

CHEMICAL COMPOSITION OF EGG SHELL IN *MONIEZIA EXPANSA*

Archana Gupta¹ and S.K. Srivastava²

Received October 3, 2010 and Accepted January 23, 2011

ABSTRACT : The cestode *Moniezia expansa* possesses very small vitelline gland and therefore has very thin egg-shell. The chemical composition of the egg-shell of *M. expansa* has been investigated using histochemical techniques. There are three precursors of egg-shell viz. phenolase, phenols and Proteins. Of these precursors, only protein precursors is found to be present in *M. expansa* and phenols and phenolase are found to be absent. The presence of basic protein, tyrosine, keratin, protein containing disulphide (-SS-) and (-SH-) linkages indicate the egg-shell to be of keratin-type. Arginine, elastin, and lipid were absent. Besides protein, glycogen and lipids were also present.

Key Words: Egg shell, histochemistry, keratin.