

of *F. auricularia*. He also figures some early stages of vitellogenesis in the latter species. Jordan (1909) deals with the reproductive organs and genital sternites of *Hemimerus talpoides* Walker 1871. The same structures of *Arixenia jacobsoni* Burr 1912 are figured and fully described by Burr and Jordan (1913).

Walker (1919) deals with the genital segments of the Dermaptera—principally *Forficula auricularia* and *Anisolabis maritima* (Gené) 1832. He figures (after Zacher, 1911) the genital sternites of these two species and also the ovipositor and genital sternites of *Kalocrania marmoricrura* (Serville) 1839 [= *Cranopygia marmoricrura* (Serville) 1839] and of *Echinosoma occidentale* de Bormans 1893 [= *Echinosoma afrum* (Palisot) 1805]. Nel (1929) figures and describes the developing and adult reproductive organs of *F. auricularia*. He says that there are no ovipositor valves associated with the 8th and 9th sternites. Snodgrass (1933) deals with the reproductive system of the Dermaptera and later (1935) illustrates and mentions the posterior portion of the reproductive organs and the genital sternites of *A. maritima*. Qadri (1940) very briefly describes the adult organs in *F. auricularia* and in *Hemimerus hanseni* Sharp 1895. He also traces the development of the reproductive organs in *F. auricularia* and mentions the status of the genitalia in the Dermaptera. The reproductive organs and genital sternites of *Hemimerus deceptus ovatus* Deoras 1941 are figured and briefly described by Deoras (1941, 1941a).

Chopard (1949) figures and mentions the reproductive organs of *Labidura riparia* and *Forficula auricularia*. He also describes the genitalia of *Kalocrania* [= *Cranopygia*] and *Echinosoma*. Bonhag (1956) deals with aspects of the histochemistry, particularly of periodic acid-Schiff-positive substances, in the developing oocyte of *Anisolabis maritima*. Imms (1957) figures the reproductive organs of *F. auricularia* and briefly discusses the organs in other species. The histology of the egg tube and of the developing oocytes of *A. maritima* are covered in detail by Arnold (1957).

Technique

As with the male, fresh specimens were examined in 1% saline, and most dissections carried out in 70% alcohol. Again, aqueous Bouin's Fluid or Eltringham's Fixative B (Eltringham, 1930) were used, and Ehrlich's haematoxylin counterstained with van Gieson proved satisfactory.

Acknowledgments

The writer's thanks are again due to Dr T. E. Woodward (now of the Department of Entomology, University of Queensland) for his helpful advice during the progress of this work at the University of Auckland. Mr C. D. Shorey, of the Department of Zoology, University of New England, again assisted with the photography.

OUTLINE OF THE STRUCTURE AND RELATIONS OF THE REPRODUCTIVE ORGANS AND GENITAL SEGMENTS

The female reproductive organs of *Anisolabis littorea* (Fig. 1) consist of a pair of ovaries, communicating by paired lateral oviducts with the short median oviduct which leads to the exterior at the bottom of a short pit-like genital chamber opening apparently between the seventh and eighth segments. The spermatheca opens on to the mid-dorsal aspect of the genital chamber behind the gonopore. There are no discrete accessory glandular structures. The organs are generally milky-white in colour.

The genital segments (Fig. 2) are the eighth and ninth, and these terga are reduced, fused to the tenth and overlapped by the seventh. The eighth and ninth sterna are reduced and divided, each portion being fused to the sides of the