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Research Paper

DEVELOPMENT OF IMPROVED LINE OF BREEDER STOCK DABA TRIVOLTINE OF TROPICAL TASAR SILKWORM, *ANTHERAEA MYLITTA* D. THROUGH RECURRENT SELECTION

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ABSTRACT

Daba trivoltine race of *Antheraea mylitta* D. was segregated from the Daba bivoltine population, for utilization in the hotter zones of the country to enable an additional crop to the farmers. The exploitation of this race for seed production over the years, to meet the demand of commercial rearers, resulted in a considerable decline in its vigour and quantitative traits of commercial importance. Hence, the breeder stock of the Daba trivoltine race was considered for improvement through the recurrent selection method. Initially, a base population was prepared by pooling the Daba TV populations collected from different geo-climatic regions of Chhattisgarh. Subsequently, recurrent selection strategy was resorted to for six generations, keeping the selection criteria of higher fecundity (215-240) and higher average shell weight (> 1.25 g). Due to repeated selection, an overall improvement was recorded in the quantitative characters of breeder stock in comparison with the control population. The improved line developed through recurrent selection, is being evaluated through field trials.

Key words: *Antheraea mylitta* D., breeder stock, Daba TV, recurrent selection.