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FRESHWATER MUSSELS. THESIS ADVISOR : ASSIST. PROF. DR.SOMSAK PANHA.
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Glochidial shell ultrastructure from 12 species of Thai freshwater mussels belong to the family Amblemidae has been studied. Detailed electronmicrographs of different parts of shell dimensions were described, illustrated and compared. The key based on glochidial morphological characteristics is proposed for the identification of species.

All glochidia were found to be suboval in outline and of hookless type, which can be divided into two groups based on shellvalve structure. The first group is equivalve - equilateral and different characteristics of external sculpture of shell surface with containing of 7 species :
Pilsbryconcha exilis exilis (Lea, 1839) *Hyriopsis* (*Hyriopsis*) *bialatus* Simpson, 1900 *Hyriopsis* (*Limnoscapha*) *desowitzi* Brandt, 1974 *Hyriopsis* (*Limnoscapha*) *myersiana* (Lea, 1856) *Chamberlainia hainesiana* (Lea, 1856) *Scabies crispata* (Gould, 1843) *Ensidents ingallsianus ingallsianus* (Lea, 1852). The second group is unequivalve - unequilateral and divergence of the spines at ventral shell-apex, with composing of 5 species : *Pseudodon combodiensis combodiensis* (Petit, 1865) *Uniandra contradens tumidula* (Lea, 1856) *Physunio superbus* (Lea, 1843) *Physunio eximius* (Lea, 1856) *Trapezoideus exolescens exolescens* (Gould, 1843)

This study indicates a significant role of glochidium fine structures in the integration of freshwater bivalve taxonomy.