



## **Rediagnosis of *Ichthyotrema* Caballero & Bravo-Hollis, 1952 (Digenea: Gyliachenidae Fukui, 1929), including the redescription of *I. vogelsangi* Caballero & Bravo-Hollis, 1952**

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### **Abstract**

Recent studies on the Gyliachenidae Fukui, 1929 have led to our reinterpretation of the morphology of the group. Here we emend the generic diagnosis of *Ichthyotrema* Caballero & Bravo-Hollis, 1952 to reflect current understanding of the morphology of the digestive system and male terminal genitalia. We redescribe the type-, and only, species, *Ichthyotrema vogelsangi* Caballero & Bravo-Hollis, 1952, based on our examinations of paratype material from the intestine of *Prionurus punctatus* Gill, 1862, caught in Pacific waters off Mexico. Specimens of *I. vogelsangi* are distinctive because of their massive bodies, and *Ichthyotrema* is distinguished among the Gyliachenidae by the position of the cirrus-sac entirely posterior to the caeca, the possession of a post-testicular ovary and the coiling of the uterus between the diagonal testes. The ventral sucker of *Ichthyotrema* is close to the posterior extremity of the body, supporting placement of the genus within the Gyliacheninae Fukui, 1929. Here we recognise *Ichthyotrema* as a monotypic genus within the Gyliachenidae, which is restricted to acanthurid fishes in the Eastern Pacific Ocean.

**Key words:** *Ichthyotrema vogelsangi* Caballero & Bravo-Hollis, 1952; *Ichthyotrema* Caballero & Bravo-Hollis, 1952; Gyliachenidae; Digenea; *Prionurus punctatus* Gill, 1862; Acanthuridae; East Pacific

### **Introduction**

*Ichthyotrema* Caballero & Bravo-Hollis, 1952 was originally proposed as a monotypic genus within the Pronocephalidae Looss, 1902. These authors designated the genus within a new subfamily, Ichthyotreminae Caballero & Bravo-Hollis, 1952, based on the presence of a “prepharynx”, short caeca, a post-testicular ovary, the structure of the male terminal genitalia, the restriction of the vitelline follicles and the shape of the excretory vesicle. Yamaguti (1958) reassigned *Ichthyotrema* to the Gyliachenidae Fukui, 1929; Winter (1960) agreed with this placement and recognised the Ichthyotreminae within this family based on the post-testicular position of the ovary. Manter & Pritchard (1962) described a second species, *I. chaetodontis* Manter & Pritchard, 1962, which was subsequently reassigned to *Flagellotrema* Ozaki, 1936 by Yamaguti (1970); we have previously recombined this species as *Hadrobolbus chaetodontis* (Manter & Pritchard, 1962) Hall & Cribb, 2005 (see Hall & Cribb 2005a). Currently, we recognise *Ichthyotrema* as a monotypic gyliachenid genus, within the subfamily Gyliacheninae Fukui, 1929, distinguished from other gyliachenines by the combination of the massive fusiform body, sigmoid oesophagus, cirrus-sac entirely posterior to the caeca, post-testicular ovary and the uterine coils winding between the diagonal testes. Recently, we have been investigating extensively the taxonomy and biodiversity of the Gyliachenidae in the Indo-West Pacific. As part of that investigation, we have reinterpreted much of the morphology of gyliachenids, particularly with respect to the gastrointestinal and male reproductive systems (see Hall & Cribb 2005a, b). Here we clarify the generic diag-