

ELIMINATION OF *HAPLOCHIS TAICHUI* METACERCARIA IN CYPRINOID FISH WITH FREEZING TEMPERATURE AND SOURED FISH (*PLASOM*) WITH SALINITY

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Abstract. Human *Haplorchis taichui* intestinal fluke infection occurs via consumption of raw or undercooked cyprinoid fish and products made of this fish, eg soured fish (*plasom*). This study investigated the elimination of the *Haplorchis taichui* metacercaria in cyprinoid fish by freezing temperature (-20°C) and in *plasom* made from cyprinoid fish by salinity. Moving score and movability index were used as criteria for determining viability of the metacercaria. Fish samples were derived from a natural reservoir at village Phu Khambao, Tambon Ubolrattana, Ubon-rattana District, Khon Kaen, Thailand (GPS location: 16°43'22"N 102°37'28"E). The results showed that fish samples stored at -20°C in a commercial freezing (ice-cream) cabinet must be kept for at least 72 hours to completely eliminate the metacercaria. In addition, salinity at 41.2 ppt or higher effectively eliminated the metacercaria in *plasom* samples kept at room temperature for two days. Since *plasom* with high salinity is too salty and unhealthy, households or home-based producers should be suggested to produce fluke-free *plasom* by using fish stored in commercial ice-cream cabinet for 72 hours.

Keywords: *Haplochis taichui*, cyprinoid fish, *plasom* (soured fish), freezing temperature, salinity

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