

## SECONDARY MINERAL NUTRIENT COMBINATION IMPROVES YIELD WITH QUALITY IN TASAR CROPS

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### ABSTRACT

The role of secondary nutrients in improving the tasar crops was evaluated. Different combination of secondary mineral nutrients were formulated and its effect on the quality and quantity of leaves of tasar food plant *Terminalia arjuna* Bedd were studied. Results indicated that secondary nutrient combinations have promotary effect in crop improvement by enhancing the quality and yield of leaves as well as the commercial characters of cocoons. Among different combination of secondary mineral nutrients tried, SM5 [Foliar application of Magnesium sulphate (2 %, w/v) and basal application of Calcium carbonate (3 quintal / ha)] was the best in terms of crop improvement. Under this combination, leaf yield increased by 27.45% over control. Further, chemo assay revealed a significant improvement in the quality of leaves. Moisture, total mineral, crude protein and total carbohydrate increased by 3.53, 19.44, 18.50 and 16.66%, respectively over control. The increase in leaf quality was further confirmed by bio assay as is reflected in cocoon weight, shell weight and shell percentage which increased to the tune of 20.17, 35.71 and 13.01 % as compared with control.

**Key words:** *Antheraea mylitta*, bio assay, chemo assay, secondary mineral nutrient combinations, tasar crops, *Terminalia arjuna*.