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ECOGENETICS OF STARVATION TOLERANCE FOR DEXTROSE SUGAR IN THREE INDIAN SPECIES OF THE GENUS - *DROSOPHILA*

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ABSTRACT – Present investigation starvation resistance of isofemale line from different natural populations of three closely related Indian species of *bipectinata*-sub group of the genus-*Drosophila* have been undertaken in presence of Dextrose sugar in culture media. The species were *Drosophila malerkotiana, Drosophila bipectinata* and *Drosophila parabipectinata*. The F1 individuals from each isofemale line were placed under starvation condition in vials. Survival time in dextrose sugar media was recoded for each male in the vial. Variations in resistance for starvation in inter populational studies were analyzed by student t-test. In certain comparison significant differences were observed in starvation tolerance among different *Drosophila* species under observations. Discussion have been made about genetic basis for such a significant variation in resistance to starvation.

Key words : Dextrose, *Drosophila*, starvation resistance, survival time, bipectinata subgroup, inter-population.