**Zygonemertes virescens (Verrill 1879)** SCAMIT Vol. , No

Group: Nemertea: Enopla: Hoplonemertea: Amphiporidae

 Date Examined: 5 July 2011

 Voucher By: Tony Phillips

SYNONYMY: None

LITERATURE:

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Coe, W.R. 1905. Nemerteans of the west and north-west coasts of North America. Bull. Mus. Comp. Zool. Harvard Coll. 47:1-319.

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Coe, W.R. 1944. Geographical distribution of the nemerteans of the Pacific coast of North America, with descriptions of two new species. Journal of the Washington Academy of Sciences, 34(1):27-32.

Coe, W.R. 1951. The Nemertean Faunas of the Gulf of Mexico and of Southern Florida. Bull. Mar. Science of the Gulf and Caribbean, 1(3):149-186.

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 Correa, D.D. 1964. Nemerteans from California and Oregon. Proc. Calif. Acad. Sci., 31(19):515-558.

Crandall, F.B. & J.L. Norenborg. 2001. Checklist of the Nemertean Fauna of the United States. Nemertes (<http://nemertes.si.edu>). Smithsonian Institution, Washington, D.D. pp. 1-36.

Crandall, F.B. et al. 2002, Checklist of the Nemertean Fauna of Japan and Northeastern Asia. Nemertes (<http://nemertes.si.edu>). Smithsonian Institution, Washington, D.D. pp. 1-44.

Roe, P., J.L. Norenburg and S. Maslakova. 2007. Nemertea. In The Light and Smith Manual. Intertidal Invertebrates from Central California to Oregon. Pp. 221-233.

DIAGNOSTIC CHARACTERS:

1. Body grayish-white, green to greenish-brown to brown dorsally.
2. Proboscis sheath extends almost full length of body, proboscis papillated
3. Basis approximately 2x in length to stylet (s/b ratio 0.46 – 0.67); 1-2 accessory pouches with 1- 3 accessory stylets. Basis cylindrical with convoluted bottom. Point of stylet attachment to basis can have scalloped edge.



1. Eyes sometimes weakly visible when not cleared; cleared specimens (Figure 1) with an anterior row of eyes on anterior edge of head in front of cephalic furrow/brain lobe. Inside of these external rows is a second pair of rows that are also anterior of the cephalic furrow/brain lobe. The interior row of eyes are smaller is size compared to the outside row. The external row can have up to 20 -30 round eyes and the interior row 15 – 20 eyes. An irregular row of eyes along the lateral nerve cord (posterior of cephalic furrow/brain lobe) can appear to be connected to the external row of anterior eyes. This posterior directed irregular row can have up to 30 eyes. Coe (1905) described up to 100 eyes in individuals he observed. Eyes are black, but have been described to be reddish-brown in brown individuals (Coe 1905).



Figure 1. Zygonemertes virescens (cleared) eye pattern.

RELATED SPECIES AND CHARACTER DIFFERENCES:

The normal gray- greenish coloration of Zygonemertes virescens make it stand out in relation to the other enoplans found in the SCB. It is a more robust (thickened) species than most enoplans found in the SCB. Two other species of Zygonemertes have been described for the Pacific coast of North America. Coe (1901) described Zygonemertes albida and Z. thalassina. Zygonemertes albida is described as being white to pale yellow and is found only as far south as Puget Sound, though Crandall is reported to have found a specimen in Monterey (Roe, et al. 2007). Zygonemertes thalassina is described as being similar to Z. virescens except for the armature of the proboscis and number of probosideal nerves (Coe 1905). It has only been reported in Alaska (Coe 1901, 1905, 1940, 1944) until Roe et al. 2007 report an occurrence at Point Reyes by Crandall. A species of Tetrastemma (T. aberrans Coe 1901), found north of Monterey, is similar is dorsum coloration, but can be differentiated by eyes and proboscideal armature.

DEPTH RANGE: Intertidal – 15 meters

DISTRIBUTION: British Columbia to Ensenada, Mexico; New England