SEMI-SYNTHETIC DIETS FOR YOUNG AGE REARING OF TROPICAL TASAR SILKWORM, ANTHERAEA MYLITTA DRURY

Dinesh Kumar, S. K. Sharan, P. K. Mishra, B. M. K. Singh and B. C. Prasad
Central Tasar Research and Training Institute, P.O. Piska Nagri, Ranchi - 835 303, India
e-mail: dineshumrao@rediffmail.com, dineshkcsb@yahoo.co.in.
(Accepted 3 December 2009)

ABSTRACT – Nineteen semi synthetic diets were tested for rearing of young age larvae of Tasar silkworm, Antheraea mylitta Drury in indoor condition and transferred to on host plant Terminalia tomentosa (Asan) under in outdoor condition to observe the survival and growth. The higher survival of young age larvae (1st and 2nd instar) was observed on diets containing dry leaf powder i.e. D-13 to D-19. The larval duration was more or less similar to control lots. Diets containing Terminalia tomentosa (Asan) or T. arjuna (Arjun) leaf powder were performed better than Shorea robusta (Sal) leaf powder. The survival of young age larvae was very poor on D-1 to D-12.

The 3rd instar larvae (day1) were shifted from semi synthetic diets to on host plant T. tomentosa (Asan) under in outdoor condition and survival was observed to be higher on diet fed larvae of D-17 (74%), D-19 (72%), D-16 (72%) and D-18 (70%). During 4th instar, survivability was maximum on diet fed larvae of D-17 (64%) followed by D-16 (63%) and D-19 (62%) in comparison to control (68%). The survival percentage and cocoon yield was higher on diet fed larvae of D-19 (38 cocoons) followed by D-17 (37 cocoons) and D-16 (36 cocoons) against control (48 cocoons) per 100 larvae. No significant difference was observed in larval duration and growth of diet fed larvae and control lots.

Key words: Semi synthetic diets, tasar silkworm, rearing, Antheraea mylitta.