

Heterophyid flukes are human small intestinal parasite. Eggs morphology under light microscope and life cycles of these flukes are closed to those of liver fluke, *Opisthorchis viverrini*. Nevertheless, *O. viverrini* can produce more severe pathological changes and complications. In this study, more metacercariae of Heterophyid flukes were found in natural cyprinoid fishes in Tambon Ban Pao, Amphur Mae Tang, Chiang Mai Province than those of *O. viverrini*. By morphological characteristic, the metacercariae of *Haplorchis taichui* and *H. pumilio* were 90.26%. *Puntius leiacanthus*, *P. gonionotus* and *Thynnichthys thynoides* were the most highly infected cyprinoid fishes with the average of 181.7, 80.3 and 59.2 metacercariae per fish, respectively. However, the metacercariae of *O. viverrini* was only 0.23%. After 5 days infection of heterophyid metacercariae in mice, the parasites developed to be adults with eggs, however, there was no egg found in mice feces. All of the adult parasites found in mice were morphologically resemble to *H. taichui*. Niclosamide in the dose of 40 mg per 1 kg body weight for one dose can eradicate all of the heterophyid flukes in mice. This drug is almost not absorbed in the intestinal wall, with the small part absorbed being metabolized into aminoclosamide, which is inactive as an anthelmintic. In case of the *Opisthorchis*-like egg is found in feces, Niclosamide may be the proper drug using for eradicate heterophyid flukes from the intestine. The patients who still have the same kind of eggs in refecal examination should be the *O. viverrini* infected person.