{1}$ .
24. Maxillipes dexter, supinus.  $\frac{75}{1}$ .
25. Uropus sinister, pronus.  $\frac{35}{1}$ .

Fig. 26—28. *Periscyphis albescens* B.-L.

26. Antenna dextra.  $\frac{25}{1}$ .
27. Uropus sinister, pronus.  $\frac{25}{1}$ .
28. Uropus sinister, supinus.  $\frac{25}{1}$ .



Buddo-Lund del

I.N. Möller sc.