Species: *Phyllochaetopterus* sp A SCAMIT, 2023 §

Synonyms: *Phyllochaetopterus* sp LA1 Haggin, 2019 §

Family: Chaetopteridae  
Suborder: Terebellimorpha  
Order: Terebellida  
Infraclass: Canalipalpata  
Subclass: Sedentaria  
Class: Polychaeta  
Phylum: Annelida

**Diagnostic Characters:**

1) Largest fragment 17.4 mm for 17 chaetigers; 3.3 mm long and 1.6 mm wide across Region A.

2) Prostomium rounded, eyes absent; tentacular cirri present on chaetiger 1 (Image 1).

3) Region A with 9 chaetigers (Image 2).

4) Region B with 2 chaetigers, notopodia appear bilobed (Images 3, 4).

5) Region C incomplete, # of segments unknown; parapodia bottle-shaped (Image 5).

6) Chaetiger 4 with 1 cutting chaetae, 3-sided and asymmetrical apically, with etchings in concavities and on shaft (Images 6, 7); notochaetae long, lanceolate, slightly asymmetrical (Images 6, 8); neurochaetae short, lanceolate, highly asymmetrical (Images 6, 9).

7) Tube thin, clear, parchment-like.

**Pigmentation/MGS:**

Prostomium, peristomium and A1 unpigmented; A2 yellow-brown; A3-A4 speckled brown; A5 brown; A6 glandular, white; A7 non-glandular, white; A8-A9 brown, fading to unpigmented (Image 2).

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Ver. 3.0  
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**Phyllochaetopterus sp A**

SCAMIT, 2023 §

**Material Examined:**

B’18-10355—South of Pt. Dume, Santa Monica Basin/San Pedro Channel, 818 m (5 inds.) (33.88369N, 118.79006W—17AUG18) (Images 2-9)

B’18-10366—Off Two Harbors, Santa Catalina Island, San Pedro Channel, 883 m (2 inds.) (33.48691N, 118.42353W—02AUG18) (Image 1)

Also from B’18-10362—San Pedro Channel, 745 m (33.63467N, 118.58360W—02AUG18)

**Similar Species:**

*Phyllochaetopterus limicolus* Hartman, 1960—*Phyllochaetopterus limicolus* is similar to *Phyllochaetopterus sp A* in having 9 chaetigers in Region A, 2 chaetigers in Region B, a single cutting chaetae in chaetiger 4 and lacking eyes. The two differ in the ventral pigment pattern of Region A. *Phyllochaetopterus limicolus* has been described with some variability in this pigmentation. Hartman (1960) described it as chalky white thru chaetiger 2, dark tawny or brown from 3-5, chalky white from 6-8 then grayish green. Blake (1996) describes it as pale on chaetiger 1, covered in small pigment spots becoming a reddish-brown band between 5/6 or 6/7, then a large glandular shield on 6-8. SCAMIT (1992)
Similar Species (cont.):

Phyllochaetopterus limicolus (cont.): discussed the variation in pigment and described *P. limicolus* as having brown coloration on chaetigers 5 & 6, and chalky white on chaetigers 6-8. All of these descriptions differ from the alternating narrow pigment bands found in *Phyllochaetopterus* sp A.

*Phyllochaetopterus prolifica* Potts, 1914 (sensu Blake, 1996)—*Phyllochaetopterus prolifica* is similar to *P. sp A* in having a single cutting chaetae in chaetiger 4 but differs in a number of ways. *Phyllochaetopterus prolifica* has eyes that are lacking in *P. sp A* and can have up to 12 chaetigers in both Regions A & B. The ventral pigment pattern of Region A is also different between the two species.

*Phyllochaetopterus* sp LH1 Harris, 2017 §—*Phyllochaetopterus* sp LH1 is similar to *P. sp A* in having a single cutting chaetae in A4 but differs in having up to 10 chaetigers in Region A and over 30 in Region B. The ventral pigment pattern of Region A is a solid brown in *P. sp LH1*, rather than alternating as in *Phyllochaetopterus* sp A.

*Phyllochaetopterus gigas* Nishi & Rouse, 2014—*Phyllochaetopterus gigas* is similar to *Phyllochaetopterus* sp A in having 9 chaetigers in Region A, 2 chaetigers in Region B, and lacking eyespots. *Phyllochaetopterus gigas* differs in the number of cutting chaetae in chaetiger 4, with up to 6, compared to 1 in *Phyllochaetopterus* sp A. The ventral pigment pattern of Region A also differs, consisting of a broad light patch followed by a broad dark patch and a large white, glandular region on chaetigers 7 and 8 in *Phyllochaetopterus gigas*, where it is a series of alternating thin bands and a narrow white, glandular region on chaetiger 6 in *P. sp A*. *Phyllochaetopterus gigas* has short, inconspicuous tentacular cirri, while *P. sp A* has relatively large tentacular cirri. *Phyllochaetopterus gigas* is known only from the vicinity of whale falls in Monterey Canyon in 2892 m.

Habitat:

*Phyllochaetopterus* sp A is known from deeper water in the San Pedro Channel. It is found in sediments of clayey silt from 745–883 m. Also collected in the samples were the polychaetes *Aamage longibranchiata* Hartman, 1960 (10355, 10366); *Ampharete cornuta* (Hilbig, 2000) (10355); *Myriochele gracilis* Hartman, 1955 (10362); *Maldane californiensis* Green, 1991 (10362); *Syllis* sp A SCAMIT, 2023 § (reported as *Syllis* sp LA4 Haggin, 2019 §) (10362); *Protis pacifica* Moore, 1923 (10355, 10362, 10366); *Aricidea (Acmira) rubra* Hartman, 1963 (10362); *Aricidea (Acmira)* sp LA1 Lovell, 2014 § (10355, 10366) *Levisenia oculata* (Hartman, 1957) (10362); *Cossura rostrata* Fauchald, 1972 (10362); *Kirkegaardia* sp B SCAMIT, 2023 § (reported as *Kirkegaardia* sp LA1 Haggin, 2019 §) (10355, 10362, 10366); *Chaetozone* sp D SCAMIT, 2023 § (reported as *Chaetozone* sp LA2 Haggin, 2019 §) (10355); *Harmothoe* sp LA1 Furlong, 2014 § (10362); *Lepidonotus* sp A SCAMIT, 2023 § (reported as *Lepidonotus* sp LA1 Haggin, 2019 §) (10362); and an unidentified polynoid (10362), an unidentified *Aricidea* (10355), an unidentified *Cossura* (10362).

Discussion:

Nishi & Rouse (2007) separated the genus *Phyllochaetopterus* into 4 groups based on the combination of number of cutting chaetae in A4 and the number of chaetigers in Region B. The groupings are as follows:

Group A—1-2 cutting chaetae in A4 & 2 chaetigers in Region B

Group B—1-2 cutting chaetae in A4 & 3 or more chaetigers in Region B

Group C—more than 6 cutting chaetae in A4 & 2 chaetigers in Region B

Group D—more than 6 cutting chaetae in A4 & 3 or more chaetigers in Region B

*Phyllochaetopterus* sp A would be placed into Group A with *Phyllochaetopterus limicolus*. 

Phyllochaetopterus sp A SCAMIT, 2023 §
Discussion (cont.):

The P-Value Tool file has a P-Code of “P389” for *Phyllochaetopterus limicolus*. *Phyllochaetopterus limicolus* is the most likely species for *Phyllochaetopterus* sp A to have been identified as in the past, but I am not sure if it should inherit P-Code “P389” from *Phyllochaetopterus limicolus*. Leslie Harris (SCAMIT, 2022) has expressed that true *Phyllochaetopterus limicolus* is found in deep water, it has a broad thorax and a thinner, tapering abdomen. It is possible that *P. sp A* is *P. limicolus* and the difference in ventral pigment is just variation.

WoRMS currently lists 22 valid species of *Phyllochaetopterus* and SCAMIT Ed. 13 has 2 named species and 1 provisional species listed. *Phyllochaetopterus* sp A would be the 2nd provisional species when added in Edition 14.

References:


Harris, L. 2017. NEP *Phyllochaetopterus* Character Table. *SCAMIT Handout*.


Other Literature Consulted: