BIOLOGY AND BEHAVIOUR OF THE LEAF-ROLLER,
DIAPHANIA PULVERULENTALIS (HAMPSON) (LEPIDOPTERA: PYRALIDAE)
AT DIFFERENT TEMPERATURES

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ABSTRACT
Life cycle features of Diaphania pulverulentalis, a pest of mulberry, Morus alba L. (Moraceae) were studied at three
different conditions of temperatures of $20 \pm 1 \, ^\circ C$, $25 \pm 1 \, ^\circ C$ and $30 \pm 1 \, ^\circ C$. The developmental cycle of this insect is
characterized with distinct stages of egg, larva, pre-pupa and pupa. There was a clear trend of decrease in the duration
of different stages viz., egg (5.93, 3.77, 2.47 days), caterpillar (11.61, 9.88, 6.50 days), pre-pupa (3, 2.38, 1.77 days)
and pupa (12.70, 9.16, 6.46 days) corresponding to increase in temperature ($20 \pm 1 \, ^\circ C$, $25 \pm 1 \, ^\circ C$ and $30 \pm 1 \, ^\circ C$,
respectively). The average duration of life cycle of D. pulverulentalis at 20, 25 and 30 $^\circ C$ was 33.24, 25.19 and 17.2
days, respectively with the mean fecundity of 399.2, 373.2 and 250 eggs, respectively. A detailed account on the
studies carried out on mating, oviposition, longevity and sex-ratio is provided in this paper.

Key words: Biology, Diaphania pulverulentalis, fecundity, life cycle, longevity, mating, oviposition, sex-ratio.