

P95

IDENTIFYING HOSTS AND HOST'S ANSWERS TO THE ENIGMATIC AUTOCHTHONOUS LEECH *Haemopsis elegans* (HIRUDINEA: HAEMOPIDAE)

Hasst A.^{1,2}, Kleewein A.³

¹Department of Specific Prophylaxis and Tropical Medicine, Medical University Vienna, Austria; ²Micro-Biology Consult Dr. Andreas Hassl, Vienna, Austria; ³Department of Evolutionary Biology, University of Vienna, Austria

For decades ectoparasitism on anurans was exclusively attributed to leeches of the genus *Hirudo* in Europe, whereas indigenous leeches of the genus *Haemopsis* were considered to show a preclusive macrophagous feeding behaviour. Nevertheless, the family Hirudinidae is poly-paraphylic, and the feeding behaviour is no synapomorphic attribute within this leech family.

In 2004 the Haemopid taxon *Haemopsis elegans* (Moquin-Tandon, 1846) was renovated, perhaps re-erected as species, and plausibly separated from the ubiquitous and abundant predacious species *H. sanguisuga* after a century of being vanished. The feeding behaviour and the prevalence of this Central European autochthonous leech are unknown so far.

During an amphibian population monitoring at the Lanzendorfer Moor near Klagenfurt in Carinthia in spring 2005 some common toads (*Bufo bufo*) were detected being molested and injured by leeches. The leeches stuck on the toads unequivocally, penetrated the toad's skin marginally via a bite, causing a massive skin reddening and irritation; and a picayune after-bleeding circle became apparent when the leeches were removed by force. The leeches were surprisingly diagnosed as members of the Haemopid taxon *Haemopsis elegans*.

Due to a weaker shaped mouthpart compared to the one of the predacious *H. sanguisuga*, tissue- or blood-feeding of *H. elegans* was assumed formerly; the original author, Moquin-Tandon, even postulated sanguivory on homoiothermic vertebrates. Thus, attacking and assaulting toads seems to be a possible behavior of this leech taxon - at least as a failed attempt of tissue feeding on an oversized prey. A distinctive, common anti-leech behavior of water frogs was described at the Lanzendorfer Moor previously. Whether this is an analogue behavior of frogs to the well known anti-violator behaviour of common toads, or this is the local frogs answer to assaults by *H. elegans*, remains open.