

A Conservation Medicine`s Ward: *Haemopsis elegans*, an enigmatic toad-injuring autochthonous leech

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Five native leeches are well known sucking blood from or feeding on tissues of vertebrates except fishes: The allochthonous, exclusively sanguivorous medical leeches, *Hirudo medicinalis* and *H. verbana*, the autochthonous, ectoparasitic European turtle leech *Placobdella costata*, and the autochthonous, but endoparasitic duck leeches *Theromyzon tessulatum* and *T. maculosum*.



l: *Hirudo medicinalis*
r: *Hirudo verbana*
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Placobdella costata
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Theromyzon tessulatum
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Theromyzon maculosum
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l: *Haemopsis elegans*
r: *Haemopsis sanguisuga*
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The native species of the leech genus *Haemopsis* (Deutsch: Unechte Roßegel) are considered to be macrophageous, not sanguivorous. Yet, in 2004 a superb taxon, *Haemopsis elegans* (Moquin-Tandon 1846), has been re-erected by Grosser; and this presumptive native and autochthonous taxon, most probably a rare species deserving protection, is habitually separated from the ubiquitous, common, and sober *H. sanguisuga*. But, biological data of *H. elegans* are unknown to a large extend, especially the diet and the habitat of this leech are sensitive material.

During a herpetological survey in the Lanzendorfer Moor/Carinthia in May 2005 leeches were detected by chance attacking and injuring spawning toads (*Bufo bufo*). Some of the leeches were classified as *H. elegans* by the unicoloured dark-gray venter, the lateral margins with a compact longitudinal yellow stripe, and the brown median stripe with some paramedian rectangular brown spots on the greenish dorsum. At least one of them was stuck on a toad 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 leech was removed by force.

Haemopsis elegans
on *Bufo bufo*
© A. Kleewein



Conclusions: *Haemopsis elegans* may be the only known ectoparasitic and maybe even sanguivorous species within the leech genus *Haemopsis*; macrophagous feeding behavior will no longer be regarded as a helpful taxonomic criterion within the family Hirudinidae; and the thesis of poly-paraphyly within this leech family is reinforced.