

VARIATION IN BIOCHEMICAL COMPOSITION OF DIFFERENT HOST PLANTS OF MUGA SILKWORM, *ANTHERAEA ASSAMENSIS* HELFER

Kartik Neog¹, G. U. Ahmed², B. G. Unni³, P. Dutta¹, D. K. Gogoi¹ and K. Giridhar¹

¹Central Muga Eri Research & Training Institute, Central Silk Board, Lahdoigarh, Jorhat – 785 700, Assam, India.

²Gauhati University, Guwahati, Assam, India.

³Biotechnology Division, North East Institute of Science & Technology (CSIR), Jorhat – 785 006, Assam, India.

E-mail: kartik_neog@rediffmail.com

ABSTRACT

Four different host plants of muga silkworm, *Antheraea assamensis*, viz., Som (*Persea bombycina*), Soalu (*Litsea polyantha*), Diglotti (*L. salicifolia*) and Mejankari (*L. citrata*), were evaluated for leaf biochemical constituents during different seasons. For all the seventeen nutrient constituents analysed from the leaves as a whole, Som was superior over other host plants irrespective of season and type of leaves, followed by Soalu. Tender leaves of Som possessed significantly the highest amounts of total mineral, crude protein, reducing sugar, TSS, β -sitosterol, total phenol, ascorbic acid, chlorogenic acid and tannins. Soalu tender leaves were found to contain significantly the highest amounts of moisture, soluble protein and lignin content, whereas, crude fibre, chlorophylls and ADF contents were at par in both Som and Soalu leaves.

Key words: *Antheraea assamensis*, Diglotti, host plants, Mejankari, muga silkworm, Soalu, Som.