SYNONYMY: *Euclymene grossa newporti*, not Berkeley & Berkeley 1941; Maldanidae sp A of CSD 1984; Maldanidae sp A of Phillips 1987; *Petaloproctus* type rear ends, of Green 1985 (SCAMIT voucher sheet Vol. 3, No. 12). Note: These are historical synonymies of usage in Southern California sampling programs.


DIAGNOSTIC CHARACTERS:

1. Rostrate uncini in neuropodia setigers 1-3.
2. Paired dorsal pores present on setigers 7-9 (see figs. 2, 3), *(not in original description, not reported for Maldanidae; KG)*. Pores are posterior to and slightly dorsal to the notosetae.
3. Methyl green staining pattern is present in pre and post-setal areas on setigers 4-7, with strong ventral staining patch on setiger 8 extending pre- and post-setal (see fig. 4).
4. Prostomium forms cephalic plaque with margins slightly incised posterolaterally and posteriorly (more pronounced in larger individuals). Nuchal organs long and parallel. Reticulate pattern visible on large individuals (see fig. 1).
5. Pygidium forms asymmetrical anal plaque; margin well developed with dorsal notch (see figs. 5, 6). Anus near ventral margin of plaque. Unfortunately pygidium is usually lost due to fragmentation, but can sometimes be found in the polychaete “fragments”.

RELATED SPECIES AND CHARACTER DIFFERENCES:

1. *Axiothella* sp – Rostrate uncini in neuropodial setigers 1-3, dorsal pores absent, MG staining presetal on setigers 1-4 and pre and postsetal on setigers 5-8, symmetrical anal plaque with central anus and circlet of pygidial cirri. Note: The taxonomy of the local species of *Axiothella* is poorly understood.
2. Euclymeninae sp A SCAMIT 1987 – Single acicular spines in neuropodial of setigers 1-3, dorsal pores absent, MG staining pattern on pre-setal areas only in setigers 4-7, MG ventral and lateral racing stripes present in early abdominal setigers, symmetrical anal plaque with central anus and circlet of pygidial cirri.
3. *Praxillella pacifica* E. Berkeley 1929 – Neuropodial spines setigers 1-3, dorsal pores absent, MG staining pattern setigers 4-8 is solid with no post-setal stain on setiger 8, symmetrical anal plaque with anal cone and circlet of pygidial cirri.
4. *Praxillella gracilis* (M. Sars 1861) – Neuropodial spines setigers 1-3, dorsal pores absent, prostomium with long thin anterior palpode, MG staining pattern setigers 4-8 is solid with no post-setal stain on set 8, symmetrical anal plaque with anal cone and circlet of pygidial cirri.
5. *Petaloproctus* sp – no cephalic plaque, neuropodial spine on first setiger, dorsal pores absent, anal plaque asymmetrical.

COMMENT: Identification of anterior fragments (the condition of most specimens) is confirmed by presence of dorsal pores on setigers 7-9 and MG staining pattern on setigers 4-8. Presence of the unique pygidial sections in samples indicate occurrence of this species.
Species name: *Petaloclymene pacifica* Green 1997

Family: Maldanidae

Prepared by: Larry Lovell, LACSD and Karen Green, SAIC

### DEPTH RANGE

10-200m

### HABITAT & DISTRIBUTION

Silty-sandy sediments; Santa Barbara to NW Mexico.

### ILLUSTRATIONS

Figure 1. Head end, lateral view, MG staining.

Figure 2. Dorsal pores, set 7,8; MG staining.

Figure 3. Dorsal pore, set 9, MG staining.

Figure 4. Ventral MG staining area setiger 8

Figure 5. Pygidium, lateral view.

Figure 6. Pygidium, dorsal view.

Material examined: Figs 1-3, large specimen, LACSD Station 1B, 150m, July 2007; Figs 4-5, LACSD Station 6D, 30m, July 2007.