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## Research Notes: Experimental Infection with Strigoid Cercariae

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## RESEARCH NOTE

### EXPERIMENTAL INFECTION WITH STRIGEOID CERCARIAE

During the summers of 1947 and 1948 strigeoid cercariae from Carrol Lake, Wisconsin were collected and identified by the late Dr. F. G. Brooks and turned over to the writer for use in the experimental infection of frog tadpoles and various fish. It was hoped to establish or eliminate these animals as the second intermediate host. One of the 8 tested was found infective for fish, and 1 infected tadpoles. These records do not elucidate the life cycles of these worms, but it is hoped that the work may help in the future study of strigeoid cercariae.

Descriptions of the cercariae used may be found in Brooks, F. G. (1948. Report to the Biology Division of the Wisconsin Conservation Department and the Department of Zoology, University of Wisconsin, on larval trematode parasites of Carrol Lake snails).

I wish to thank the Wisconsin State Conservation Department for assistance and the use of facilities at the Woodruff Fisheries Biology Laboratory.

Following is a list of the cercariae used and the results of the attempted infections:

1. *Cercaria lambda* Brooks, 1948:—Experimental metacercariae were not recovered from the following: Sunfish, *Lepomis gibbosus* (5), 1–48 days; bullhead, *Ameriurus* sp. (3), 15–38 days; perch, *Perca flavescens* (2) 1–3 days; Mud minnow, *Umbra limi* (2), 30–51 days; golden shiner, *Notemigonus chrysoleucas* (1), 30 days; frog tadpoles (sp?) (8), 6–20 days.

2. *Cercaria psi* Brooks, 1948:—Six sunfish and 2 largemouth black bass, *Huro salmoides*, developed metacercariae identical or similar to *Neascus ambloplitis* = *Uvulifer ambloplitis* as recorded by Krull (1934, Copeia 2: 69–71) and Hunter and Hamilton, (1941, Tr. Am. Micr. Soc. 60 (4): 498–507).

Metacercariae were not recovered from the following—bullhead (1), 28 days; mud minnow (3), 34 days; perch (3), 3–11 days; stickleback, *Eucalia inconstans* (2), 7 days; golden shiner (4), 4–7 days; fathead minnow, *Pimephales p. promelas* (1), 5 days; frog tadpole (sp?) (4), 4–29 days.

3. *C. stonii* Brooks, 1943:—Experimental metacercariae were not recovered from the following—sunfish (4), 8–32 days; perch (1), 3 days; bullhead (3), 23–36 days; mud minnow (2), 10 days.

4. *C. douglasi* Cort, 1917:—Experimental metacercariae were not recovered from the following—sunfish (4), 3–30 days; fathead minnow (1), 20 days; golden shiner (1), 15 days.

5. *C. kappa* Brooks, 1948:—Experimental diplostomula were recovered from many frog tadpoles (sp?); they were recovered from the body cavity and were very similar to those reported for *Fibricola texensis* by Chandler (1942, Tr. Am. Micr. Soc. 61: 156–167).

Experimental metacercariae were not recovered from the following—golden shiner (5), 4–6 days; sunfish (2), 7 days.

6. *C. macradena* Cort and Brackett, 1938:—Experimental metacercariae were not recovered from sunfish (2), 5–30 days.

7. *C. dohema* Cort and Brackett, 1937:—Experimental metacercariae were not recovered from the following—sunfish (4), 3–30 days; bullhead (1), 5 days; fathead minnow (2), 5 days; golden shiner (1), 20 days; mud minnow (1), 21 days.

8. *C. zeta* Brooks, 1948:—This form is very similar to *Cercaria Posthodiplostomum minimum* but experimental metacercariae were not recovered from the following—sunfish (6), 2–14 days; golden shiner (6), 2–12 days; mud minnow (4), 5–13 days; largemouth black bass (1), 12 days.—GLENN L. HOFFMAN, University of North Dakota [Present address: Eastern Fish Disease Laboratory, Leetown (P. O. Kearneysville) West Virginia].

## PLATE I

