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SCALISPINIGERA OCULATA HARTMAN, 1967 (SCALIBREGMATIDAE: POLYCHAETA): SENIOR SYNONYM OF *LACYDONIA ANTARCTICA* (LACYDONIIDAE) HARTMANN-SCHRÖDER & ROSENFELDT, 1988

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Abstract.—*Scalispinigera oculata* Hartman, 1967, originally placed in the polychaete family Scalibregmatidae, is transferred to *Lacydonia* Marion & Bobretzky, 1875, in the family Lacydoniidae. *Scalispinigera oculata* is the type species of the genus, and *Scalispinigera* is consequently synonymized with *Lacydonia*. The second species described in the genus, *S. cirrata* Hartman & Fauchald, 1971, is likewise transferred to *Lacydonia*. Based on examination of the types *Lacydonia antarctica* Hartmann-Schröder & Rosenfeldt, 1988 is considered to be a junior synonym of *Lacydonia oculata* (Hartman, 1967), new combination. The relationship of *L. oculata* to *L. mikrops* Ehlers, 1913 is discussed.

Hartman (1967) described the new genus and species *Scalispinigera oculata* from the Antarctic Peninsula, and, with a note that it did not conform to the conventional definition of the family, placed it in the family Scalibregmatidae. Examination of the holotype of *S. oculata* indeed indicates that the species actually belongs to the genus *Lacydonia* Marion & Bobretzky, 1875, family Lacydoniidae Bergström, 1914. The position of *S. oculata* has been questioned earlier in studies by Kudenov & Blake (1978) and Blake (1981), in the former considered to be of uncertain position, in the latter questionably referred to the Hesionidae.

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Apart from *L. oculata* seven species are included in *Lacydonia*:

L. miranda Marion & Bobretzky, 1875, from Mediterranean
L. mikrops Ehlers, 1913, from Antarctic
L. papillata Ushakov, 1958, from Kurile Trench, NW Pacific
L. incognita Rullier, 1965, from West Africa
L. cirrata Hartman & Fauchald, 1971, new combination, from U.S. east coast
L. laureci Laubier, 1975, from Mediterranean
L. antarctica Hartmann-Schröder & Rosenfeldt, 1988, from Antarctic

Of these, *L. antarctica* is here considered a junior synonym of *L. oculata*.

The redescription of *Scalispinigera oculata* presented here is based completely on the holotype. Drawings were completed with a camera lucida. Institutions and museums are indicated by the following abbreviations: CENTOB (Centre National de Tri d'Océanographique Biologique, Brest), USNM (National Museum of Natural History, Smithsonian Institution, Washington, D.C.), ZMH (Universität Hamburg, Zoologisches Institut und Museum).

Family Lacydoniidae Bergström, 1914

Genus *Lacydonia* Marion & Bobretzky, 1875

Lacydonia Marion & Bobretzky, 1875:57–61.
Scalispinigera Hartman, 1967:134.

Type species.—*Lacydonia miranda* Marion & Bobretzky, 1875, by monotypy.

Description.—Body-size small. Prostomium rounded, with four small, smooth frontal antennae. One pair of eyes or eyes lacking. Proboscis unknown. First visible segment achaetous, with one pair of small tentacular cirri. Parapodia and setae present from segment 2. Anteriormost parapodia uniramous, lacking dorsal setigerous lobes; following parapodia biramous with separate noto- and neuropodial setigerous lobes, aciculae and setae. All parapodia with small, inflated dorsal and ventral cirri. Notosetae capillaries, neurosetae composite spinigers. One pair of pygidial cirri.

Lacydonia oculata (Hartman, 1967), new combination
Fig. 1

Scalispinigera oculata Hartman, 1967:134–135, pl. 41A–C.—Kudenov & Blake, 1978:428, 441.—Blake, 1981:1131, 1157.
Lacydonia antarctica Hartmann-Schröder & Rosenfeldt, 1988:36, figs. 11–13. New synonymy.

Material examined.—*Scalispinigera oculata* holotype (USNM 47326), Antarctic Peninsula, Anvers Island, Fort Lockroy, off Wiencke, 64°68′S, 63°30′W, shore, coll. W. Schmitt. *Lacydonia antarctica* holotype (ZMH 19098) and paratype (ZMH 19099), Antarctic Peninsula, King George Island, 62°05.3′S, 57°39′W, 265 m, coll. U. Mühlenhardt-Siegel; 1 specimen (ZMH P-20529), Antarctic, Elephant Island, 61°09.7′S, 56°10.3′W, 290 m, coll. U. Mühlenhardt-Siegel, det. G. Hartmann-Schröder & P. Rosenfeldt.

Description.—Holotype of *S. oculata* complete, 6 mm long and 0.8 mm wide (setiger 17, including parapodia but excluding setae) for ca. 45 setigers. Body dorso-ventrally flattened, widest anteriorly, slowly tapering posteriorly.

Prostomium rounded, slightly incised anteriorly, about twice as wide as long (Fig. 1A, B). Paired antennae small, papilliform, difficult to discern, ventral pair situated in small depressions (Fig. 1B). Pair of large eyes, anteriorly situated; lenses not observed. Small rounded median antenna situated just posterior to eyes. Proboscis not observed. Segment 1 with one pair of small rounded tentacular cirri (Fig. 1A, B). Segments 2–4 uniramous, without notopodial setigerous lobes, neuropodia with setigerous lobes bearing composite neurosetae. Parapodia following segment 4 biramous. Segments biannulated with small intersegmental areas dorsally and ventrally. Indistinct transverse ridges present medially on each segment (bands of cilia?). Notopodia from segment 2 with inflated dorsal cirrus, ovoid with pointed tips, inserted near notopodial base. Setigerous lobe conical, with single notoacicula (Fig. 1C). Notosetae long, smooth capillaries. Neuropodium with conical setigerous lobe, single neuroacicula slightly stouter than notoacicula. Neurosetae composite spinigers, long and thin with single-toothed rostrum, blade serrated. Ventral cirrus similar to dorsal in size and shape, inserted subdistally on neuropodium. Pygidium with two small inflated cirri and median ventral papilla (Fig. 1D).

Color: Eyes black. Body brownish yellow, darker brown pigment present laterally on each segment, extending both dorsally and ventrally. Most dorsal and ventral cirri with dark pigmented tips.

Remarks.—Hartman's interpretation of the characters of *S. oculata* was clearly influenced by the fact that she considered the specimen to be a scalibregmatid. Contrary to the description above, she stated that biramous parapodia were present from seg-

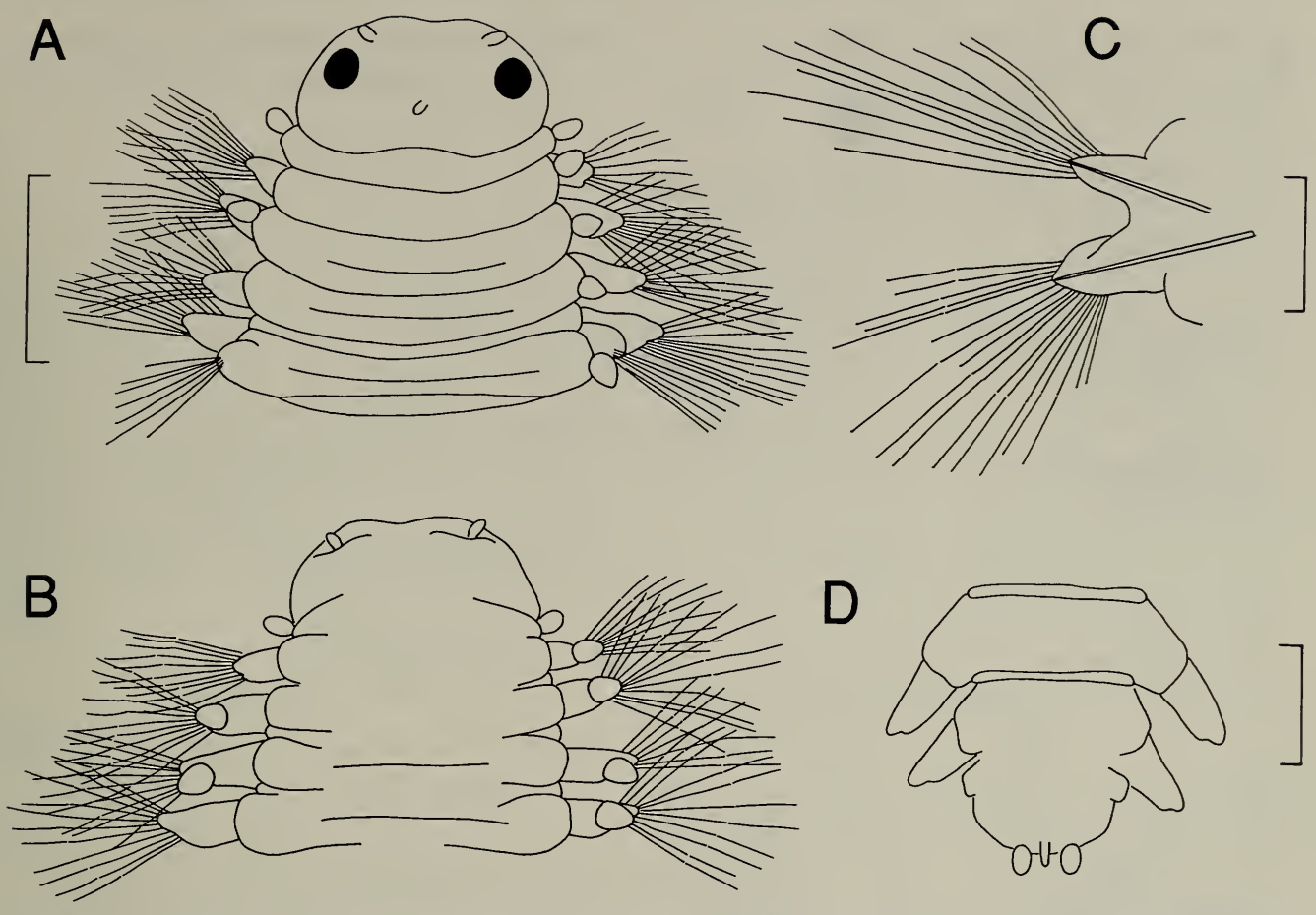

Fig. 1. *Lacydonia oculata,* holotype (USNM 47326). A. Anterior end, dorsal view. B. Anterior end, ventral view. C. Left parapodium from ca. segment 20, posterior view. Only about half of full number of setae shown. D. Posterior end, ventral view. Setae omitted. Scale lines A–B 250 μm, C 250 μm, D 100 μm.

ment 2, that dorsal and ventral cirri were lacking, that the segments were triannulated, and that the epithelium was weakly aerolated (probably segmental bands of cilia with adhering particles).

Hartman's species obviously is a lacydoniid, and the type species, *L. miranda,* is illustrated here (Fig. 2) for comparison. As noted by Cantone (1973) the species is provided with five antennae, rather than four; the median one was overlooked by Marion & Bobretzky (1875) in their original description. While we see no obvious differences between *L. oculata* and *L. miranda,* we would not synonymize the two species. We consider common Antarctic and Mediterranean distributions of these species to be highly unlikely, and such a conclusion would have to be based on other material and methods. The intent was to place the species described by Hartman (1967) into the correct familial context, and a revision of the family Lacydoniidae is beyond the scope of this paper.

Hartmann-Schröder & Rosenfeldt (1988), in their description of *L. antarctica,* only discussed two *Lacydonia*-species: *L. miranda* (which incorrectly was stated to have four rather than five antennae; observations based on examination of western Mediterranean specimens) and *L. laureci.* Possibly they overlooked the existence of Ehlers' species *L. mikrops,* which was also described from the Antarctic (Wilhelm II Land). Considering Hartman's mistake it is less surprising that *Scalispinigera oculata* was not discussed in their study, but comparing the type material of *L. antarctica* with that of *S. oculata* clearly shows them to be conspecific. Hartmann-Schröder & Rosenfeldt's drawing (fig. 11) shows the median antenna as situated on a line between the

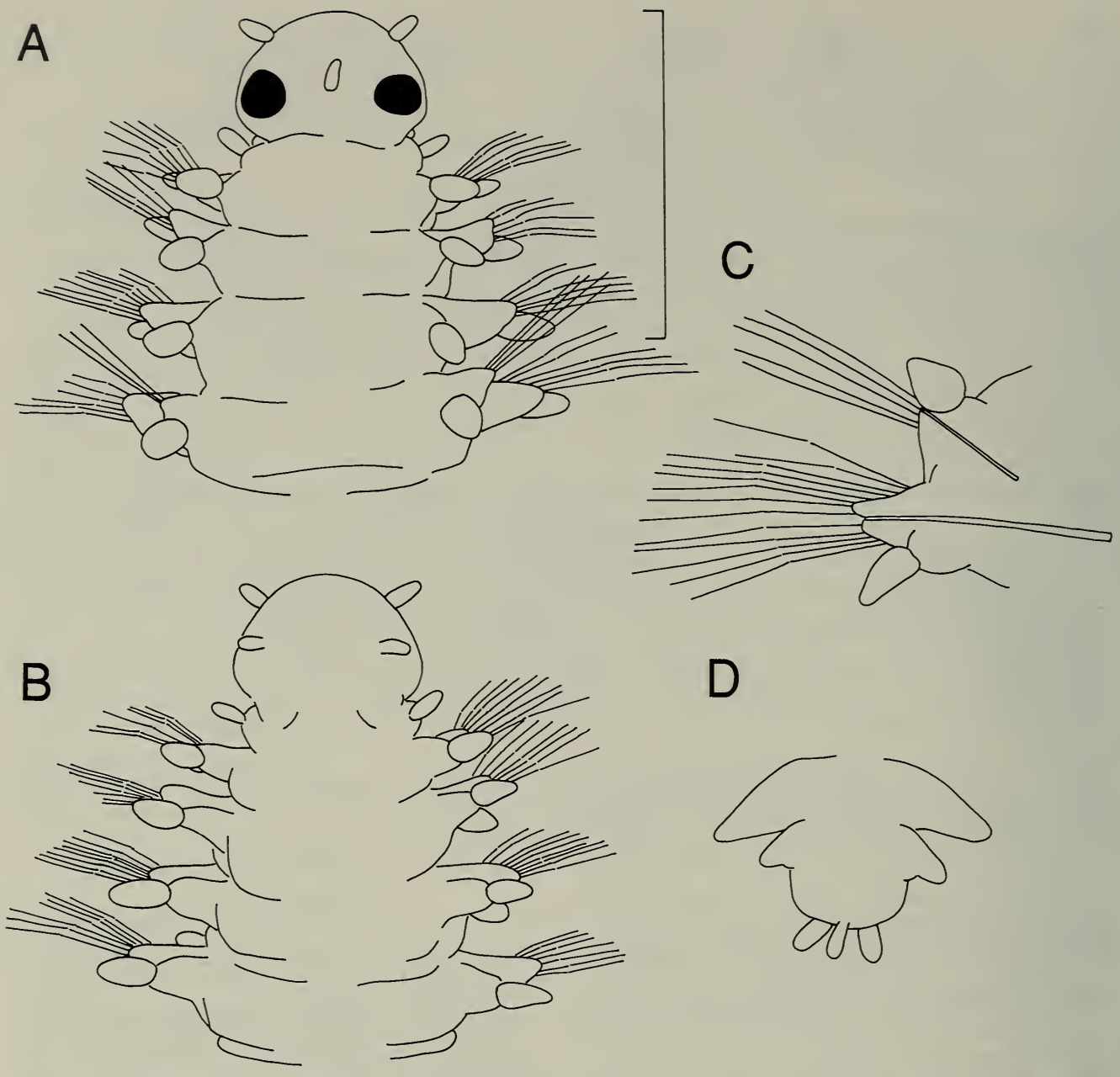

Fig. 2. *Lacydonia miranda,* specimen from Italy, Sicily, Brucoli, 37°17′N, 15°11′E, 17 m (in FP's collection). A. Anterior end, dorsal view. B. Anterior end, ventral view. C. Left parapodium from segment 10, posterior view. D. Posterior end, ventral view, setae omitted. All drawn to same scale; scale line 250 μm.

anterior rather than posterior sides of the eyes. This is due to the angle in which the specimen was drawn; examination of their material shows it to be situated more posterior.

The original description and illustrations of *S. cirrata* show this species as well to agree with the generic definition of *Lacydonia,* for which reason it is transferred to this genus.

Of *L. mikrops* two syntypes (ZMH V-8549) and seven specimens from the Weddell Sea collected by EPOS 3 in 1989 (CENTOB) were examined. Ehlers (1913) mentioned several specimens in his description, but the one on which he based at least the major part of his description is unfortunately not one of the remaining syntypes. The two syntypes are in poor condition and probably the only remaining type material; for this reason we hesitantly allocate the Weddell specimens to *L. mikrops.* Nevertheless, *L. mikrops* appears to differ from *L. oculata* in having much smaller eyes and

in having a prostomium as wide as long rather than much wider than long.

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