

**Postembryonic Development of Two Adzuki Bean Insect Pests,
Maruca vitrata and *Matsumuraeses phaseoli*,
Fed on Artificial Diets**

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Larvae of two insect pests, *Maruca vitrata* (Lepidoptera: Pyralidae) and *Matsumuraeses phaseoli* (Lepidoptera: Tortricidae), were collected from flowers and pods of adzuki bean (*Vigna angularis*) during August and September, and were successively reared with semisynthetic artificial diets of common constituents at a condition of 25°C and 60% RH. Different photoperiod regimes, 13L:11D and 16L:8D, were applied to *M. vitrata* and *M. phaseoli*, respectively, in the rearing.

Periods for development of egg, larva, pupa, preoviposition and adult of *M. vitrata* were 3.0, 14.0, 7.7, 3.1 and 17.5 days, respectively. Eggs were collected on leaves of soybean seedlings in a oviposition cage and the number of eggs laid by a female was about 215 (16~640). The weight of pupae were 50.0mg and 52.9mg for male and female, respectively, and the ratio of female was 0.60. The rates of pupation and adult emergence were 75.7 and 96.4%.

Periods on development of egg, larva, pupa, preoviposition and adult of *M. phaseoli* were 3.7, 16.1, 8.9, 7.4 and 18.8 days, respectively. Eggs were collected on wax paper attached on the top of a oviposition cage. The weight of pupae were 22.7mg and 17.3mg for male and female, respectively, and the ratio of female was 0.42. The rates of pupation and adult emergence were 81.4 and 97.9%.