

**Diversity of Paederinae
referring to their equipment of female accessory glands
(Coleoptera Staphylinidae)**

Note 16 (Staphylinioidea), released by Luigi De Marzo on February 2013
– An analysis based on seven species of this subfamily.
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SUBJECTS

- Although all included into a single tribe (Paederini, *sensu* Coiffait, 1978; 1982; 1984), the examined species widely differ to each other in the anatomical outlines of their female internal genitalia.
- Diversity was previously appreciated by looking at the shape of the spermatheca (De Marzo, 2010)
- and is confirmed to be as much wide in the equipment of female accessory glands.

MATERIAL AND METHODS

- Most species were identified thanks to the courtesy of Dr. Adriano Zanetti (Verona Museum, Italy).
- Names agree with the checklist of Smetana (2004).
- Observations were made on females killed with ethyl-acetate vapours and dissected in saline solution (NaCl 0,9%).

RESULTS

- A pair of accessory glands has been recorded for females of *Leptobium gracile* (Gravenhorst), *Ochthephilum collare* (Reitter), *Paederus fuscipes* Curtis and *Pseudolathra lusitanica* (Erichson).
- Although greatly differing in both shape and size according to species, glands were easily to be recognized because of their position at each side of the vagina.
- Glands of the member of the nominal genus, *Paederus fuscipes*, are tubular, very long and branched (Fig. 1.A).
- Although tubular as well, glands of *Leptobium gracile* are comparatively short and lack branching (Fig. 1.B).

- Glands of both *Pseudolathra lusitanica* and *Ochtheophilum collare* are sack-like; respectively, they are 600 μm long and about 200 μm large in diameter (Fig. 2).
- Granular content of the gland reservoirs has been observed in every species;
- in the case of *Paederus fuscus*, it strictly embodies that previously observed in the closely related species, *Paederidus rubrothoracicus* (Goeze),
- where its connection with a bacterial flora was previously ascertained (De Marzo, 1991).
- No compelling evidence about such symbiotic significance has been acquired for glands of the other species.
- Absence of female accessory glands was verified for *Astenus thoracicus* (Baudi), *Lithocharis ochracea* (Gravenhorst) and *Rugilus orbiculatus* (Paykull).

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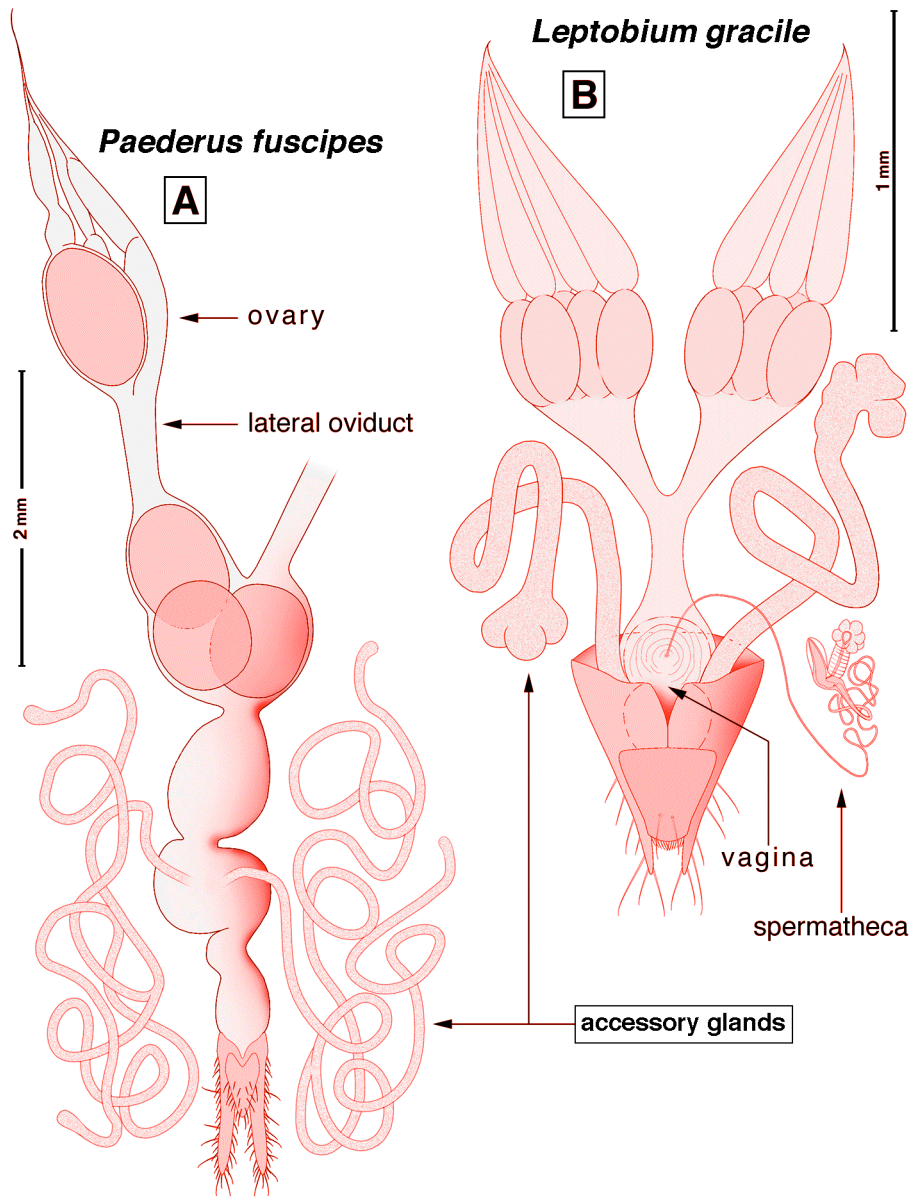


Fig. 1 - Staphylinidae-Paederinae: female genitalia of two species provided with accessory glands.

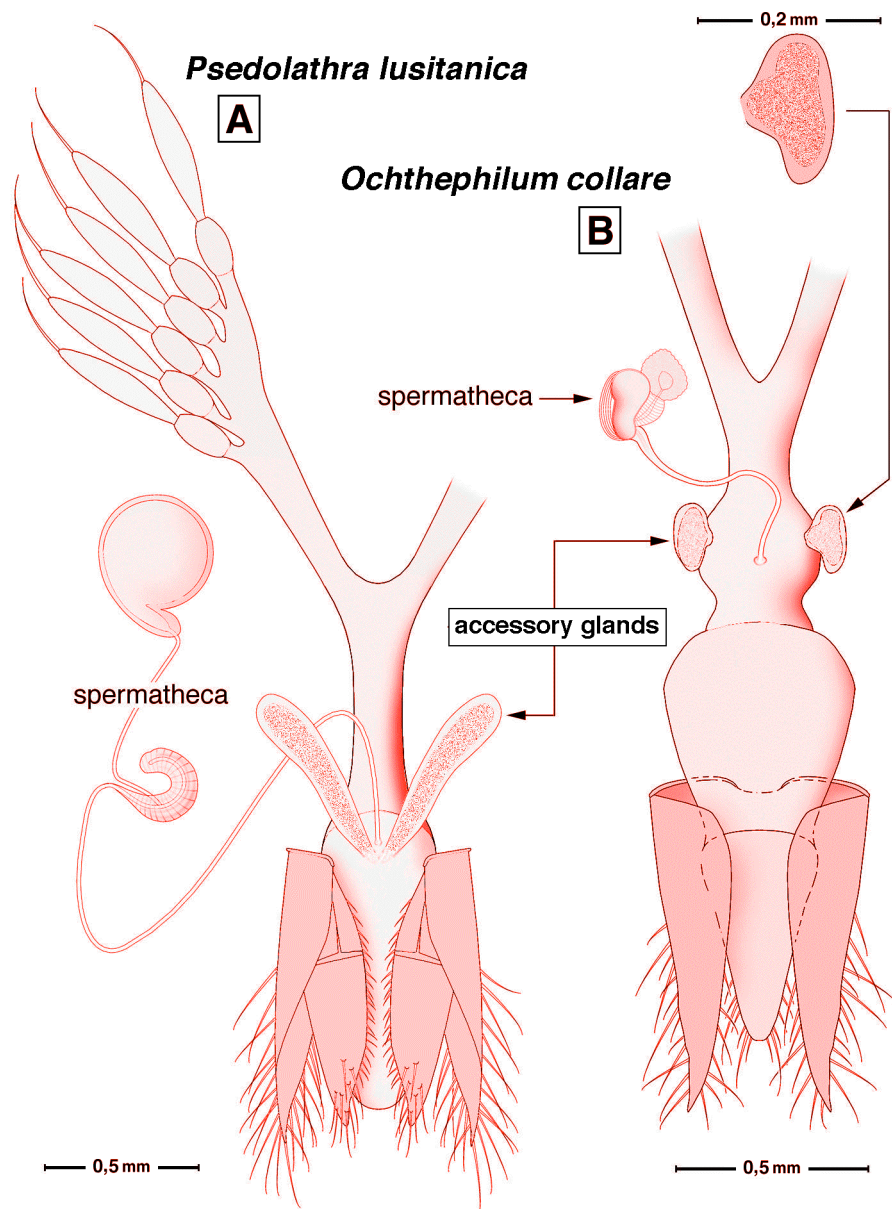


Fig. 2 – Staphylinidae-Paederinae: female genitalia of further two species provided with accessory glands.