PROC. BIOL. SOC. WASH.
99(4), 1986, pp. 616–626

FOUR NEW GENERA OF DORVILLEIDAE (ANNELIDA: POLYCHAETA) FROM THE GULF OF MEXICO

Paul S. Wolf

Abstract.—Four new genera, each with one new species, are described from the Gulf of Mexico. One new genus, *Ougia,* is diagnosed to include two species formerly placed within *Schistomeringos* Jumars, 1974. Maxillary morphology is considered herein to be the primary diagnostic character at the generic level.

Major taxonomic treatments of the dorvilleids were done by Pettibone (1961) and Jumars (1974). Pettibone (1961) used only external morphological characters to separate the five genera known at that time. Fauchald (1970) and Jumars (1974) also used, to a certain extent, the morphology of the mouth-parts, in addition to traditional characters, to separate genera and some species. Recent descriptions of new species have relied heavily on maxillary morphology in specific diagnoses (e.g., Oug 1978; Westheide 1977, 1982; Blake 1979; Wainwright and Perkins 1982).

Wolf (1984) employed maxillary morphology as the primary generic and specific diagnostic character. Other generic characters included the degree of development of the head appendages, the distribution and degree of development of the notopodia, and the presence or absence of notopodial internal acicula. Westheide and Nordheim (1985) also used the above characters in describing four new genera and showed the importance of the pygidium as a diagnostic character.

Wolf (1984) identified three possible new genera and a fourth possible new genus was placed, with reservations, within *Schistomeringos.* The purpose of this study is to describe those four genera and four new species and to propose new combinations for *Schistomeringos macilenta* and *S. subaequalis,* both described by Oug (1978), in one of the newly proposed genera, *Ougia.*

The bulk of the material examined for this study was collected as part of a U.S. Bureau of Land Management (now Minerals Management Service) Outer Continental Shelf baseline study conducted during 1975–1981. MAFLA stations were those designated within the Mississippi-Alabama-Florida portion of the program; SO-FLA stations were those located off southwest Florida; STOCS stations were located off the Texas coast (see Uebelacker and Johnson 1984). The remaining material was collected under the auspices of the Environmental Protection Agency (EPA) during a contract issued to Science Applications International Corp. through JRB Associates, McLean, Virginia (EPA stations).

Type material and some additional specimens are deposited in the National Museum of Natural History, Smithsonian Institution (USNM). Other specimens are in the laboratory museum of Barry A. Vittor & Associates, Inc., Mobile, Alabama.

Figure Abbreviations

an—antenna
anC—anal cirrus
bPl(supR)—basal plate (superior row)
br—branchia
D1, D2, etc.—free denticle 1, free denticle 2, etc.
Li—ligament
mC—maxillary carrier
mvC—midventral cirrus
neAc—neuroaciculum
noAc—notoaciculum
noto—notopodium

pa—palp
vC—ventral cirrus
vSetLo—ventral setigerous lobe

Ougia, new genus

Type species.—*Ougia tenuidentis*, new species.

Diagnosis.—Maxillae in 4 rows; superior rows with basal plates and free denticles; inferior rows without basal plates, with free denticles. Maxillary carrier present. Palps long, slender, biarticulate. Antennae long, sometimes articulated. Notopodia with or without distal article, with internal acicula throughout. Supra-acicular setae include simple forms, with or without furcate setae. Subacicular setae include compound falcigers and occasionally inferior simple setae in far posterior setigers.

Remarks.—*Ougia* is distinguished from the genus *Schistomeringos* Jumars, 1974, by lacking basal plates in the inferior maxillary rows. As defined here, *Ougia* now contains *O. macilenta* (Oug, 1978) and *O. subaequalis* (Oug, 1978) both formerly included within *Schistomeringos*.

Etymology.—The genus is named in honor of Dr. Eivind Oug, who described several *Schistomeringos* species from Scandinavia, and suggested they be removed to new genera. His excellent figures and descriptions made this task relatively painless.

Key to the Species of *Ougia*

1. Maxillae with anteriormost inferior free denticles with long, slender, arista-like process; furcate setae, when present, pseudocompound, with entire tips ..... *O. tenuidentis*
– Maxillae with anteriormost inferior free denticles otherwise; furcate setae, when present, simple, with hispid tips 2
2. Notopodia small, without distal article; maxillary carriers poorly developed ..... *O. macilenta*
– Notopodia long, with distal article; maxillary carriers well-developed ..... *O. subaequalis*

Ougia tenuidentis, new species
Figs. 1, 2

Schistomeringos sp. B, Wolf, 1984:44–18, fig. 44-11, 44-12a-i.

Material examined.—FLORIDA, off St. Petersburg: MAFLA Sta 2209J, Nov 1977, 27°52′30.5″N, 83°33′59.0″W, 34 m, clayey-sandy silt, 1 paratype (USNM 89566); MAFLA Sta 2211F, JUL 1976, 27°56′29.5″N, 83°52′59.5″W, 43 m, coarse sand, 1 specimen; MAFLA Sta 2211E, Aug 1977, same data, 1 paratype (USNM 89567). Off Apalachicola River: MAFLA Sta 2423C, Jul 1976, 29°37′00.8″N, 84°17′00.2″W, 19 m, silty-fine sand, 1 specimen (USNM 89568). Off Port St. Joe: EPA Sta 1-2, Nov 1983, 29°53.1′N, 85°31′W, 13.8 m, fine sand with shell, 1 paratype (USNM 98925); EPA Sta 4-1, Nov 1983, 29°52.2′N, 85°30.65′W, 12.6 m, fine sand with shell, 1 paratype (USNM 98926); EPA Sta 5-2, Nov 1983, 29°52.2′N, 85°30.5′W, 14.7 m, fine sand with shell, 1 paratype (USNM 98927); EPA Sta 14-1, Nov 1983, 29°47.05′N, 84°26.55′W, 11.4 m, fine sand with shell, 1 paratype (USNM 98929); EPA Sta 24-2, Nov 1983, 29°50.4′N, 84°28.45′W, 12 m, fine sand with shell, HOLOTYPE (USNM 98924); EPA Sta 27-1, Nov 1983, 29°51.4′N, 84°29.95′W, 13.2 m, fine sand with shell, 1 paratype (USNM 98928); EPA Sta 27-2, Nov 1983, same data, 1 specimen. Off Panama City: EPA Sta 3-1, Nov 1983, 30°07′03″N, 85°45′30″W, 15 m, medium to fine sand with shell, 2 specimens; EPA Sta 8-1, Nov 1983, 30°07′08″N, 85°45′38″W, 12.6 m, sand with shell, 1 specimen.

Description.—Length to 3.0 mm, width to 0.37 mm (including parapodia). Largest specimen complete with 40 setigers; one specimen (USNM 98927) incomplete but with 46 setigers, 2.7 mm long. Prostomium broadly rounded anteriorly, eyes absent (Fig. 1A). Antennae deciduous, when present with

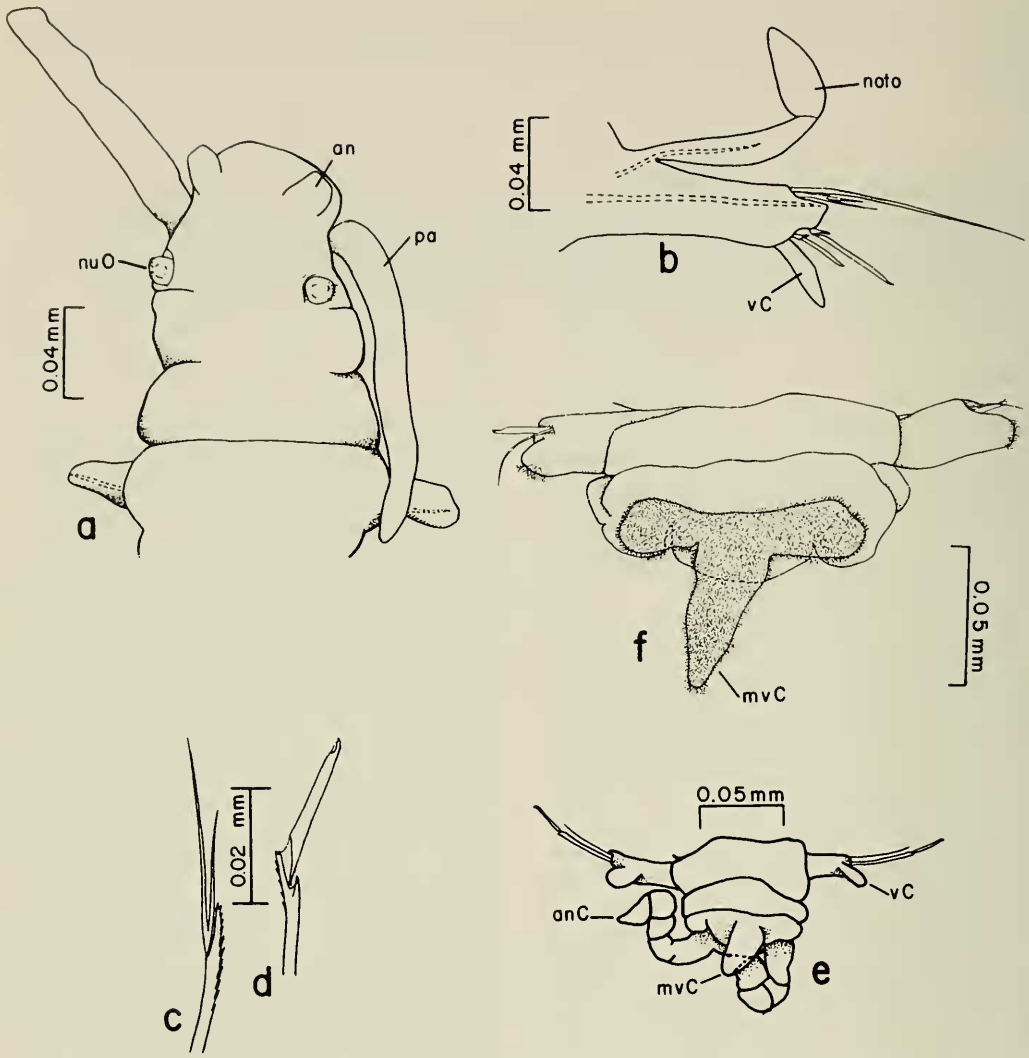

Fig. 1. *Ougia tenuidentis*: a, Anterior end, dorsal view (antennae broken); b, Anterior parapodium, posterior view; c, Furcate seta; d, Middle compound falciger; e, Posterior end, ventral view; f, Same, lateral anal cirri missing. (Figures a–d from Wolf 1984:fig. 44-12a–d.)

9 particles, terminal article pear-shaped. Palps also deciduous, when present indistinctly articulated with palpostyle. One specimen (USNM 98929) with both palps and antennae present; antennae about 1.5 times length of palps. Single pair of ciliated nuchal organs present, often inverted.

Notopodia present from setiger 2, each long, slender, with terminal article (Fig. 1B). Neuropodia without distinct pre- and postsetal lobes. Supra–acicular neurosetae simple, serrate, tapering to fine tips; 5–6 per parapodium in 2 rows in anterior setigers; anterior row of 2–3 short, gently curved setae; posterior row with 3–4 long, gently curved setae. Number of supra-acicular setae reduced to 3–4 per parapodium after about setiger 13–15. Furcate setae present on a few parapodia in some specimens, absent entirely in other specimens. When present, furcate setae pseudocompound, with long, thin tines, with serrations below short

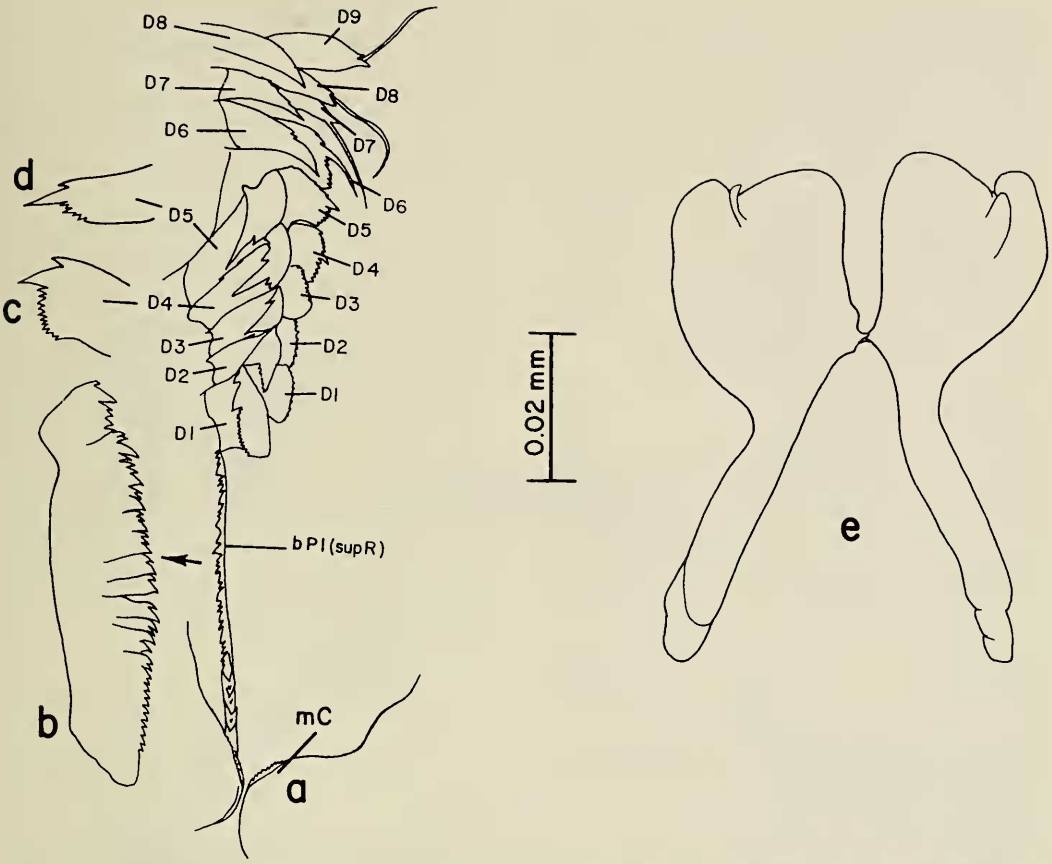

Fig. 2. *Ougia tenuidentis*: a, Entire left side of maxillae, dorsal view; b, Left basal plate, lateral view; c, Free denticle 4 from superior row; d, Free denticle 5 from superior row; e, Mandibles, dorsal view. (Figures a–e from Wolf 1984:fig. 44-12e–i.)

tine (Fig. 1C). Subacicular setae entirely compound, bidentate falcigers with minute serrations on concave margins (Fig. 1D); about 6 per parapodium arranged in 2 ill-defined rows; blade length ratio 2.1:1. Far posterior neuropodia occasionally with single long, very thin, inferior simple seta.

Pygidium with 2 articulated, terminolateral anal cirri and a single digitiform, subterminal, midventral cirrus (Fig. 1E). Enlarged ventral view reveals median cirrus heavily ciliated and located on a ventral ciliated pad (Fig. 1F).

Maxillae with weakly chitinized serrate, maxillary carriers (Fig. 2A) extending ventrolaterally as a weak ridge. Superior row basal plates (Fig. 2B) with about 12 large teeth and 33 smaller teeth; up to 9 free denticles present. Denticles with large main fang, numerous medial teeth and 1 lateral tooth (Fig. 2C, D); anteriormost denticles long, sharply pointed. Inferior maxillary row without basal plates (Fig. 2A); with up to 9 free denticles. Denticles 1–3 oval, with broad cutting edge composed of numerous minute teeth. Anteriormost free denticles each with long main fang and very long, thin arista. Mandibles (Fig. 2E) broad anteriorly, widely divergent posteriorly; anterior edge of each mandible trilobed.

Remarks.—The most notable variation found among material examined concerned

the presence of furcate seta. In most specimens only one furcate seta could be found on the entire worm. Several specimens did not have any furcate setae at all, and examination of excised cleared parapodia did not reveal any internal developing furcate setae. It is concluded that the presence of furcate setae in any parapodia is entirely random and may not occur at all. This variable appearance of furcate setae is also described for *O. subaequalis* but not for *O. macilenta* (see Oug 1978:294, 296).

Ougia tenuidentis differs from other members of the genus in having maxillae with its anteriormost inferior free denticles bearing long, terminal, arista-like projections; having pseudocompound instead of simple furcate setae with tines tapering to fine tips instead of hispid tips; and in having mandibles each with three anterior lobes instead of a single lobe. *Ougia tenuidentis* differs from *O. macilenta* in having long notopodia with a distal article instead of short ones without a distal article. *Ougia tenuidentis* differs from *O. subaequalis* in having poorly-developed instead of well-developed maxillary carriers.

Etymology.—The specific epithet is taken from the Latin *tenuis,* thin, and *dens,* a tooth, referring to the long, thin appearance of the anterior free denticles of the inferior maxillary rows.

Distribution.—Gulf of Mexico, off Florida, 11.4–43 m.

Diaphorosoma, new genus

Type species.—*Diaphorosoma magnavena,* new species.

Diagnosis.—Maxillae in 4 rows, each row composed entirely of free denticles; basal plates lacking. Maxillary carriers absent. Antennae long, articulated. Palps biarticulate. Anterior notopodia long, slender with internal acicula; posterior ones small, without internal acicula. Branchiae present on anterior parapodia. Supra-acicular setae simple, tapering to bidentate tips. Furcate setae absent. Subacicular setae include bidentate compound and pseudocompound falcigers.

Remarks.—Among the genera with four rows of maxillae, *Diaphorosoma* is unique in lacking maxillary carriers and in having each of its maxillary rows composed entirely of free denticles, thus lacking basal plates entirely. It differs additionally in having well-developed notopodia with acicula anteriorly which are replaced by small, globular ones without acicula posteriorly. The presence of pseudocompound falcigers is also unknown among other dorvilleid genera.

Etymology.—From the Greek *Diaphoros,* divided, and *soma,* body, referring to the divided appearance of its body into anterior and posterior regions characterized by the presence of long notopodia anteriorly and small notopodia posteriorly.

Diaphorosoma magnavena, new species
Figs. 3, 4

Genus B, Wolf, 1984:44-32, fig. 44-23, 44-24a–k.

Material examined.—FLORIDA, Southwest: SOFLA Sta 25E, Nov 1980, 24°47′57″N, 82°13′16″W, 24 m, silt/clay, HOLOTYPE (USNM 89577); SOFLA Sta 25D, Jul 1981, same location, 1 paratype (USNM 89578). Off St. Petersburg: MAFLA Sta 2208H, Jul 1976, 27°56′00.5″N, 83°27′29.6″W, 30 m, clayey-sandy silt, 1 specimen; MAFLA Sta 2208J, Aug 1977, same location, 1 paratype (USNM 89576). Off Apalachicola River: MAFLA Sta 2422H, 29°30′N, 84°27′W, 24 m, medium fine sand, 1 specimen; MAFLA Sta 2422I, same date and location, 1 specimen.

Description.—Length to 8.5 mm, width to 0.25 mm. Largest specimen incomplete with about 65 setigers. Prostomium (Fig.3A) conical, broadly rounded anteriorly, with 2 slightly raised, longitudinal lobes dorsally. Eyes absent. Antennae each with up to 20 distinct articles; each about 2.25 times length

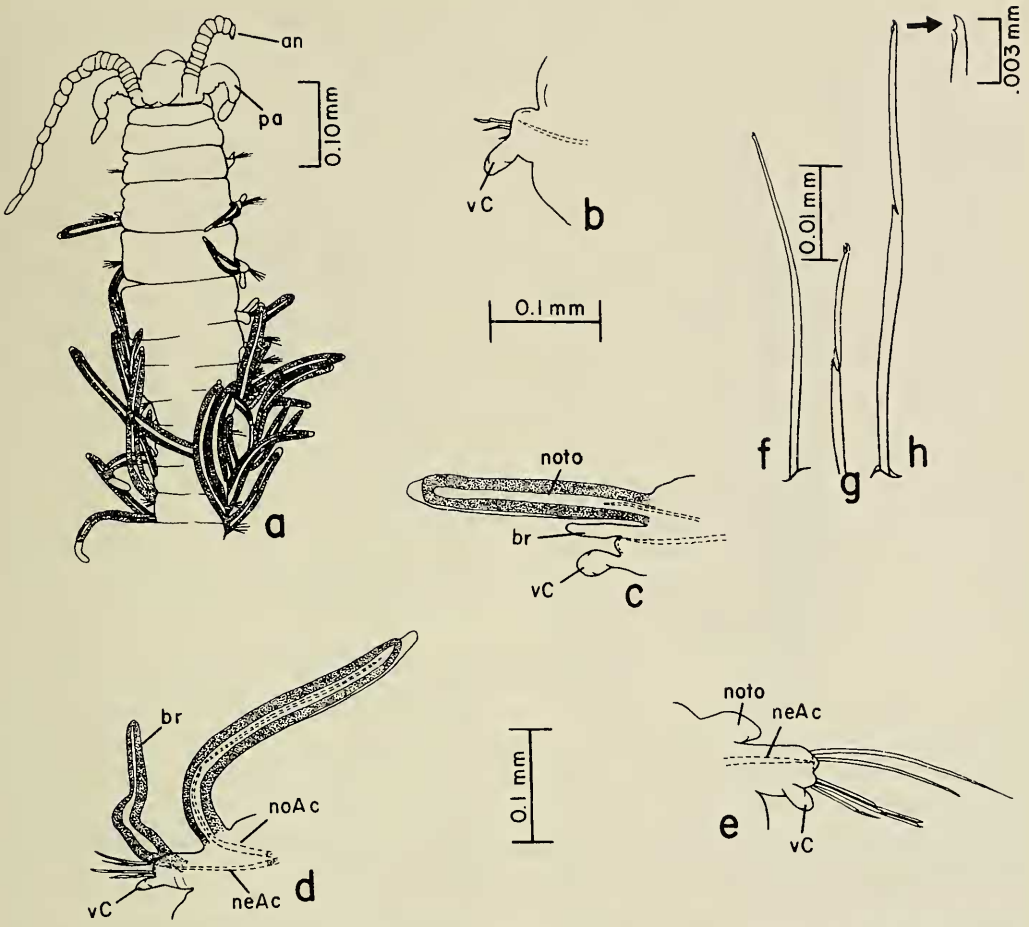

Fig. 3. *Diaphorosoma magnavena*: a, Anterior end, dorsal view; b, Parapodium from setiger 1, anterior view; c, Parapodium from setiger 4, anterior view; d, Parapodium from mid-branchiate region, anterior view; e, Posterior parapodium, posterior view; f, Simple supra-acicular seta; g, Subacicular compound falciger; h, Subacicular pseudocompound falciger from far posterior region. (Figures a–h from Wolf 1984:fig. 44-24a–h.)

of palps. Palps stout with distinct palpostyles.

Setiger 1 without notopodia, with large, digitiform ventral cirri (Fig. 3B). Notopodia of setigers 2–18 to 20 longer than body width, with internal acicula and obvious internal vascular loop (Fig. 3C, D). Notopodia posterior to setigers 18–20 small, papilliform, without internal acicula or vascular loop (Fig. 3E). Branchiae present from setigers 4–18 to 20, arising distally on dorsal side of neuropodia; beginning as small digitiform lobes without vascular loops (Fig. 3C), gradually becoming larger and obviously vascularized (Fig. 3D). Neuropodia each with 1 presetal lobe and 1 or 2 postsetal lobes depending on state of contraction. Supra-acicular setae simple with small, bidentate tips and minute serrations along one margin (Fig. 3F). Furcate setae absent. Subacicular compound falcigers with long to short bidentate blades (Fig. 3G), becoming pseudocompound on far posterior setigers (Fig. 3H).

Pygidium missing on all specimens examined.

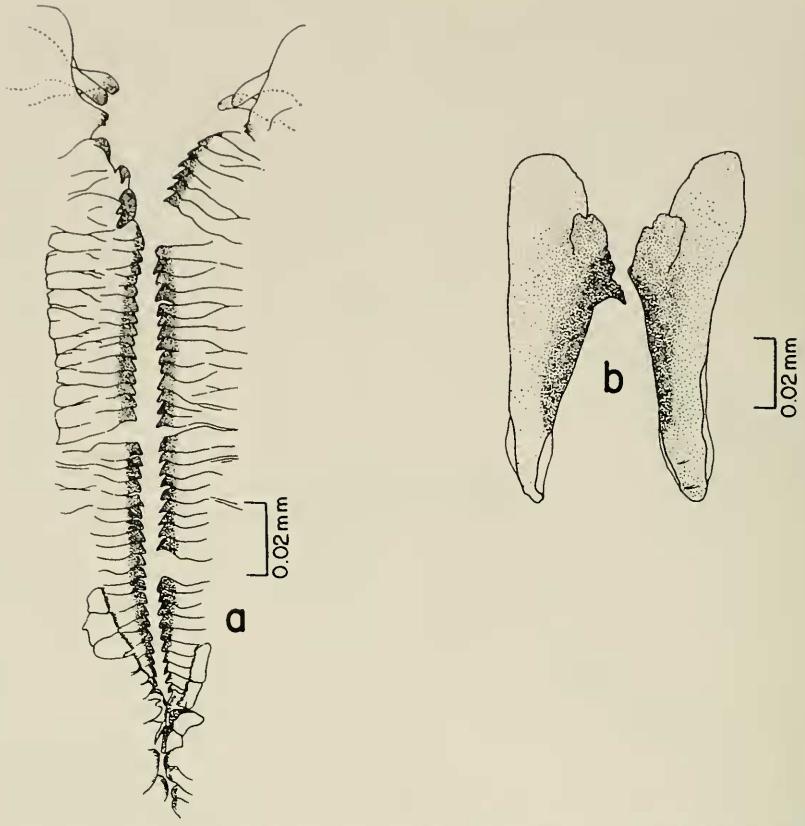

Fig. 4. *Diaphorosoma magnavena*: a, Entire maxillae, dorsal view; b, Mandibles, dorsal view. (All figures from Wolf 1984:fig. 44-24i–k.)

Maxillae (Fig. 4A) in 4 rows composed only of free denticles, basal plates entirely absent. Maxillary rows not fused posteriorly. Superior maxillary rows asymmetrical; left side with 6 dentate free denticles anteriorly and 1 smooth denticle posteriorly; right side with 2 dentate denticles anteriorly and 2 smooth denticles posteriorly. Inferior maxillary rows symmetrical, each composed of 30–40 beaked free denticles, each denticle bearing 1 tooth; 4 anteriormost denticles digitiform, smooth to slightly dentate (broken?); 2–4 posteriormost denticles smooth. Maxillary carriers absent. Mandibles large, anterior portions each with 1 large lobe and smaller lobe on inner margin; each mandible tapering posteriorly to narrow, slightly divergent tips (Fig. 4B).

Remarks.—*Diaphorosoma magnavena* is unique among dorvilleids in having distinctly vascularized branchiae and notopodia. Development of such appendages may be in response to the low oxygen conditions in clay habitats, from which four of the six specimens were collected.

Etymology.—The specific epithet is taken from the Latin *magnus,* large, and *vena,* blood vessel, referring to the obvious vascular loops present in the anterior notopodia and branchiae.

Distribution.—Gulf of Mexico, off Florida; 24–30 m.

Eliberidens, new genus

Type species.—*Eliberidens forceps,* new species.

Diagnosis.—Maxillae in 4 rows, each row

with superior and inferior basal plates only, free denticles entirely lacking. Maxillary rows fused posteriorly to very small and thin maxillary carriers apparently fused to posteriorly directed ligament. Palps and antennae similar to each other in size and shape, each simple, smooth, digitiform. Notopodia absent. Supra-acicular setae include simple, serrate, tapering forms; with or without furcate setae. Subacicular setae compound, unidentate falcigers.

Remarks.—The actual presence of maxillary carriers is somewhat questionable. A pair of very small, thin, lateral projections is found in the area where maxillary carriers are to be expected. These projections are here interpreted to be reduced maxillary carriers similar to those described for *Gymnodorvillea floridana* Wainwright and Perkins, 1982.

Among the genera having four rows of maxillae, *Eliberidens* is unique in that each row is composed of only a basal plate, thus lacking free denticles entirely. *Eliberidens* is similar to *Meiodorvillea* Jumars, 1974, in lacking notopodia while possessing both antennae and palps; but differs in having four rather than two rows of maxillae; in having each maxillary row composed entirely of a single basal plate instead of only free denticles; and in having very reduced maxillary carriers fused to a posteriorly directed ligament instead of a pair of dorsally placed, small carriers not fused to a ligament.

Etymology.—From the Latin *e,* without, *liber,* free, and *dens,* teeth, referring to the complete absence of free denticles in the maxillary rows. Gender: masculine.

Eliberidens forceps, new species
Fig. 5

Genus A, Wolf, 1984:44-29, fig. 44-21, 44-22a–g.

Material examined.—FLORIDA, off Cape Romano: MAFLA Sta 2958I, Aug 1977, 25°40′N, 83°50′W, 120, medium fine sand, HOLOTYPE (USNM 89575). Off St. Petersburg: MAFLA Sta 2212C, Jun 1976, 27°57′00.0″N, 84°47′59.6″W, 189 m, silty-very fine sand, 1 paratype (USNM 89574).

Description.—Length to 3.5 mm, width to 0.2 mm. Largest specimen incomplete with about 43 setigers. Prostomium (Fig. 5A) conical, rounded anteriorly. Eyes absent. Antennae and palps similar in size and shape, each smooth, digitiform.

Parapodia without well-developed pre- and postsetal lobes (Fig. 5B). Supra-acicular setae include long, simple, serrate setae tapering to fine tips. Furcate setae (present in only one specimen) with long tine about twice as long as short tine (Fig. 5C), spines present below short tine; furcate setae replaced by shorter simple setae in some fascicles. Subacicular compound falcigers with long to short unidentate blades; long extension of shaft-head bifid (Fig. 5D, E). Blade ratio approximately 5.9:1.

Pygidium missing from all specimens examined.

Maxillae in 4 rows, each row composed entirely of basal plates; free denticles entirely lacking (Fig. 5F). Plates of superior row appearing as blunt pincers; each plate thin, clear, with rounded tooth bearing minute, subterminal, brush-like hairs anteriorly. Plates of inferior row with numerous, fine teeth. Superior and inferior plates fused to each other posteriorly and to very small, thin maxillary carriers; carriers fused to a long, posteriorly directed ligament. Anterior portion of ligament dark brown. Mandibles (Fig. 5G) poorly developed, only slightly divergent posteriorly, produced into curved arms anteriorly.

Etymology.—The specific epithet is from the Latin *forceps,* pincers, referring to the pincer-like shape of the superior maxillary rows, and is a noun in apposition.

Distribution.—Florida, Gulf of Mexico, 120–189 m.

Westheideia, new genus

Type species.—*Westheideia minutimala,* new species.

Diagnosis.—Maxillae in 2 rows, each row

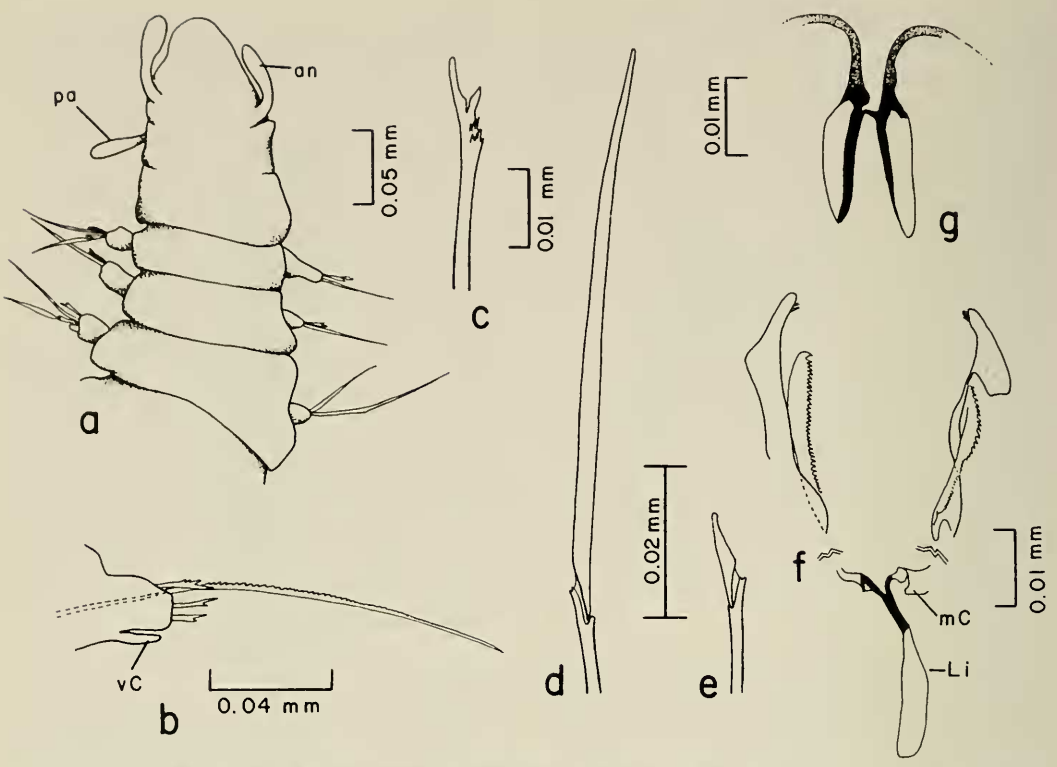

Fig. 5. *Eliberidens forceps*: a, Anterior end, dorsal view; b, Anterior parapodium, posterior view; c, Furcate seta; d, Upper compound seta; e, Lower compound seta; F, Entire maxillae, dorsal view (broken); g, Mandibles, dorsal view. (All figures from Wolf 1984:fig. 44-22a–g.)

composed of single plate, serrate posteriorly, with denticles anteriorly; maxillary carriers present, fused to posteriorly directed ligament. Palps biarticulate. Antennae indistinctly articulated, similar in length to palps. Notopodia present on anterior setigers only, each without distal article but with internal acicula. Branchiae present on anterior parapodia. Supra-acicular setae simple including long, evenly tapered forms and furcate forms. Subacicular setae compound, unidentate falcigers.

Remarks.—The maxillae of *Westheideia* are similar to those of *Ikosipodus* Westheide, 1982. In *Westheideia,* however, the maxillae are carried on narrow maxillary carriers instead of broad carrier plates. *Westheideia* differs primarily from *Ikosipodus* in having instead of lacking antennae, in having notopodia anteriorly instead of lacking them throughout, in having instead of lacking furcate setae, and in having more than 87 setigers instead of no more than 10.

Westheideia is similar to *Eliberidens* and *Gymnodorvillea* in having reduced maxillary carriers fused to a long posterior ligament. *Westheideia* differs from *Eliberidens* in having two instead of four rows of maxillae and in having notopodia with internal acicula intead of lacking notopodia entirely. *Gymnodorvillea* lacks head appendages and notopodia and has four rows of maxillae.

Etymology.—I am pleased to name this genus in honor of Dr. Wilfried Westheide who has published numerous detailed and careful works on the Dorvilleidae.

Westheideia minutimala, new species
Fig. 6

Genus C, Wolf, 1984:44-32, fig. 44-25, 44-26a–i.

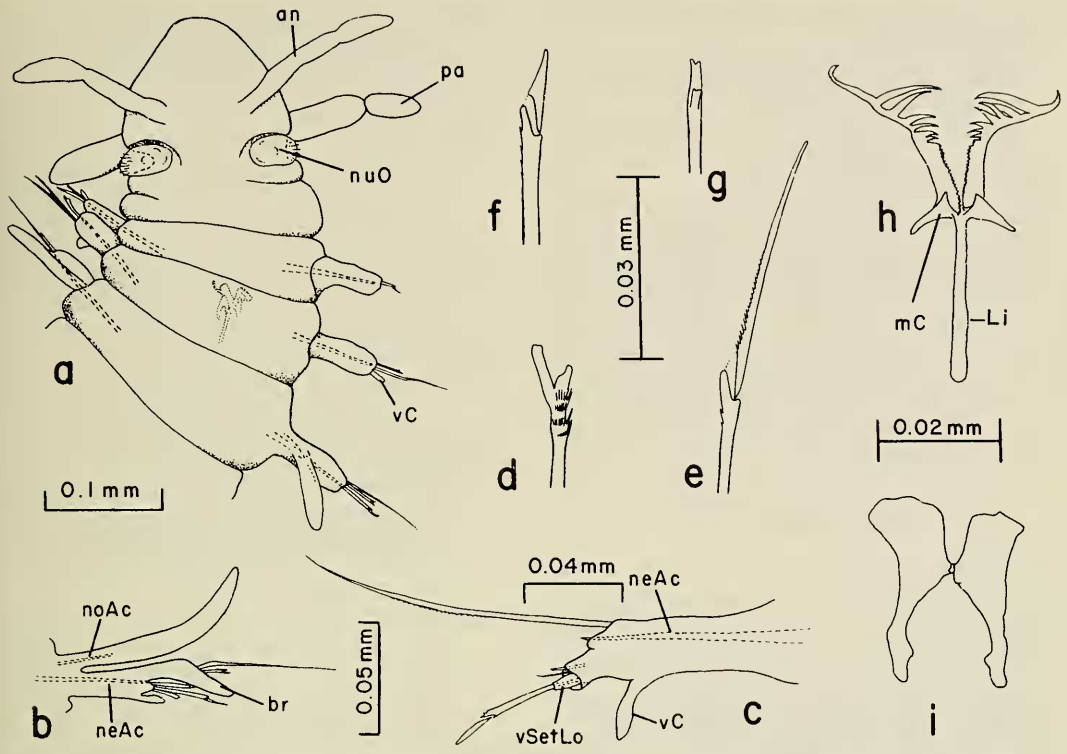

Fig. 6. *Westheideia minutimala*: a, Anterior end, dorsal view; b, Anterior parapodium, posterior view; c, Posterior parapodium, posterior view; d, Furcate seta; e, Upper compound falciger; f, Lower compound falciger; g, Shaft of compound seta, edge-on view; h, Entire maxillae, dorsal view; i, Mandibles, dorsal view. (All figures from Wolf 1984:fig. 44-26a–i.)

Material examined.—FLORIDA, off Cape Romano: MAFLA Sta 2960G, Sep 1977, 25°40′N, 82°20′W, 27 m, fine sand, HOLOTYPE (USNM 89579). Off St. Petersburg: MAFLA Sta 2211F, Nov 1977, 27°56′29.5″N, 83°52′59.5″W, 43 m, coarse sand, 1 paratype (USNM 98923). Off Crystal River: MAFLA Sta 2316C, Nov 1977, 28°42′00.3″N, 84°20′00.7″W, 35 m, silty fine sand, 1 paratype (USNM 89581). Off Apalachicola River: MAFLA Sta 2423C, Jul 1976, 29°37′00.8″N, 84°17′00.2″W, 19 m, silty fine sand, 1 specimen. TEXAS, off Matagorda Island: STOCS Sta 6-1, transect I, Spring 1976, 27°39′N, 96°12′W, 100 m, silty clay, 1 paratype (USNM 89580).

Description.—Length to 5 mm, width to 0.6 mm. Largest specimen incomplete with 87 setigers. Prostomium (Fig. 6A) conical, rounded anteriorly, eyes absent. Antennae indistinctly articulated. Palps smooth, biarticulate, similar in length to antennae. Single pair of large ciliated nuchal organs present at dorsal postectal margins of prostomium.

Setiger 1 without notopodia, with small ventral cirri. Notopodia present on setigers 2–29 only, each long, cylindrical, about half as long as body width, without terminal article (Fig. 6B). Neuropodia without distinct pre- and post-setal lobes, with superior branchial lobe on setigers 5–28 (Fig. 6B), and with strongly eversible ventral setal lobe, especially in posterior parapodia (Fig. 6C). Supra-acicular neurosetae include simple serrate setae tapering to fine tips, and furcate setae having blunt tines with cusps below short tine (Fig. 6D). Subacicular compound falcigers with long to short unidentate blades

(Fig. 6E, F), long extension of shaft-head bifid (Fig. 6G).

Pygidium missing from all specimens examined.

Maxillae (Fig. 6H) in 2 rows, each row as single plate, serrate posteriorly, with 6–7 long, sharp teeth anteriorly. Anteriormost portion of maxillae sharply pointed, curved. Maxillary , carriers thin and triangular, fused to dorsal face of maxillae and to posteriorly directed ligament. Mandibles broad anteriorly, fused medially, tapering posteriorly to narrow, widely divergent tips (Figs. 6I).

Distribution.—Off western Florida and Texas, 19–100 m.

Acknowledgments

I wish to thank Drs. Kristian Fauchald, National Museum of Natural History, Washington, D.C.; Brigitte Hilbig, Battelle New England Marine Research Laboratory, Duxbury, Massachusetts; and Barry A. Vittor, Barry A. Vittor & Associates, Inc., for their reviews of the manuscript. Dr. Kristian Fauchald arranged the loan of some material. Some of the material examined was obtained under contract from Environmental Protection Agency to JRB Associates, McLean, Virginia, contract number 68-01016388. Barry A. Vittor & Associates, Inc., provided monetary and material support for this research.

Literature Cited

Blake, J. A. 1979. A redescription of *Pettiboneia sanmatiensis* Orensanz (Polychaeta: Dorvilleidae) and a revised key to the genera of the Dorvilleidae.—Bulletin of the Southern California Academy of Sciences 78(2):136–140.

Fauchald, K. 1970. Polychaetous annelids of the families Eunicidae, Lumbrineridae, Iphitimidae, Arabellidae, Lysaretidae and Dorvilleidae from western Mexico.—Allan Hancock Monographs in Marine Biology 5:1–335.

Jumars, P. A. 1974. A generic revision of the Dorvilleidae (Polychaeta), with six new species from the deep North Pacific.—Zoological Journal of the Linnean Society of London 54:101–135.

Oug, E. 1978. New and lesser known Dorvilleidae (Annelida, Polychaeta) from Scandinavian and northeast American waters.—Sarsia 63(4):285–303.

Pettibone, M. A. 1961. New species of polychaete worms from the Atlantic Ocean, with a revision of the Dorvilleidae.—Proceedings of the Biological Society of Washington 74:167–186.

Uebelacker, J. M., and P. G. Johnson (eds.). 1984. Taxonomic guide to the polychaetes of the northern Gulf of Mexico. Final report to the Minerals Management Service, contract 14-12-001-29091. Barry A. Vittor & Associates, Inc., Mobile, Alabama. 7 vols.

Wainwright, S. C., and T. H. Perkins. 1982. *Gymnodorvillea floridana,* a new genus and species of Dorvilleidae (Polychaeta) from southeastern Florida.—Proceedings of the Biological Society of Washington 95(4):694–701.

Westheide, W. 1977. Interstitielle Fauna von Galapagos. XVIII. Nereidae, Eunicidae, Dorvilleidae (Polychaeta).—Mikrofauna Meeresboden 63: 1–39.

———. 1982. *Ikosipodus carolensis* gen. et sp. n., an interstitial neotenic polychaete from North Carolina, U.S.A., and its phylogentic relationships with Dorvilleidae.—Zoologica Scripta 11(2): 117–126.

———, and H. von Nordheim. 1985. Interstitial Dorvilleidae (Annelida, Polychaeta) from Europe, Australia and New Zealand.—Zoologica Scripta 14(3):183–199.

Wolf, P. S. 1984. Family Dorvilleidae. *In* J. M. Uebelacker and P. G. Johnson (see above). Volume VI, Chapter 44, 37 pp.

Barry A. Vittor & Associates, Inc., 8100 Cottage Hill Road, Mobile, Alabama 36609.