1st International Conference on Recent Developments in Science, Humanities & Management-2018
Amar Singh College Cluster University, Gogji Bagh, Srinagar (J&K) (ICRDSHM-18)
17th-18th April 2018 www.conferenceworld.in ISBN : 978-93-87793-09-5

BLACKHEADED FIREWORM, RHOPOBOTA NAEVANA (HUBNER) (LEPIDOPTERA: TORTRICIDAE): A NEW PEST OF APPLE CROP IN KASHMIR HIMALAYA

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ABSTRACT

During survey of apple orchards of Kashmir valley in 2013, the terminals of current season twigs were found severely skeletonised by larvae of a lepidopteran moth. These larvae were collected from the field, brought to laboratory and reared at an ambient temperature (25 ± 5°C) and relative humidity (70 ± 5%) and adult after emergence has been taxonomically identified as Blackheaded fireworm; Rhopobota naevana (Hubner) belonging to tribe Eucosimini of family Tortricidae . Study of biology revealed that the mean pre-oviposition, oviposition and post-oviposition period was 2.26±0.23, 3.37±0.15 and 1.58±0.42 days, respectively, while as mean male/female sex ratio was 1.30±0.12. The fecundity/female ranged from 66.12-92.50 eggs and percentage hatchability ranged between 64.16-82.96 per cent in different generations. The study further clarified that larval period completed through five distinct instars with mean duration of 1st, 2nd, 3rd, 4th and 5th instar larvae as 2.29±0.07, 3.47±0.17, 4.27±0.38, 4.78±0.41 and 6.18±0.79 days, respectively and total larval development period of 21.01±1.80 days. Results thus indicated that R. naevana (Hubner) completed its life cycle in 38.29-47.80 days in different generations, undergoes hibernation for six months in its egg stage and has complete three generations in temperate region of J&K from May to October.

Key words: Apple, Biology, Damage, Kashmir, Taxonomy, Tortricid moth.