PSEUDOPECOELOELUS SESOKOENSIS
SP. N. (TREMATODA: OPECOELIDAE)
FROM THE INTESTINE OF
PLECTORHYNCHUS PICTUS
(VALENCIENNES) OF OKINAWA, JAPAN

William G. Dyer
Department of Zoology
Southern Illinois University
Carbondale, IL 62901

Ernest H. Williams, Jr. and Lucy Bunkley Williams*
Sesoko Marine Science Center
University of the Ryukyus
Motobu-cho, Okinawa 905-02 Japan

ABSTRACT

Pseudopecoelus sesokoensis sp. n. is described from Plectorhynchus pictus of
Sosokojima, Motobu-cho, Okinawa, Japan. It differs from other species of Pseudopecoelus except P. maomao Yamaguti, 1970, from Abudejduj abdominalis of
Hawaii in having unlobed gonads, vitellaria not extending anterior to the acetabulum, and a pendunculated acetabulum without lateral notches. It differs from P. maomao in having an acetabulum larger than the oral sucker and vitellaria uninterruptes at the testicular level.

During the course of a study of the parasites of marine fishes of Ryukyu
Islands, Japan, 2 specimens representing the genus Pseudopecoelus von Wicklen,
1946, were detected in the intestine of 1 of 4 Plectorhynchus pictus taken off the
north coast of Sosokojima, Motobu-cho, Okinawa. Based on comparison with other

*Permanent Address: Department of Marine Sciences, University of Puerto Rico, Mayaguez, Puerto Rico 00708
species of *Pseudopecoelus*, the specimens are considered to be new species which is described herein.

**MATERIALS AND METHODS**

Four *Plectorhynchus pictus* were taken by means of spearfishing off the north coast of Sesoko-jima, Motobu-cho, Okinawa during July, 1985. Fishes were kept alive in plastic bags containing seawater and transported to the laboratory where the containers were placed in a refrigerator. Live specimens were removed from the fish within a few hours.

Flukes were washed in 0.7% saline, fixed in warm AFA and stored in 70% ethanol plus 2% glycerin. Specimens were stained with Harris' hematoxylin, dehydrated, cleared in beechwood creosote, and mounted in Canada balsam. Measurements are in micrometers unless otherwise indicated. The drawing was made with the aid of a camera lucida.

**DESCRIPTION**

Opecoelidae Ozaki, 1925
Opecoelinae Stunkard, 1931

*Pseudopecoelus* von Wicklen, 1946

*Pseudopecoelus sesokoensis* sp. n.

(Fig. 1)


Type host: *Plectorhynchus pictus* (Valenciennes) (Perciformes: Pomadasyidae)

Anatomical location: intestine

Type locality: North coast of Sesoko-jima, Motobu-cho, Okinawa, Ryukyu Islands, Japan, 26° 38'N, 127° 52'E; depth 60 ft., large coral heads.

Type specimen: USNM Helm. Coll. holotype no. 79503.

Etymology: The specific epithet *sesokoensis* refers to the geographic locality of the host and parasite.
DISCUSSION


*Pseudopecoeulus sesokoensis* sp. n. differs from other species in this genus except *P. maomao* Yamaguti, 1970, from *Abudefduf abdominalis* of Hawaii in having unlobed ovary and testes, a predunculated acetabulum without lateral notches, and vitellaria not extending anterior to the acetabulum. It differs from *P. maomao* in having an acetabulum larger than the oral sucker and vitellaria uninterrupted opposite to the testes.

ACKNOWLEDGMENTS

Special thanks to Dr. J. Ralph Lichtenfels of the Animal Parasitology Institute, USDA, ARS, Beltsville, Maryland, who kindly loaned the type specimens of *P. maomao*. Dr. Kiyoshi Yamazato, Sesoko Marine Science Center and the Ministry of Education, Science and Culture of Japan supported the research of EHW and LBW for 1 year (1985-1986).

LITERATURE CITED

Figure 1. *Pseudopecoelus sesokoensis*, ventral view of holotype, from *Plectorhynchus pictus*. 