

**NOTE: Histology of the Midgut and Peritrophic Membrane
in *Lymantria dispar* Caterpillars Fed on Leaves of *Quercus
cerris* or *Robinia pseudoacacia***

V. Perić-Mataruga,^{1,*} J. Lazarević,¹ M. Vlahović,¹
M. Mrdaković¹ and L. Ilijin¹

The structure of the columnar cells, goblet cells and peritrophic membrane was studied in the midgut of gypsy moth (*Lymantria dispar* L.) caterpillars fed with a suitable (*Quercus cerris* L.) or an unsuitable (*Robinia pseudoacacia* L.) host. Columnar cells in the midgut of caterpillars fed on *R. pseudoacacia* leaves were elongated with small nuclei, partial loss of microvilli and vacuolated cytoplasm. The number and height of goblet cells and their nuclei were greater in caterpillars fed on *Q. cerris* leaves in comparison with larvae fed on *R. pseudoacacia* leaves. Peritrophic membranes were thin and delicate in the midgut of caterpillars fed on *R. pseudoacacia* leaves.

KEY WORDS: *Lymantria dispar*; midgut; columnar cells; goblet cells; peritrophic membrane; *Quercus cerris*; *Robinia pseudoacacia*; leaves.

Received March 9, 2005; accepted Aug. 16, 2005; <http://www.phytoparasitica.org> posting Nov. 8, 2005.

¹Institute for Biological Research Siniša Stanković, 11060 Belgrade, Serbia & Montenegro. *Corresponding author [Fax: +381-11-761-433; e-mail: vesper@ibiss.bg.ac.yu].