

한국산 「재첩」 이 「이전고환극구흡충」 의 제 2
패류중간숙주가 될 수 있는가

Corbicula fluminea (Bivalvia: Corbiculidae): a possible
second molluscan intermediate host of *Echinostoma*
cinetorchis
(Trematoda: Echinostomatidae) in Korea

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Corbicula fluminea Müller 1884 is the commonest freshwater bivalve in Asian countries including Korea. This clam is easily found in the freshwater systems, and edible as a food source in Korea. This study was aimed to confirm natural infection of *C. fluminea* collected from various localities with *Echinostoma cinetorchis*, an important human intestinal fluke in Korea.

In field-collected *C. fluminea* (about 2.4cm in width), no shedding of lophocercous cercariae and metacercariae of *E. cinetorchis* was found in this study. As the second step each of a total 20 clams was exposed to 20 *E. cinetorchis* miracidia for 20 hrs. in the laboratory, and the exposed clams were checked for shedding the cercariae everyday 10 days postinfection. However, no cercaria was released up to 50 days after observation. To confirm the clams as the second intermediate host of *E. cinetorchis* experimentally each of 30 clams was exposed to 100 cercariae shed from *Segmentina hemisphaerula* which had been infected with miracidia of *E. cinetorchis*. More than 90% of 30 clams employed were found to be infected with the metacercariae. Metacercariae from clams were orally fed to rats (Sprague-Dowley strain). These rats were killed 4 weeks after infection and typical adult worms of *E. cinetorchis* were recovered from the small intestines.

This is the first report that *C. fluminea*, a Korean favorable food source, possibly acts as the second intermediate host of *E. cinetorchis* in Korea.