

A New Second Intermediate host of the Trematode, *Gorgodera Amplicava*

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Gorgodera amplicava Looss is a common trematode parasite of the urinary bladder of the frogs, *Rana clamitans* Latr. and *R. catesbeiana* Shaw. Krull (1935) has described the life cycle of this parasite. He found that a bivalve mollusk, *Sphaerium partumeium* Say, served as the first intermediate host and that a snail, *Helisoma antrosa*, acted as the second intermediate host. In a later paper, Krull (1936) lists the following additional snails that may function as second intermediate hosts: *Physa halei*, *Lymnaea traskii*, *Helisoma trivolvis*, and *Pseudosuccinea columella*.

To this list of second intermediate hosts I wish to add the crayfish, *Cambarus sp.* In the examination of these crustacea from a small stream near Lafayette, Indiana, a number of metacercariae were found in the body cavity, loosely attached to the wall of the cardiac chamber of the stomach. Over 50% of the crayfishes from this region were infested with this larval trematode. Clams of the genus *Sphaerium* were collected from this locality, and some of them gave off cercariae which were fed to crayfishes. The crayfishes used in the feeding experiment were part of a group collected from a very small stream in which no *Sphaerium* or other bivalves could be found. As a check on previous infestation, approximately fifty crayfishes from this group were examined and found to be negative. The cercariae which were fed encysted in the crayfishes in the region of the cardiac chamber of the stomach. When crayfishes were examined at intervals after the feeding, it was found that the metacercariae reached their maximum size in four or five weeks. Crayfish tissue containing metacercariae was fed to two of four frogs (*Rana pipiens*) collected from a small swamp. The other two frogs were found to be negative for bladder flukes. One frog was examined fourteen days after the experimental feeding, and immature trematodes were found in the bladder. The other frog was examined thirty-one days after feeding the metacercariae, and sexually mature *Gorgodera amplicava* were recovered from the bladder. Several of these worms were producing eggs.

References

- Krull, W. H., 1935. Studies on the life history of a frog bladder-fluke, *Gorgodera amplicava* Looss, 1899. Papers of Mich. Acad. Sci., Arts and Letters. 20:697-709.
- Krull, W. H., 1936. Additional second intermediate hosts for *Gorgodera amplicava* Looss, 1899. (Trematoda: Gorgoderidae). Proc. Helminthological Soc. of Wash. 3:58.