

8-9-83



SOUTHERN CALIFORNIA ASSOCIATION
OF
MARINE INVERTEBRATE TAXONOMISTS

July 1983

Vol. 2, No. 4

Next Meeting: AUGUST 15, 1983

Note: This is the third Monday in August.

Place: Marine Biological Consultants
947 Newhall Street
Costa Mesa, California 92627

Specimen Exchange Group: Orbiniidae and Paraonidae

Topic Taxonomic Group: Cumacea and Ostracoda

MINUTES FROM JULY 11, 1983

Video System: We finally purchased the video system. It worked great! We were able to do twice as much work in half the time.

With the video system everyone is able to look at the organism on the monitor together. The person at the scope (where the camera is mounted) can then point out pertinent characters of that particular species. Questions and answers are heard (and seen) by everyone, which speeds the process of examining the specimens.

When we were finished with the topic taxonomic group, so much time was left, we had a demonstration on how to dissect an amphipod. The demonstration showed us again what a great teaching tool the video system is. We were able to watch how to tackle the dissection of an amphipod and study all the parts, especially mouthparts. The demonstration was such a success that it stimulated the interest of some polychaete people, and one is actually looking forward to his first amphipod dissection.

The video system will play an important role in future SCAMIT meetings. The meetings will be shorter more cohesive and will be more informative using the video system. In addition to looking at the specimens from the exchange, related species and genera can be viewed for comparison. Also, guest speakers will be able to use the system for their demonstrations.

Onuphid Workshop: The first SCAMIT-sponsored workshop will be held in August on Onuphid polychaetes. The workshop will deal with all species of Onuphids and attempt to resolve or define problems with the group. Pack all your Onuphids and mark your calender for:

Onuphid Workshop
August 24, 1983 at 9:30 a.m.
Marine Biological Consultants

FOR MORE INFORMATION CALL: JOHN SHISKO (213) 322-3131



SCMIT Picnic: By the time you receive this newsletter, the picnic will be underway. Hope you were able to make it.

Literature Committee: Leslie Harris, from SCCWRP, produced another great annotated literature list. A copy is enclosed.

Free-Lance Referral List: Some of you wondered what that meant on your membership application. The information was used to make a list of members who take on work on the side. This list is available on request. The idea was prompted by people asking for referrals. With the list, SCAMIT can give referrals of SCAMIT members unbiasedly.

List of July 11, 1983 Topic Species:

SCCWRP 23, PL24, OC26 Pleusymtes subglaber
LACO14 Parapleustes pugettensis
OC25 Rhachotropis oculata
MBC13 Batea lobata
MBC14 Pleusirus securus
MBC15 Eusiroides monoculoides

ANNOTATED LITERATURE LIST
FOR
ARABELLIDAE, LYSARETIDAE, IPHITIMIDAE
AND
DORVILLEIDAE

Compiled
By

Leslie Harris

Akesson, Bertil. 1976. Morphology and life cycle of Ophryotrocha diadema, a new polychaete species from California. *Ophelia*, 15(1):23-25.

Describes and illustrates O. diadema, with a discussion of reproduction and larval development.

Annenkova, N. 1937. The polychaete fauna of the northern part of the Japan Sea. (In Russian). *Explor. Mers U.S.S.R.*, fasc. 23:139-216.

Original description and figures of Schistomeringos japonica (as Staurocephalus).

Armstrong, J.W., & Jumars, P.A. 1978. Branchiate dorvilleidae (Polychaeta) from the North Pacific. *Bull. So. Ca. Acad. Sci.*, 77(3):133-138.

Original descriptions and illustrations of Protodorvillea pugettensis and Protodorvillea dibranchiata. Changes the definition of the family Dorvilleidae by the inclusion of branchiae and suggests that the family Iphitimidae be merged into it.

Banse, K. 1963. Polychaetous annelids from Puget Sound and the San Juan Archipelago, Washington. *Proc. Biol. Soc. Wash.*, 76:197-208.

Original description and illustration of Ophryotrocha vivipara n. sp., and suggests a need for a new study of Pacific O. puerilis.

Banse, K. & K.D. Hobson. 1974. Benthic errantiate polychaetes from British Columbia and Washington. *Fish. Res. Bd. Canada. Bull.* 185:111p.

Has good keys for the northern arabellids and dorvilleids, many of which also belong to the southern California fauna. Schistomeringos caeca & S. japonica are included in Dorvillea, as is S. longicornis under D. rudolphi.

Banse, K. & F.H. Nichols. 1968. Two new species and three new records of benthic polychaetes from Puget Sound (Washington). *Proc. Biol. Soc. Wash.*, 81:223-230.

Protodorvillea recuperata n. sp. is described and figured.

Berkeley, E. 1927. Polychaetous annelids from the Nanaimo District. Part 3. Leodicidae to Spionidae. *Contrib. Can. Biol. Fish.*, 3(17): 407-422, 1 plate.

Original description of Dorvillea pseudorubrovittata. Records for 1 Arabella and 4 other dorvilleids, most of which are now synonyms.

Blake, J.A. 1979. A redescription of Pettiboneia sanmattiensis Orensanz (Polychaeta:Dorvilleidae) and a revised key to the genera of the Dorvilleidae. Bull. S. Ca. Acad. Sci., 78(2):136-140.

Supplements the original description and provides new illustrations. The revised generic key includes Pettiboneia and omits Apophryotrocha Jumars, actually a post-juvenile onuphid. Jumars' 1974 generic arrangement is otherwise accepted.

Chamberlin, R.V. 1918. Polychaetes from Monterey Bay. Proc. Biol. Soc. Wash., 31:173-180.

Original description of Arabella munda, now a junior synonym of A. semimaculata.

Chamberlin, R.V. 1919. New polychaetous annelids from Laguna Beach, California. J. Entomol. Zool. Pomona, 11:1-23.

Original descriptions of Arabella lagunae (junior synonym of A. iricolor), Arabella mimetica and Biborin ecbola n.g., n. sp.. No illustrations were provided and A. mimetica and Biborin ecbola remain poorly known.

Chamberlin, R.V. 1919. The Annelida Polychaeta. Mem. Mus. Comp. Zool., Harvard Coll., 48:1-514, 80 pls. (2 vols).

Original description and figures of Cenothrix mutans, now Arabella mutans, Oenone telura, now a junior synonym of O. fulgida. Also establishes Dorvillea as the replacement name for Staurocephalus (preoccupied) and Dorvilleidae for Staurocephalidae.

Claparede, E. 1868. Les Annelides Chetopodes du Golfe de Naples. Mem. Soc. Phys. Geneve, 19(2):313-584, 16 pls.

Original descriptions and illustrations of Arabella geniculata (as Notocirrus geniculatus) & Drilonereis filum (as Lumbriconereis filum).

Claparede, E. 1870. Les ANNELIDES CHETOPODES du Golfe de Naples. Mem. Soc. Phys. Hist. Nat., Genève, 20(2):365-542.

Original description of the genus Drilonereis.

Claparede, E. & E. Metschnikow. 1869. Beiträge zur Kenntniss der Entwicklungsgeschichte der Chaetopoden. Zeits. wiss. Zool. Leipzig, 19:163-205.

Original description of Ophryotrocha puerilis n.g., n.sp.

Ebbs, N.K., Jr. 1966. The coral-inhabiting polychaetes of the northern Florida reef tract. Part I. Aphroditidae, Polynoidae, Amphinomidae, Eunicidae, and Lysaretidae. Bull. Mar. Sci., 16(3):485-555.

Provides extensive synonymy list, description, illustrations and discussion for Oenone fulgida.

Ehlers, E. 1901a. Die Polychaeten des magellanischen und chilenischen Strandes. Ein faunistischer Versuch. Festschrift zur Feier des Hundertfünfzigjährigen Bestehens der königlichen Gesellschaft der Wissenschaften zu Gottingen. (Abh. Math. - Phys.) Berlin, Wiedmannsche Buchhandlung, pp. 1-232.

Original description and figures of Schistomeringos longicornis (as Stauronereis).

Ehlers, E. 1901b. Die Anneliden der Sammlung Plate. Fauna Chilens. Zool. Jahrb. Jena, Suppl., 5:251-272.

Original description of Dorvillea cerasina (as Staurocephalus cerasinus).

Emerson, R.R. 1974. A new species of polychaetous annelid (Arabellidae) parasitic in Diopatra ornata (Onuphidae) from Southern California. Bull. So. Ca. Acad. Sci., 73(1):1-4.

Original description and illustrations of Arabella endonata.

Fauchald, K. 1970. Polychaetous annelids of the families Eunicidae Lumbrineridae, Iphitimidae, Arabellidae, Lysaretidae, and Dorvilleidae from Western Mexico. AH Monogr. Mar. Biol., #5, 335p, 27 pls.

Along with Hartman, 1968, this is the most valuable reference for this area. Many of the species in Hartman are included, with detailed descriptions and figures, plus a number of new species, 2 of which (Arabella pectinata and Drilonereis mexicana) are found in southern California. The genus Iphitime is taken out of the Lysaretidae and put into its own family, the Iphitimidae. The generic subdivision of the Arabellide is discussed, as are the Dorvilleidae and Lysaretidae. Appendices listing all species in the above families include references to original descriptions, some synonyms, revisions of type material and type areas.

Fauchald, K. & D.R. Hancock. 1981. Deep-water polychaetes from a transect off Central Oregon. Allan Hancock Foundation Mono. Mar. Biol., 11:73pp, 8 pls.

Extends the range of Dorvillea batia from its type locality off San Diego to Yaquina Bay, central Oregon.

Grube, A.-E. 1850. Die Familien der Anneliden. Archiv fur Naturgeschichte, Berlin, 16(1):249-364.

Original description of Arabella.

Hartman, O. 1938. Descriptions of new species and new generic records of polychaetous annelids from California of the families Glyceridae, Eunicidae, Stauronereidae, and Opheliidae. UC Pub. Zool., 43(6): 93-112.

Original descriptions and illustrations of Stauronereis gracilis (now Protodorvillea) and S. articulatus (now a junior synonym of Schistomeringos longicornis).

Hartman, O. 1944. Eunicea. AHPE, 10(1):1-238, pl. 1-18.

Discusses the west coast representatives of Arabellidae, Lysaretidae and Dorvilleidae. Contains the original descriptions and figures of Notocirrus californiensis and Labidognathus forcipes. The name Arabellidae is herein proposed, and Arabella attenuata Treadwell is transferred into Notocirrus.

Hartman, O. 1952. Iphitime and Ceratocephala (Polychaetous Annelids) from California. Bull. So. Ca. Acad. Sci., 51(1):9-20.

Original description and figures of Iphitime loxorhynchi.

Hartman, O. 1963. Submarine Canyons of Southern California. Systematics: Polychaeta AHPE, 27(3):93p, 4 figs.

Brief description and first record of Dorvillea atlantica from Southern California. This account was later synonymized with Schistomeringos longicornis by Jumars, 1974.

Hartman, O. 1968. Atlas of errantiate polychaetous annelids from California. Allan Hancock Foundation, Univ. So. Calif., Los Angeles, 828 pp.

Hobson, K.D. 1971. Some polychaetes of the superfamily Eunicea from the North Pacific and North Atlantic Oceans. Proc. Biol. Soc. Wash., 83(47):527-544.

Reports on the first occurrences in the northeastern Pacific of Drilonereis longa and Dorvillea caeca, places Dorvillea kefersteini of Berkeley and Berkeley and Protodorvillea recuperata into the synonymy of P. gracilis. Also discusses the probable conspecificity of P. gracilis and P. kefersteini McIntosh, although they're left separate. A description and pictures of P. kefersteini are provided.

Imajima, M. 1967. Errant polychaetous annelids from Tsukumo Bay and vicinity of Noto Peninsula, Japan. Bull. Nat. Sci. Mus. Tokyo, 10(4):403-441.

Descriptions and figures of Oenone fulgida and Schistomeringos japonica (as Dorvillea).

Jumars, P.A. 1974. A generic revision of the Dorvilleidae (Polychaeta), with six new species from the deep North Pacific. Zool. J. Linn. Soc., 54(2):101-135.

The major reclassification of this family, now commonly followed (for changes since this paper, see Blake, 1979). Of particular interest to southern California taxonomists is the establishment of Schistomeringos and the separation of S. rudolphi and S. longicornis. New species described from this area are Dorvillea batia, Exallopus cropion n.g., n. sp., Meiodorvillea apalpata n.g., and Schistomeringos meiofurca.

Kinberg, J.G.H. 1865. Annulata nova. Ofv. Kongl. Vetensk. - Akad. Forh., 1864 (v.21):559-574.

Establishes the family Lysaretidae, which has page priority over the family name Oeononidae erected in the same paper.

La Greca, M. & G. Bacci. 1962. Una nuova specie de Ophryotrocha delle coste tirreniche (Annelida Polychaeta). Boll. Zool. Torino, 29: 13-24.

Original description and illustrations of Ophryotrocha labronica.

Marenzeller, E.V. 1902. Südjapanische Anneliden. 3. Aphroditea, Eunicea. Akad. Wiss. Wien, Denkschr., 72:563-582.

Original description of the genus Iphitime.

Montagu, G. 1804. Descriptions of several marine animals found on the south coast of Devonshire. Trans. Linn. Soc. Lond., 7:80-84.

Original description of Arabella iricolor (as Nereis iricolor).

Moore, J.P. 1906. Additional new species of polychaeta from the North Pacific. Proc. Acad. Nat. Sci. Phil., 58:217-260.

Original description of Stauronereis annulatus (now Schistomeringos).

Moore, J.P. 1909. Polychaetous annelids from Monterey Bay and San Diego, California. Proc. Acad. Nat. Sci. Phil., 61:235-295 3 pl.

Original descriptions and illustrations of Drilonereis nuda and Dorvillea moniloceras (as Stauronereis).

Moore, J.P. 1911. 'The polychaetous annelids dredged by the U.S.S. "Albatross" off the coast of southern California in 1904:III. Euphrosynidae to Goniadidae. Proc. Acad. Nat. Sci. Phil., 63:234-318.

Original descriptions and illustrations of Arabella semimaculata (as Aracoda) and Drilonereis falcata, plus a questionable record of Arabella attenuata (now Notocirrus).

Orensanz, J.M. 1973. Los Anelidos poliquetos de la provincia Argentina. III. Dorvilleidae. Physis (Sect. A), 32(n.85):325-342.

Descriptions and illustrations of 6 species in 4 genera, following the taxonomic revision of Pettibone (1961). Agrees with Pettibone (1963) in placing Stauronereis annulatus as a junior synonym of Stauronereis rudolphi. The description of S. rudolphi includes a good discussion of variability in the maxillae. Original description and figures of Pettiboneia sanmatiensis n.g., n. sp.

Orensanz, J.M. 1974. Los Anelidos Poliquetos de la provincia biogeografica Argentina. VI. Arabellidae. Physis (Sect. A), 33(n.87):381-408.

Provides a key to genera which includes Notopsilus Ehlers and Cenothrix Chamberlin as subgenera of Arabella Grube. Arabella (Arabella) iricolor (no discussion of synonymies), Drilonereis filum and D. falcata are described and figured.

Parfitt, E. 1866. Description of a Nereis new to science. The Zoologist, London, ser. 2, 1:113-114.

Original description of the genus Dorvillea.

Pettibone, M.H. 1961. New species of polychaete worms from the Atlantic Ocean, with a revision of the Dorvilleidae. Proc. Biol. Soc. Wash., 74:167-186.

The first, much needed revision of the family Dorvilleidae. Divides the genus Dorvillea sensu lata into 4 genera, Dorvillea Parfitt, Stauronereis Verrill (re-established as valid), Papilliodorvillea new genus and Protodorvillea new genus. Stauronereis gracilis Hartman, 1938, is put into Protodorvillea. A key to genera is provided.

Pettibone, M.H. 1963. Marine polychaete worms of the New England Region. 1 Aphroditidae through Trochochaetidae. Bull. U.S.N.M., 227(1): 1-356, 83 figs.

A classic work on east coast polychaetes. Descriptions and illustrations of species also found on the west coast are Arabella iricolor (A. semimaculata is placed as one of its junior synonyms), Drilonereis longa, Drilonereis magna (D. falcata put as a junior synonym, based on examination of the type), Stauronereis caecus and S. rudolphi (S. annulata and S. articulatus put into synonymy based on examination of the types). The synonymies of A. semimaculata, D. falcata and S. annulata have not been followed by west coast authors.

Pilger, J. 1971. A new species of Iphitime (Polychaete) from Cancer antennarius (Crustacea:Decapoda). Bull. So. Calif. Acad. Sci., 40(2):84-87.

Description and illustration of Iphitime hologranchiata n. sp., plus a table of diagnostic characters of the 5 species in the genus.

Rioja, E. 1941. Datos para el conocimiento de la fauna de poliquetos de las costas del Pacifico de Mexico. Anales Inst. Biol. Mex., 12:669-746.

Records of Arabella iricolor, Oenone dyphillidia (?junior synonym of O. fulgida) and redescription of Stauronereis articulatus.

Savigny, J.C. 1818. Les Annelides. In Lamarck, J.B.de. Histoire naturelle des Animaux sans Vertèbres présentant les caractères généraux et particuliers de ce animaux, leur distribution, leurs classes, leurs familles, leurs genres, et la citation des principales espèces qui s'y rapportent; précédée d'une Introduction offrant la détermination des caractères essentiels de l'Animal, sa distinction du végétal et des autres corps naturels, enfin, l'exposition des principes fondamentaux de la zoologie. Paris, 5:1-612.

Original descriptions of the genus Oenone and Aglaura fulgida n.g., n. sp. (later made the genotype Oenone).

Schmarda, L.K. 1861. Neue Wirbellose Thiere beobachtet und gesammelt auf einer Reise um die Erde 1853 bis 1857. 1. Turbellarian, Rotatorien und Anneliden, pt. 2:1-164.

Original description of the genus Notocirrus.

Treadwell, A.L. 1906. Polychaetous annelids of the Hawaiian Islands collected by the Steamer Albatross in 1902. Bulletin of the U.S. Fish Commission, for 1903, pt. 3, pp. 1145-1181. figs. 1-81.

Original description and figures of Notocirrus attenuatus (as Arabella attenuata).

Treadwell, A.L. 1941. Polychaetous annelids from the west coast of Mexico and Central America. Zool. (NY), 26(6):17-24.

Original description and figures of Arabella pacifica, a junior synonym of A. semimaculata.

Webster, H.E. 1879. Annelida Chaetopoda of the Virginian coast. Trans. Albany Inst. N.Y., 9:202-269.

Original description and figures of Drilonereis longa.

Webster, H.E. & C.E. Benedict. 1884. The Annelida Chaetopoda from Provincetown and Wellfleet, Mass. U.S. Con. Fish. Wash., Rept., vol. for 1881, p. 699-747.

Original description of Scolopimeraps caecus (as Scolopimeraps cephalus).

VOUCHER SHEET

Oenone fulgida (Savigny, 1818)

Lysaretidae

Date Examined and Code:

June 13, 1983; AHF 13

Keys Used:

Fauchald, K. 1977 p. 111

Fauchald, K. 1970 p. 143

Hartman, O. 1944 p. 184

Other Literature:

Imajima, M. 1967. Bull. Nat. Sci. Mus. Tokyo, 10(4):404-441.

Rioja, E. 1941. Anales Inst. Biol. Mex, 12:669-746.

Chamberlin, R.V. 1919. Mem. Mus. Comp. Zool. Harv., 48:1-514

Ebbs, N.K. 1966. Bull. Mar. Sci., 16(3):485-555.

Treadwell, A.L. 1921. Pub. Carnegie Inst., Wash., 15:1-131.

Monro, C.C.A. 1933. Proc. Zool. Soc. Lond., 1933(1):1-96

Savigny, J.C. 1818. Hist. Nat. Anim. Saxe. Vert., 5:1-612.

Important Characters:

One distinct peristomial segment; 3 nuchal antennae; jaws with one pair of mandibles, five pairs of maxillae (maxilla I usually distally falcate, proximal end dentate) and one pair of prolonged maxillary carriers with an elongate median carrier; no branchiae; notopodia represented by enlarged, flattened dorsal cirri supported by acicula. Setae simple, capillary to geniculate and simple or bidentate hooks present.

Related Species & Character Differences:

None along eastern Pacific coast of North America.

Common Synonyms:Aglaura fulgida Savigny, 1818Oenone lucida Savigny, 1818Agaurides fulgida (Savigny, 1818) in Fauvel, 1917; Hartman, 1944.Oenone diphyllida Schmarada, 1861; Treadwell, 1921Oenone dyphyllida Rioja, 1941Oenone teluri Chamberlin, 1919NOT Halla parthenopeia of Okuda, 1933 or Oenone fulgida of Imajuma & Hartman, 1964 (Halla okudai Imajuma, 1967)Variability:

Shape of simple setae from capillary to geniculate, with or without wings outside curve; start of bidentate subacicular hooks present from setigers 14-24 or setigers 40-60; arrangement and number of teeth on the different jaw pieces, forceps symmetrical or asymmetrical, shape and size of paired and median maxillary carriers; form and distribution of acicula.

Oenone fulgida (continued)

Lysaretidae

Aids to Identification:

The upright dorsal cirri, the arabellid-like head with three minute nuchal antennae and the jaw arrangement are distinctive characters.

Comments:

The present large differences between the various descriptions of the pharyngeal apparatus and other variable characters may be caused by the presence of several different species, possibly as many as 5 or 6... The name and concept of O. fulgida is retained here until such a study can be completed. Fauchald, 1970 (only species in genus). Fauchald, 1977, lists 4 species in Oenone.

Knox, G.A. and K.M. Green. 1972. The polychaetes of New Zealand. Part 3. Lysaretidae. J. Royal Society New Zealand, 2:431-434. ? New Species of Oenone?

VOUCHER SHEET

Protodorvillea gracilis (Hartman, 1938)

Dorvilleidae

Date Examined and Code:

June 13, 1983; HYP 22

Keys Used:

Hartman, O. 1968 (Atlas) P. 815, 825
 Hartman, O. 1944 p. 188
 Banse and Hobson, 1974 p. 90, 92
 Pettibone, M. 1961 p. 180
 Blake, J. 1979 p. 140
 Fauchald, K. 1977 p. 112

Other Literature:

Hartman, O. 1938 Univ. Calif. Publ. Zool., 43:93-112
 Hobson, K.D. 1971 Proc. Biol. Soc. Wash., 83:527-544
 Jumars, P. 1974 Zool. J. Linn. Soc., 54(2):101-135

Important Characters:

Parapodia uniramous, without elongate dorsal cirrophores and notoacacula; neurosetae include simple capillaries, compound heterogomphs and simple furcate setae; palps long, with distal palpostyles; short, clavate antennae; 4 rows of denticuled plates as maxillae present, plus maxillary carriers and elongated mandibles flared and denticuled anteriorly; dorsal cirri short, ovoid; present on first setiger; bidentate, hooked tips of compound neurosetae; two eyes.

Related Species & Character Differences:

P. kefersteini (McIntosh, 1869), P. biarticulata Day, 1963 and P. gracilis all have antennae present, well-developed palpi and dorsal cirri on the first setiger. The antennae are articulated in P. articulata and smooth or indistinctly articulated in the other two species. P. gracilis has prominent subterminal spines on compound setae, while only the superiormost compound setae of P. kefersteini have at most indistinct spines.

Common Synonyms:

Stauronereis gracilis Hartman, 1933
Dorvillea gracilis (Hartman, 1938) of Hartman, 1944
Protodorvillea gracilis (Hartman, 1938) Pettibone, 1961
Protodorvillea recuperata Banse & Nicols, 1968
Dorvillea kefersfeini auctt. (Refers to northeastern Pacific records.)

Aids to Identification:

General appearance is distinctive among common dorvilleids: long palpi, short antennae and short, clavate dorsal cirri without acicula.

Comments:

The presence or absence of parapodial setal lips and the prolongation of the parapodial lobe has often been used as a specific character. See Hobson 1971 for a discussion of the lobes's variability.

VOUCHER SHEET

Dorvilleidae sp. B

Dorvilleidae

Date Examined and Code:

June 13, 1983; HYP 23

Comments:

Undescribed genus and species. See SCAMIT Newsletter 2(3): Four provisional species of dorvilleid polychaete from the northeastern Pacific, by David E. Montagne (LA Co.).

VOUCHER SHEET

Dorvilleidae sp. C

Dorvilleidae

Date Examined and Code:

June 13, 1983; HYP 24

Comments:

Undescribed genus and species. See SCAMIT Newsletter 2(3): Four provisional species of dorvilleid polychaete from the northeastern Pacific, by David E. Montagne (LA Co.).

VOUCHER SHEET

Drilonereis longa Webster, 1879

Arabellidae

Date Examined and Code:

June 13, 1983: OCSO 23

Keys Used:

Hartman, O. 1968 (Atlas) p. 796, 801
Banse and Hobson, 1974 p. 89
Harris, L. in SCAMIT 2(3)

Other Literature:

Pettibone, M. 1963 Bull. U.S. Nat. Mus., 227(1):1-356.
Hobson, K. 1971 Proc. Biol. Soc. Wash., 83:527-544
Hartman, O. 1944 Allan Hancock Pac. Exped. 10:1-238
Webster and Bedict, 1984

Important Characters:

Mandibles missing (or very small and inconspicuous);
maxillae I and II dentate; both pre- and post-setal lobes
of posterior parapodia prolonged, noticeably bilabiate;
very slender body and threadlike.

Related Species & Character Differences:

No other described species on this coast has prolonged
pre- and post-setal lobes. For other characters, see
Drilonereis mexicana voucher or Drilonereis table (Harris
in SCAMIT 2(3)).

Variability:

In the original description Webster noted that one or both
mandibles might be missing; when present, they are variable
in shape and size. East coast specimens usually have
mandibles (Pettibone, 1963); west coast specimens appear
to always lack them.

Aids to Identification:

The worm's general appearance - very long and extremely
slender (filiform) - is immediately distinctive.

Comments:

Dave Montagne (LA Co. San.) is currently studying a worm
that is superficially identical to the Drilonereis longa
described in Hartman, 1968 that occurs as an endoparasite
in Tharyx spp.

VOUCHER SHEET

Drilonereis mexicana Fauchald, 1970

Arabellidae

Date Examined and Code:

June 13, 1983; SCCWRP 22

Keys Used:Fauchald, K. 1970 p. 135, 138
Harris, L. in SCAMIT 2(3)Other Literature:Hartman, O. 1944 Allan Hancock Pac. Exped., 10:1-238
Hartman, O. 1968 Atlas, 828 pp.
Banse and Hobson, 1974 Fish. Res. Bd., Canada, Bull.
185:1-111Important Characters:

Maxilla I are falcate, proximally dentate; mandibles are absent; acicular spines projecting; presetal lobes absent; maxilla II dentate.

Related Species & Character Differences:

The three species likely to be confused with D. mexicana in southern California are D. falcata Moore, 1911, D. longa Webster, 1879, and D. nuda Moore, 1909. D. falcata and D. mexicana are superficially alike, and since D. falcata is so common, undissected specimens are apt to be lumped under that name. D. falcata, however, has conspicuous large, black mandibles; it has short, rounded pre-setal lobes and thick, digitate-conical post-setal lobes. D. mexicana has neither mandibles nor pre-setal lobes. D. nuda has no mandibles, while D. longa, reported to have rudimentary mandibles or none, also has no mandibles in west coast specimens. D. longa is distinguished from D. mexicana by the former's possession of elongate pre- and post-setal lobes; D. mexicana has only very short, button-shaped post-setal lobes. D. longa is also very slender and threadlike, and can be identified on sight by this character. D. nuda lacks mandibles but is distinguished from D. mexicana by its proximally smooth maxilla I and its possession of low, truncate pre-setal and digitate post-setal lobes.

Variability:

No observations on variation in the description; none noted in specimens.

Common Synonyms:Drilonereis nuda of Hartman 1944, 1968 (in part)
D. falcata auctt.

Drilonereis mexicana (continued)

Arabellidae

Aids to Identification:

Large specimens must be dissected to check for mandibles and if the proximal part of maxilla I is dentate or smooth. Also check shape of posterior post-setal lobes. Small worms can be placed under a microscope to see the details of the jaw apparatus without dissection.

VOUCHER SHEET

Notocirrus californiensis Hartman, 1944

Arabellidae

Date Examined and Code:

June 13, 1983; OCSO 24, PL23

Keys Used:

Hartman, O. 1968 (Atlas) p. 807, 811
Banse and Hobson, 1974 p. 88, 90

Other Literature:

Hartman, O. 1944. Allan Hancock Pac. Exped., 10:1-238

Important Characters:

Acicular spines present; maxilla I distally dentate;
maxilla I with 7 and 9 teeth; maxilla II with 7 and 13
teeth; prostomium acute distally, longer than wide.

Related Species & Character Differences:

N. attenuatus (Treadwell, 1906) has a distally rounded
prostomium which is about as long as wide and maxilla
I have 4 to 5 teeth. This species is poorly known.

Variability:

None noted in the literature or observed in specimens.

Aids to Identification:

Must be dissected; easily confused superficially with
Drilonereis species.