lateral projections on the thorax and/or abdomen, called lateral scoli. At the end of the abdomen there is a long supra-anal process, which carries faeces and/or exuviae in order to provide a mechanical and chemical protection to the larvae.

The immature stages of many Cassidinae species are still unknown or poorly described. In the cassidine clade, only 254 (8.3%) of the species are described or illustrated, mainly the last instar larva. For the tribe Mesomphaliini, that comprises around 553 species, immatures of only 33 species have been described, most of them only superficially, except for three species. For Paraselenis, the only larva described is \textit{P} (s. str) \textit{axillaris}, but it is a superficial description of the last instar larva. \textit{Paraselenis} is one the three genera in Mesomphaliini with maternal care. This defensive behavior is probably responsible for the huge morphological changes in the larvae of the species with maternal care.

Compared with the other larvae of Mesomphaliini without maternal care, \textit{Paraselenis} larva has lateral scoli reduced in size and number, also the supra-anal process is shorter. Other features are setae on the head and dorsal side of the body reduced in size and number. The eyes are proportionally smaller. The only larvae described with maternal are \textit{Acromis spinifex} and \textit{P} (s. str.) \textit{axillaris}. Since none of these descriptions are detailed, the only difference observed between \textit{Acromis} and \textit{Paraselenis} larvae is the number of lateral scoli, which are eight and ten, respectively.

\section*{About homology of \textit{Haliplus} Latreille, 1802 larvae postanal process (Coleoptera, Haliplidae)}

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\textit{Haliplus} larvae are characterized by long postanal process, often forked at the tip. This process was interpreted as partially fused urogomphi (\textit{Vondel} 2004, 2005, 2011 etc.; \textit{Beutel} et al., 2011), or modified cerci (\textit{Jaboulet} 1960). According to \textit{Seeger} (1971), \textit{Spanger} (1991) and \textit{Lawrence} & \textit{Ślipiński} (2013), abdominal segment X is expanded posteriorly forming a median process.

We have studied the structure of the terminal segment of the larvae \textit{Haliplus} s.str. and \textit{Liaphlus} spp. on the series of sections 10 and 20 \textmu m, stained Mayer’s haematoxylin.

Muscles of abdominal segments in \textit{Haliplus} consist of muscle bundles that do not form bands or layers. The complexity of the muscular system of \textit{Haliplus} is far inferior to that of the larvae of Dytiscidae (\textit{Speyer} 1922) and approaches to the minimum set of muscles, known for smallest larvae of Ptiliidae (\textit{Grebennikov} & \textit{Beutel} 2002; \textit{Polilov} & \textit{Beutel} 2009).

In the abdominal segment VIII–IX \textit{M. dorsales interni mediales} and \textit{M. ventrales interni mediales} (nomenclature of muscles after \textit{Kemner} 1913) are well developed, originating from the phragma and attached to the edge of the next segment. Typically, each of these muscles is represented by two pairs of bundles. Working as antagonists, they provide flexion and
extension of the abdomen in the sagittal plane. External longitudinal muscles are absent. Dorsoventral muscles of the segments are represented by two groups with different functions: oblique *M. urotergosternales interni* provide lateral flexion of the abdomen and, in part, act as synergists of longitudinal muscles; transverse *M. tergosternales externi* act as depressors of the segment. Each group of dorsoventral muscles is also represented by several bundles, so that the bundles of oblique muscles are able to act as their antagonists.

Musculature of the abdominal segment X is represented by 3–4 bundles of muscles, which originate on the dorsal surface and are inserted at the edges of the anal area. Anal area of *Haliplus*, like other cuticle, is strongly sclerotized and represented by two lobes bearing paired apodemes. Paired distal muscles (homologs of dorsal retractor — *M. retractores ani dorsales*) are attached to these apodemes, as well as 2–3 pairs of proximal muscles, interpreted by us as ventral retractors (*M. retractores ani ventrales, M. retractores bursarum analium*). Musculature of abdominal segment X in Adephaga larvae is formed exclusively by longitudinal muscles – the retractors of the anus, anal camera, or eversible appendages (*Kemmner 1913*). Thus, it can be assumed that the longitudinal axis of abdominal segment X in *Haliplus* is heavily tilted, takes an almost vertical position and does not coincide with the axis of the postanal process, occupying the terminal position. Therefore, this postanal process should be considered as outgrowth of the dorsal surface of the segment X, not homologous to urogomphi or cerci.

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The intertidal larva of a new species of *Micronaspis* (Coleoptera: Lampyridae) from Northeastern Brazil

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The monotypic firefly genus *Micronaspis* Green, 1948 (Lampyridae: Lampyrinae: Cratomorphini) is renowned by its intertidal immature stages. *Micronaspis floridana* Green, 1948 is reported for southern Florida, U.S.A. The new species inhabits rocky shores of the Serra Grande beach, Bahia, part of the Atlantic Rainforest biome of the Neotropical Region. Green (1959) distinguished *Micronaspis* from other lampyrid by pronotum not alutaceous, without median carina, prothorax distinctly emarginated medially and clypeus not connate with frons. The knowledge concerning immature stages of Lampyridae is still insipid and information about ontogeny of *Micronaspis* remains scanty. This study aimed to describe the larva of a new species collected on three campaigns in the rainy season from December 2014 to March 2015 deposited in Entomological collection Professor José Alfredo Pinheiro Dutra, Universidade Federal do Rio de Janeiro, and comprising 50 larvae. The larva of a new species of *Micronaspis* is distinguished by head with 2 vitreous areas convergent posteriorly, each one as wide as antennomere II and strongly indented on the posterior margin; coronal suture almost reaching epicranial suture; stemmata moderately developed; antennomere I robust and membranous; mandibles symmetrical, narrow, sickle with apex weakly curved, with a fringe of bristles covering 2/3 of the mandible, and a duct opening externally, near to the apex; labial palp two-segmented, I globular, sclerotized and with distal bristles, II apically narrow; prothorax trapezoidal, 2× longer than wide, anterior margin slightly emarginated; abdominal terga I-VIII with four tubercles, two on the median posterior margin that is half than the pair on the posterior angles; abdominal sterna with a pair of setae in the posterior third. Here, we provide characters to distinguish the known larvae of the Cratomorphini, and report *Micronaspis* for the first time in South America. This is the first step towards a taxonomic review of the genus.