

**A STUDY ON ELECTROPHORESIS ANALYSIS OF ACID PHOSPHATASE ISOZYMES  
DURING DIFFERENT DEVELOPMENTAL STAGES OF EVOLVED RACES R<sub>1</sub> AND R<sub>2</sub> OF  
BOMBYX MORI L**

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**ABSTRACT**

*The molecular data, in particular gel electrophoresis of enzymes and numerical methods of analysis have proven useful in many groups of insects and will see much wider use in future. Therefore, present study was designed with the main purpose to analyze the activities of alkaline phosphatase isozymes by electrophoresis method during different developmental stages of newly evolved races R<sub>1</sub> and R<sub>2</sub> of Bombyx mori L. Standardized disc electrophoresis method was performed. Acid phosphatase (ACPH) isozymes form distinct enzymes zones in the photographs and in the zymogram and these have been numbered in cathodal to anodal sequence. These isozyme patterns have been established after repeated runs. The total isozymes of different developmental stages of R<sub>1</sub> and R<sub>2</sub> have been grouped into different zones. The nomenclature of enzyme banding pattern has been followed. Results delineated that changes in ACPH zymograms during development revealed a total of 17 bands in R<sub>1</sub> and 21 bands in R<sub>2</sub> recorded for ACPH. From the present results it was clear that ACPH activity was low in R<sub>1</sub> and R<sub>2</sub>. ACPH activity was higher in R<sub>1</sub>. Whereas, in R<sub>2</sub> moderate ACPH activity was exhibited in larval as well pupal stages. In pupal stage the activity was less in male and female pupae of R<sub>1</sub> & R<sub>2</sub> races.*

**KEYWORDS:** *Bombyx Mori L, Acid Phosphatase, Electrophoresis, Race 1 (R<sub>1</sub>), Race 2 (R<sub>2</sub>)*