

SCAMIT VOUCHER SHEET

Species name: *Marphysa disjuncta* Hartman, 1961

SCAMIT Vol. 25 No. 5

Family: Eunicidae

Prepared by: Larry Lovell, LACSD: August 29, 2007

SYNONYMY:

Marphysa belli oculata of Hartman, 1963; of Hartman, 1968; not Treadwell, 1921

Marphysa sp. A of Harris and Velarde 1983§

LITERATURE:

Hartman, O., 1968. Atlas of the Errantiate Polychaetous Annelids from California. Allan Hancock Foundation, University of Southern California, Los Angeles. 828pp.

Lu, H. and K. Fauchald, 1998. *Marphysa belli* (Polychaeta:Eunicidae) and two related species, *Marphysa oculata* and *M. toto-spinata*, a new species, with notes of size-dependent features. Proc. Bio. Soc. Wash. 111(4): 829-842.

DIAGNOSTIC CHARACTERS:

1. Prostomium with five long smooth occipital tentacles, 2X length of prostomium. Tentacular cirri absent. See Figure 1.
2. Large pinnate branchiae present from setiger 13-28 in adults, 6-14 in juveniles. Insertion varies with body size (see Lu and Fauchald, 1998).
3. Composite spinigers present. **Composite falcigers present** (pers. com. - L. Harris, from holotype examination) in inferior part of the fascicle, from setiger 1 in juveniles, but can also start in the branchial region or post-branchially in adults (see Table 1). They occur in far posterior segments on large individuals. Aciculae are black with pale tips, usually 2 per fascicle. See Figure 2.

RELATED SPECIES AND CHARACTER DIFFERENCES:

1. *Marphysa angelensis* Fauchald, 1970. Occipital tentacles short; branchiae with up to 3 branches, begin set. 11 and continue to end of body; composite spinigers and falcigers are present together in all setigers.
2. *Marphysa conferta* Moore, 1911. Occipital tentacles short, articulated; branchiae begin set 7(or 4) present on 10 segments; only composite falcigers present.
3. *Marphysa mortenseni* Monro, 1928. Occipital tentacles short, not exceeding length of prostomium; branchiae subpalmate, begin on set. 25-up to 83 segments; only composite falcigers present.
4. *Marphysa sanguinea* (Montagu, 1815). Occipital tentacles just exceed length of prostomium, wrinkled; branchiae palmate, begin seg. 31-33 and continue throughout most of the body; only composite spinigers present.
5. *Marphysa stylobranchiata* Moore, 1909. Occipital tentacles short; branchiae simple, begin set 16-20, continue throughout most of the body; only composite falcigers present.

SCAMIT VOUCHER SHEET, cont.

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6. *Marphysa* sp. B of Phillips, 1999§. Occipital tentacles short; branchiae with maximum of three filaments and continue throughout most of the body; only composite spinigers present.

DEPTH RANGE: 30-151m.

HABITAT AND DISTRIBUTION: Soft sediment; southern California to San Cristobal Bay, Baja California.

DISCUSSION: Leslie Harris examined the holotype of *M. disjuncta* and found composite falcigers to be present in posterior setigers. My examination of specimens from the LACSD monitoring program (see Table 1) showed the appearance of composite falcigers and the start and end counts for branchiae to be size dependent. This agrees with the size dependent results for other closely related species in this genus as reported by Lu and Fauchald (1998). Given these results, the separation of *M.* sp A of Harris and Velarde, 1983§ cannot be maintained as distinct from *M. disjuncta*.

ILLUSTRATIONS:



Figure 1. Lateral view of anterior segments (0790 0C1).

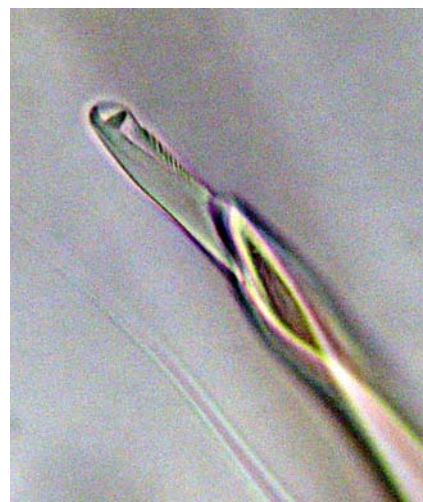


Figure 2. Composite falciger on setiger 53 (0790 0C1).

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Table 1. Chart showing characters measured on LACSD material sorted by width.
 (no. antennae, width at set. 10, set. branchiae begin, set. branchiae end, set. 1st
 composite falciger seen, set. subacicular hooks start).

survey	# ant.	width 10th	branch begin	branch end	1st CF seen	SAHook	1st ID	re ID
0106 - 0D	3	0.5	6	11	1	10	sp A	disjuncta
0106 - 7C	3	0.5	6	9	1	7	sp A	disjuncta
0106 - 7C	3	0.5	6	9	1	7	sp A	disjuncta
PSCBE 06210	3	0.5	7	13	4	12	sp A	disjuncta
PSCBE 06210	3	0.6	6	12	2	14	sp A	disjuncta
0106 - 8D	3	0.6	6	11	1	11	sp A	disjuncta
PSCBE 06210	3	0.6	7	13	4	14	sp A	disjuncta
0194 - 4C	3	0.8	6	14	2	14	sp A	disjuncta
0194 - 4C	3	0.8	6	14	2	14	sp A	disjuncta
0106 - 1C	5	0.9	8	15	10	15	sp A	disjuncta
0106 - 10C	5	1.1	9	17	*22	21	sp A	disjuncta
0106 - 3D	4	1.2	8	15	15	16	sp A	disjuncta
0101 - 1C	5	1.2	9	17	21	22	sp A	disjuncta
0102 - 1C1	5	1.2	9	17	26	18	sp A	disjuncta
0701 - 1C5	4	1.2	9	20	22	20	sp A	disjuncta
0102 - 1C1	5	1.2	9	17	24	18	sp A	disjuncta
0793 - 0C1	5	1.2	11	21	25	25	sp A	disjuncta
0702 - 0C2	5	1.5	10	20	24	19	sp A	disjuncta
site study W30	5	1.6	10	23	30	26	sp A	disjuncta
0196 - 0C	5	1.7	12	23	*46	27	sp A	disjuncta
0197 - 3C	5	2	10	23	*33	27	sp A	disjuncta
0193 - 10C	5	2	11	22+	38	26	sp A	disjuncta
0792 - 0C1	5	2.1	10	18	24	20	sp A	disjuncta
0790 - 0C1	5	2.1	12	23	43	27	sp A	disjuncta
0798 - 3D	5	2.2	12	23	42	26	sp A	disjuncta
0797 - 0C	5	2.2	12	24	*68	31	sp A	disjuncta
0790 - 0C1	5	2.3	12	24	44	26	sp A	disjuncta
0790 - 0C1	5	2.3	12	24	*51	28	sp A	disjuncta
0796 - 0C1	5	2.4	13	26	55	31	sp A	disjuncta
0795 - 0C1	5	2.4	13	24	47	28	sp A	disjuncta
0794 - 0C	5	2.5	13	26	55+	30	sp A	disjuncta
0191 - 1C	5	2.6	11	24	54	28	sp A	disjuncta
0790 - 2C	5	2.7	12	26	*50	29	sp A	disjuncta
0106 - 1C	5	2.8	11	26	38	28	sp A	disjuncta
0191 - 0B	5	3.1	12	26	100+	29	sp A	disjuncta
0192 - 2C	5	3.3	12	27	*71	30	sp A	disjuncta