

To identify suitable heat stress strain of *Kerria lacca* lac insect for increasing lac production on lac host plant *Butea monosperma* in West Bengal

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ABSTRACT: Lac is biodegradable, eco-friendly, socially acceptable, economically viable and practically feasible and having no risk to any environment, soil flora, fauna, animals and human beings. Lac is considered as natural biofungicide, biopesticide and biofertilizer. Lac is utilized in pharmaceutical, food and agricultural, cosmetic, electrical, paints and varnishes industries. To identify a suitable heat stress strain of *Kerria lacca* insect for increasing lac production in West Bengal. Bioved Research Society has selected five *K. lacca* strains which have been inoculated on 1350 palas (*Butea monosperma*) trees at 150 Farmers' field at one location of W.B. during 2012-13. Total 626.05 Q brood lac was distributed among 750 farmers of five different locations in West Bengal that results in 2972.89 Q scrapped lac production. In this way, 750 farmers earned Rs. 29,72,89,000 by lac production after adaptating scientific method of lac cultivation. The highest yield of scrapped lac was obtained from 2 and 3 strains, while lowest was obtained from strain 1. In this way strain 2 & 3 is recommended for area whose temperature lies in the range of 25 to 30°C.

Key Words: Lac, *Butea monosperma*, *Kerria lacca*, lac yield, heat stress.