Bassianobdella fusca sp. nov. (Hirudinoidea: Richardsonianidae), with an Initial Demonstration of Systematic Values in the Lengths of Annuli in the Mid-Nephric Somites

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Figures 1 and 2. Manuscript received 22nd October, 1970.

ABSTRACT

The new species is distinct in having the annuli subequal in length in the somites of the middle group of the nephric series. The bassianobdellid elongate cylindroid form of the ejaculatory bulbs, and elongate U-shape of the caecate vagina, are shown to be primary morphological forms.

The requirements of an aquatic sanguivorous habit impose a rigid discipline on the morphology of 34 somites in jawed sanguivorous leeches which, accordingly, are animals exhibiting a high measure of monotony in their general morphology. Qualities such as behaviour, muscularity, colour, etc., which readily separate closely similar species in life, vanish or diminish with death and preservation, leaving the systematist the difficult task of finding morphological separation in species which are similar in pattern, in general meristic morphology, jaws, dentition, and the other readily accessible criteria utilized in the classification of leeches for the past 150 years.

With failure in this, the indications of speciation observable in live leeches have been disregarded, and for nearly 100 years the majority of "species" have been defined where separation has been possible on distinctive morphological features present in some leeches. The approach to the assessment of the nature of speciation has been further complicated by the elementary and totally inadequate definition of genera.

The seven-banded bassianobdellid leeches are now known from Tasmania to southern Queensland. Over this range, they are essentially similar in general somital annulation, the location of external landmarks, pattern, the topography of pattern, jaws and dentition, with colour ranging from black through shades of brown, to olive. As such they would have been recognized until recently as a single species, which, lacking salivary gland papillae and copulatory gland pores, and with 16 complete 5-annulate somites, would have been placed in Limnobdella.

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