# PROCEEDINGS OF NATIONAL SEMINAR ON BIO-PIRACY

#### TOPIC:

"BIO-PIRACY - IMMINENT THREAT TO THE CONSERVATION OF BIO-DIVERSITY AND BIO-PROSPECTING OF THE FLORA AND VEGETATION OF THE NORTH EASTERN REGION."

7 & 8 NOVEMBER, 2008

# Organised by:

DERGAON KAMAL DOWERAH COLLEGE P.O. - DERGAON, DIST : GOLAGHAT, ASSAM, PIN : 785 614

Sponsored by:

UNIVERSITY GRANTS COMMISSION, NEW DELHI

# SERI-BIODIVERSITY CONSERVATION AND BIO-CHEMISTRY OF MUGA SILKWORM, ANTHERAREA ASSAMA FOOD PLANTS AND ITS ROLE IN SILK PROTEIN BIO-SYNTHESIS

## D. KHANIKOR¹ and B.G.UNNI²

<sup>1</sup> D.K.D. College, Dergaon. Assam – 785614 North Eastern Institute of Science and Technology (NEIST), Jorhat, Assam

### ABSTRACT

Biodiversity is the variety and variability among living organisms and the ecological complexes in which they occur. India has a rich and varied heritage of biodiversity. It is the natural abode for a number of sericigenous insects along with their food plants. It froms a separate habitat called 'Seribiodiversity'. The endemic muga silkworm, Antherarea assama feeds on a variety of food plants, which have a variety of genotypes. The quality of leaves on which they feed has effect on survival growth and development of the silkworms. Better the quality of leaves greater the possibility of obtaining good cocoon crops. Therefore, it is very much essential to evaluate the leaf quality to identify the best quality of food plants for muga silkworm rearing.

KEYWORDS: Seribiodiversity, endemic, silkworm, host plants, biochemical parameter

#### INTORDUCTION:

Biodiversity is the variety and variability among living organisms and the ecological complexes in which they occur. India has a rich and varied heritage of biodiversity covering 10 bio-geographical zones and is one of the 12 mega diversity countries of the world (7).

North eastern region of India is surrounded by the Himalayan ranges and flanked by the Brahmaputra and the Barak Valley and comprises of seven states. Its varied topography offers a complex variety of habitats and ecosystems, and hence stands as the richest spectrum of flora and fauna among the 12 mega diversity countries. It is the natural abode for numbers of sericigenous insects along with their food plants; forming a separate habitat called 'Seri-Biodiversity'(1,11). Among Muga, Eri, Oak and Tassar cultures, muga is endemic(16) to North East India.

PROCEEDINGS OF NATIONAL SEMINAR ON BIO-PIRACY / 141