

PLANORBIS CORNEUS NOT AN INTER-
MEDIATE HOST OF SCHISTOSOMA
MANSONI*

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ABOUT five years ago the writer obtained several specimens of *Planorbis corneus*, a mollusc widely distributed in Europe, from a resident of Puerto Rico who had purchased them in New Jersey, and has maintained the form in the laboratory since then. Mr. Frank C. Baker of the University of Illinois identified the species.

The status of *P. corneus* in respect to *S. mansoni* is apparently unknown. During the past year a number of examples, approximately a half inch in diameter, were exposed to active miracidia of *S. mansoni*. In practically all instances a definite reaction was noted, that is, the miracidia attempted penetration. Continuously we observed for half hour stretches the actions of the abundance of miracidia, several often being attached to a single tentacle, many to the head of the snail, yet penetration could never be demonstrated. Usually, a miracidium, after its efforts at some area had failed, would renew its attempts elsewhere. Snails, viable ova and miracidia were kept in the same container two to three hours—sometimes, several days. None of the molluscs passed cercariae four to six weeks after exposure. Dissection of the digestive glands (liver) showed no evidence of the presence of the sporocysts.

Two snails were kept alive for long periods, one exposed November 11, 1937, and killed February 20, 1938. Similar dates for the other were December 2, 1937 and the first week in March, 1938. At no time were cercariae discerned. Dissection of the digestive glands resulted negatively. A series of longitudinal sections of the posterior portion of that organ in the case of the second snail, likewise failed to demonstrate an evidence of invasion.

P. corneus is now used locally by fish fanciers for their aquariums, as cases of schistosomiasis have been contracted from the use of *A. glabratus* for such purposes.

The texts of Mönnig, Sprehn and Neveau-Lemaire mention four

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Old World avian trematodes which utilize *P. corneus* as their intermediate host. Given favorable conditions the species may become established and function similarly in Puerto Rico.

The instance reported above illustrates how easily an intermediate host may be introduced into a new area.