

Chorion Morphology of Eggs of *Aelia albovittata* Fieber, 1868 and *Aelia rostrata* Boheman, 1852 (Heteroptera: Pentatomidae)

Selami CANDAN Zekiye SULUDERE

Gazi University, Faculty of Arts and Sciences, Department of Biology, 06500
Ankara, TURKEY, e-mails: scandan@gazi.edu.tr, zekiyes@gazi.edu.tr

ABSTRACT

The surface morphology of eggs of *Aelia albovittata* Fieber 1868 and *Aelia rostrata* Boheman, 1852 were examined using a scanning electron microscope (SEM). Adult bugs were collected from Ankara, (Ayaş, Asartepe, Turkey) and maintained under the laboratory conditions. The animals deposited barrel-shaped eggs in batches of about 12 eggs. Newly deposited eggs showed a light yellow coloration. The eggs darkened after the onset of embryonic development. The surface sculpturing of the eggs of *A. albovittata* and *A. rostrata* is interpreted “a modified spinose” chorion. The eggs of *A. albovittata*, possess numerous chorionic spines, which are interconnected by chorionic sheets. Taken together, the surface appears polygonal reticulated. The egg surface in *A. rostrata* is dotted with spines. Each of them is flanked by numerous chorionic sheets, which are only really in contact with those of neighboring spines. The individual chorionic arrays are reminiscent of tree trunks. End-on views give the impression of a star-like pattern. The circular hatching line surrounds the operculum. There are 16-19 (*A. albovittata*) and 16-18 (*A. rostrata*) upright, roughly tubular aeromicropylar processes the anterior rim of the eggs. In the eggs of both species, darkly coloured egg-bursters with a T shaped ornamentation are seen in the lumen after hatching.

Key words: Heteroptera, Pentatomidae, *Aelia albovittata*, *Aelia rostrata*, chorion morphology, aeromicropylar processes, egg-burster, scanning electron microscope

INTRODUCTION

Information on the structure of insect eggs has been used to revealed taxonomic relationships and phylogenetic trends in a wide variety of insect orders, such as Coleoptera (Baker & Ma, 1987; Kucerova & Stejskal, 2002; Caron *et al.*, 2004), Diptera (Lavigne, 1963; Lawson & Lavigne, 1984; Kula, 1993; Candan *et al.*,