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Research Paper

OXIDATIVE STRESS INDICES IN THE LARVA AND PUPA OF WILD TASAR SILKMOTH, *ANTHERAEA PAPHIA* LINN.

G. C. Patra[1], N. Mohanty[1] and D. G. Dey[2]
[1]P.G.Department of Zooloby, North Orissa University, Takatpur, Baripada-757 003, Mayurbhanj, Odisha, India.
[2]Department of Zoology, Udala College, Udala, Mayurbhanj – 757 041, Odisha, India
E-mail: gcpatranou@gmail.com

ABSTRACT

The level of oxidative stress in the haemolymph and fat body tissue was studied in the V instar larva and diapausing pupa of tasar silkmoth, *Antheraea paphia* Linn. The concentration of protein, ascorbic acid, reduced glutathione, endogenous level of lipid peroxidation (LPX) and hydrogen peroxide content were analysed. Increase in the level of reduced glutathione towards pupal stage is the indication of maintenance of cellular antioxidant status. Also reduction in the level of LPX in the fat body tissue showed a protective mechanism to limit the tissue oxidation. Decrease in the level of H_2O_2 rendered oxidation of tissue lipids. The results suggest that pupal period challenges more oxidative stress in comparison to the V instar larva of Indian wild tasar silkmoth, *A. paphia.*

Key words: *Antheraea paphia,* antioxidants, larva, oxidative stress, pupa