

Postdepositional Dynamics of Eggs of *Podisus sagitta* (Hemiptera: Pentatomidae: Asopinae). A Light and Scanning Electron Microscopy Study

Klaus W. WOLF

Walton REID

The University of the West Indies, Electron Microscopy Unit, Mona, St. Andrew, Kingston 7, JAMAICA, e-mail: klaus.wolf@uwimona.edu.jm

ABSTRACT

The changes of the chorion shortly after egg deposition, referred to as postdepositional dynamics in this article, are described in the predatory stink bug *Podisus sagitta* using Scanning Electron Microscopy (SEM). For comparison, ovarian eggs were studied with the light microscope. At this stage, the aero-micropylar processes, slender appendages mounted at the anterior pole of the egg, are folded inwards and form arc-like threads over the anterior plate of the egg. The processes gradually straighten after deposition and assume an upright orientation. In freshly deposited eggs, spines dotting the chorion are curved. Ultimately these structures straighten and project at right angles from the surface. The eggs of *P. sagitta* are barrel-shaped and possess a spinose chorion, a common microsculpture detected in stink bug eggs. Previously unknown features concerning the spinose chorion include the heterogeneity of spines dotting the anterior plate. In addition, a narrow band of the anterior plate bordering the aero-micropylar processes shows polygons formed by shallow ridges.

Key words: Aero-micropylar process, spinose chorion, stink bug

INTRODUCTION

The appearance of eggs in three representatives of the Asopinae, a subfamily of the Pentatomidae with a predatory feeding style (for a review, see De Clercq, 2000), has been studied so far. These are *Podisus maculiventris* (Javahery, 1994; Lambdin and Lu, 1984, Bundy and McPerson, 2000), *Troilus luridus* and *Picromerus bidens* (Mayné and Breny, 1942; Javahery, 1994). Only the former species has been examined using Scanning Electron Microscopy (SEM); the studies involving the