Desmodora (Croconema) stateni Allgén

Fig. 118 a---d

Desmodora stateni ALLGÉN 1928, p. 265-267, fig. 7 a-c; Desmodora armata DITLEVSEN 1930, p. 232, fig. 50-53; Desmodora stateni ALLGÉN 1932, p. 454, fig. 12 a-c; Desmodora armata DITL. ALLGÉN 1932, p. 458-459, fig. 18 a-b; Desmodora parasitifera ALLGÉN 1949, p. 5, "footnote"; Croconema stateni (ALLGÉN) WIESER 1954, p. 38, fig. 114 a-f

Localities and material. — Fuegian Archipelago, St. 64: 833, 1799, 4 juv.; Falkland Islands, St. 15: 599, 2 juv.; St. 40: 19; St. 42: 733, 899, 4 juv.; St. 42a: 399; St. 49: 1 juv.; St. 51: 933, 1899 6 juv.; St. 53: 233, 399, 1 juv.; St. 55: 13, 699, 5 juv.; St. 56: 19;



Desmodora stateni Allgén a. Head Q, × 450, b. Head O, × 450, c. Tail, O × 270, d. Tail Q, × 270

St. 58: 599; St. 59: 799, 1 juv.; South Georgia, St. 28: 19, 1 juv.; Graham Land, St. 8: 1 juv.

Dimensions: $\delta L = 2,250 \text{ mm.}, \quad \alpha = 19,57, \quad \beta = 7,03, \quad \gamma = 17,31$ $\Diamond L = 2,240 \text{ mm.}, \quad \alpha = 19,48, \quad \beta = 7,47, \quad \gamma = 16,0$ $\Diamond L = 2,365 \text{ mm.}, \quad \alpha = 22,52, \quad \beta = 7,63, \quad \gamma = 15,10$

From the above localities numerous specimens of a *Desmodorid* were collected, which in their general shape seem to agree exactly with *Desmodora armata*, described by DITLEVSEN (1930) from New Zealand.

This is the case especially with the numerous males in the present material, the spicular apparatus and the rather remarkable supplementary auxiliary organs which are quite identical with the instructive figures given by DITLEVSEN from the male of the New Zealand species.

Already earlier, the author had, however, described, from the Staten Island (1928) in the Fuegian Archipelago, another new species, *Desmodora stateni*, which, although known only in a single female, seems to show striking similarity to the New Zealand species, both in the shape and structure of its head (cephalic cuticle and bristles, lateral organs) and in the shape of its tail.

The rather strongly developed submedian hairs of the cuticle are also characteristic of this and the Staten Island species.

In a small paper on 2 new Subantarctic Suctoria, found epizoic on a *Desmodora* from West Falkland (nearest to the Staten Island), the author (1949) had described, preliminary in a foot-note, the single nematode specimen, infected by the Suctoria, as a new species, *Desmodora parasitifera*.

Now that numerous other specimens of the same *Desmodora* have been brought home in the present material by the Swedish Antarctic Expedition, e. g. from the Falklands (material at that time not studied), it is not possible to regard them any longer as distinct from the 2 already known species.

The last-mentioned species, *D. parasitifera*, is, instead, identical with *D. stateni*, and both these species are, no doubt, synonymous with *D. armata* DITLEVSEN, described in the male specimen more exactly and pictured more instructively than I could do with the single young Staten Island female.

Because the species from the Staten Island was described in 1928, *D. armata* not before 1930, *Desmodora stateni* according to the priority rule must be the valid name of this Southern species.

Remark. WIESER (1954, p. 37 and 38) places Desmodora stateni and D. armata — and he seems to regard them not as identical but as distinct — in Croconema COBB 1920 and writes on this item (p. 37): That ALLGÉN'S Desmodora stateni actually belongs to Croconema, could already be inferred from the author's figures and by his remark: "Die Haut der ungeringelten Hinterpartie des Schwanzes zeigt eine gleichförmige Punktierung." My fairly rich material enables me to give an emended description of the species and at the same time to consider its possible synonymy with Mastodex kerguelensis STEINER. Since I am, however, not sure as to this latter point, the name stateni may be retained for the time being.

When now I have found that it seems to be right to refer the 2 named Southern Desmodores

to Croconema, I have in my type-script — already ready for printing — pointed out my changed opinion in Croconema — put into parenthesis () between the generic name Desmodora and the species-name stateni.

Probably this also holds good for D. stateni aberrans and D. reducta and also for some other *Desmodores*, described in this paper.

Against that, I must once more (last time) definitely dispute the rightness of the opinion WIESER's, according to which *Desmodora* (*Croconema*) stateni and *D. armata* should not be synonymous but different species.

WIESER says only, that his material was rich but *does not mention* the number of the animals studied by him.

Probably the material at the author's disposal is as rich as or perhaps richer than the Chilean material WIESER's.

When now, indeed, as already expressed above (compare also ALLGÉN 1953), all specimens — females and males — of D. stateni, studied by the author, are quite identical with D. armata, the 2 Southern species must without any hesitation be regarded as synonymous.

Desmodora (Croconema) stateni, described 2 years earlier than D. armata, according to the priority rule therefore remains as the valid name of this disputed Southern species.

The body is clumsy, short to more elongated, only more strongly thickened in the sex region, for the rest on the whole rather evenly thick.

The cuticle is strongly annulated, and in usual manner surrounded by bands, being rather broad in the oesophageal region, posteriorly, however, more slender.

The head, the cuticle of which being rather thick and smooth, not annulated, is truncate, mostly as long as broad. The posteriorly thickened head-cuticle is penetrated by sense hairs and on the whole interrupted by numerous small locules and fissures.

Cephalic bristles short, slender, in typical arrangement of 3-4 circlets.

Buccal cavity probably armed far anteriorly with a small clumsy, acute, conical, dorsal tooth.

The lateral organs are situated just at the level of the dorsal tooth. They are small, thickwalled, simply spiral-shaped and composed only of a single convolution.

The oesophagus is short, thin to moderately thick, posteriorly bulb-like swollen.

Also the tail is short, measuring 2 times the anal body diameter, slightly curved, conical, posteriorly truncate to more sharply pointed, provided with a slender end tip. The posterior part is finely annulated, but without bands, instead of which the cuticle is finely granulated. This end part of the tail measures 2/5 to half the length of the tail.

The spicules and the auxilliary organs are typical. The vulva is situated behind the middle of the body (V = 65,5 %).

The female organs are paired-symmetrical with reflexed ovaries.

Geographical distribution. Staten Island (ALLGÉN 1928), Chile ("sublittoral, mostly soft bottom" WIESER).

Occurrence of Thecacineta subantarctica Allgén in Desmodora stateni.

Of the two new species of Suctoria, already described by the present author (1949) from the Falklands, *Thecacineta paradesmodorae* only has been refound in a single female *Desmodora* from St. 59 and in a juvenile specimen from St. 42. All other Suctoria, refound in *Desmodora stateni* and *D. campbelli*, are typical representatives of *Thecacineta subantarctica*, the occurrence of which is to be seen in the tables p. 276.

List of Localities

- St. 1. Off the Coast of Uruguay. Black-grey clay. 33° 0′ S. 51° 10′ W. 80 m. 12. 12. 1901. Number of species found: 8; Number of specimens found: 21.
- St. 2. Off the Coast of North Argentina. 37° 15' S. 56° 8' W. Sand-mixed gravel. 100 m. 23. 12. 1901. Number of species found: 12; Number of specimens found: 26.
- St. 3. Fuegian Archipelago. 54° 43′ S. 64° 8′ W. Rubble stones and gravel. 36 m. 6. 1. 1902. Number of species found: 20; Number of specimens found: 37.
- St. 5. Graham Region. S. East of the Seymour Sound. 64° 20' S. 56° 38' W. Sand and gravel. 150—200 m. 16 1. 1902.

Number of species found: 1; Number of specimens found: 10.

- St. 6. Graham Region. 64° 36′ S. 57° 42′ W. Stones and gravel. Mud-sample. 125 m. 20. 1. 1902. Number of species found: 29; Number of specimens found: 40.
- St. 7. Graham Region. 65° 56' S. 54° 35' W. Stone-mixed mud. 920 m. 22. 1. 1902. Number of species found: 3; Number of specimens: 7.
- St. 8. Graham Region. Position of the station as well as depth uncertain. 64° 5' S. 56° 37' W. Loose clay. 360 m. 11. 2. 1902.

Number of species: 9; Number of specimens: 33.

- St. 11. Graham Region. 65° 19' S. 56° 48' W. Gravel-mixed clay. 400 m. 18. 2. 1902. Number of species: 31; Number of specimens: 68.
- St. 15. Falkland Islands. Port William. 51° 40′ S. 57° 49′ W. Macrocystis-Formation. 10 m. 31. 3. 1902. Number of species found: 44; Number of specimens: 150.
- St. 18. South Georgia. Mouth of the Westfiord, Cumberland Bay. 54° 15' S. 36° 25' W. Loose clay. 250 m. Bottom temp. + 1,2 C. 22. 4. 1902.
 Number of species: 13; Number of specimens found: 125.
- St. 21. South Georgia. Mouth of the Possession-Bay. 54° 8′ S. 37° 3′ W. Clay. 200 m. 9. 5. 1902. Bottom temp. + 1,5 C.

Number of species found: 15; Number of specimens found: 79.

St. 22. South Georgia. Off the May-Bay. 54° 17' S. — 36° 28' W. Clay with some algae. 75 m. Bottom temp. + 1,5 C. 14. 5. 1902.
Number of species found: 26; Number of specimens found: 85. St. 22a. South Georgia. Cumberland, May-Bay. Catching over stony bottom among algae in and under the tide zone. 5. 5. 1902.

- St. 22b. South Georgia. Grytviken. 22. 5. 1902 and 20 m. depth. 11. 6. 1902. Number of species found: 16; Number of specimens found: 77.
- St. 22c. South Georgia. Grytviken, from old kelp-rhizoids. 23. 5. 1902. Number of species found: 45; Number of specimens found: 350.
- St. 22d.South Georgia. Grytviken. Sample of fine washings from old kelp. 22. 5. 1902. Number of species found: 22; Number of specimens found: 200.
- St. 23. South Georgia. Off the mouth of the Moraine-Bay. 54° 23' S. -- 36° 26' W. Grey clay with gravel and stones. 64-74 m. Bottom temp. + 1,65 C. 16. 5. 1902.
 Number of species found: 32; Number of specimens found: 147.
- St. 23a. South Georgia. Moraine-Fiord. 148 m. Bottom temp. 0,35 C. 15. 2. 1902. Number of species found: 14; Number of specimens found: 51.
- St. 23b. South Georgia. Moraine-Fiord. 14 m.
 - Number of species found: 12; Number of specimens found: 49.
- St. 24. South Georgia. Off the "Kochtopf"-Bay. 54° 22' S. 36° 37' W. Grey clay. 95 m. 20. 5. 1902. Number of species found: 23; Number of specimens found: 120.
- St. 25. South Georgia. Off the "Kochtopf"-Bay 54° 22' S. 36° 27' W. Grey clay with some algae. 24— 52 m. 21. 5. 1902.
 - Number of species found: 29; Number of specimens found: 83.
- St. 26. South Georgia. Off the "Kochtopf"-Bay. 54° 22' S. 36° 27' W. Stony bottom with algae off the Macrocystis-Formation. 30 m. 24. 5. 1902.

Number of species found: 11; Number of specimens found: 29.

- St. 28. South Georgia. Mouth of the "Kochtopf"-Bay. 54° 22′ S. 36° 28′ W. Sand and algae. 12--15 m. 24. 5. 1902.
 - Number of species found: 58; Number of specimens found: 338.
- St. 30. South Georgia. The Moraine-Fiord. 54° 24' S. 36° 26' W. Clay with sparse stones. 125 m. Bottom temp. 0,25 C. 26. 5. 1902.
 Number of species found: 23: Number of specimens found: 247.
- St. 33. South Georgia, in the "Kochtopf"-Bay. 54° 22′ S. 36° 28′ W. Clay and algae. 22 m. 30. 5. 1902. Number of species found: 23; Number of specimens found: 106.
- St. 34. South Georgia. Off the mouth of the Cumberland-Bay. 54° 11' S. 36° 18' W. Grey clay with a few stones. 250—310 m. Bottom temp. + 1,45 C. 5. 6. 1902. Number of species found: 38; Number of specimens found: 224.
- St. 39. Falkland Islands. Port William. 51° 40′ S. 57° 41′ W. Sand and small stones with algae. 40 m. 4. 7. 1902.

Number of species found: 11; Number of specimens found: 12.

St. 40. Falkland Islands. Berkeley Sound. 51° 33′ S. - 58° 0′ W. Gravel and shells with algae. 16 m. Bottom temp. - 2,75 C. 19. 7. 1902.

Number of species found: 54; Number of specimens found: 291.

- St. 41. Falkland Islands. Port Louis, shallow water. 51° 33' S. 58° 9' W. Number of species found: 51; Number of specimens found: 310.
- St. 42. Falkland Islands. Port Louis. 51° 33' S. 58° 9' W. Ooze and shells. 8 m. 26. 7. 1902. Number of species found: 55; Number of specimens found: 372.
- St. 42a. Falkland Islands. Port Louis: Greenpatch. Material shaked up from algae and kelp-rhizoids, cast up on shore by storm. 30. 7. 1902. Number of species found: 54; Number of specimens found: 150.
- St. 46. Falkland Islands. Port Louis. Carenage Creek. 51° 32′ S. 58° 7′ W. Sandy bottom with quantities of Codium. 1 m. 9. 8. 1902.

Number of species found: 28; Number of specimens found: 103.

St. 47. Falkland Islands. Port Louis. Mouth of the Carenage Creek. 51° 32′ S. — 58° 7′ W. Shells and stones. 3—4 m. 9. 8. 1902.

Number of species found: 63; Number of specimens found 247.

Number of species found: 11; Number of specimens found 63.

- St. 49. Falkland Islands. Berkeley Sound. 51° 35′ S. 57° 56′ W. Shells and stones. 25–30 m. 10. 8. 1902. Number of species found: 27; Number of specimens found: 58.
- St. 51. Falkland Islands. Port William. 51° 40′ S. 57° 42′ W. Sand. 22 m. 3. 9. 1902. Number of species: 45; Number of specimens found: 245.
- St. 53. Falkland Islands. Port William. 51° 40′ S. 57° 47′ W. Sand and gravel. 12 m. 3. 9. 1902. Number of species found: 65; Number of specimens found: 372.
- St. 54. Falkland Islands. Stanley Harbour. 51° 42′ S. 57° 50′ W. Ooze with shells. 10 m. 3. 9. 1902. Number of species found: 2; Number of specimens found: 7.
- St. 55. Falkland Islands. Port Albemarle. 52° 11′ S. 60° 26′ W. Sandy bottom with algae. 40 m. 8. 9. 1902.

Number of species found: 33; Number of specimens found: 113.

- St. 56. Falkland Islands. Port Albemarle. Albemarle Harbour. 52° 9′ S. 60° 33′ W. Sandy bottom with algae. 15 m. 8. 9. 1902. Number of species found: 15; Number of specimens found: 40.
- St. 57. Falkland Islands. Port Albemarle. Albemarle Harbour. 52° 8' S. 60 ° 33' W. Sand. 18—30 m. 11. 9. 1902.

Number of species found: 21; Number of specimens found: 40.

St. 58. Falkland Islands. S. W. West Falkland. 52° 29′ S. -- 60° 36′ W. Sand and gravel. 197 m. 11. 9. 1902.

Number of species found: 23; Number of specimens found: 93.

St. 59. Falkland Islands. S. W. West Falkland. On the Burdwood-Bank. 53° 45′ S. — 61° 10′ W. Crushed shells with stones 137—150 m. 12. 9. 1902. Number of species found: 20; Number of specimens found: 70.

- St. 62. Fuegian Archipelago. Beagle-Channel. 54° 53' S. 67° 56' W. Sand-mixed clay. 140 m. 16. 9. 1902. Number of species found: 12; Number of specimens found: 63.
- St. 64. Fuegian Archipelago. North side of the Beagle Channel between Ushuaia and Lapataia. 54° 52′ S. — 68° 25′ W. Shells and algae. 35 m. 13. 10. 1902. Number of species found: 33; Number of specimens found: 192.
- St. 67. Fuegian Archipelago. Ushuaia. 54° 49' S. 68° 18' W. Ooze. 6 m. 16. 10. 1902. Number of species found: 9; Number of specimens found: 42.