

**Determination of Larval Feeding Indices of Spurge Leaf Defoliator Moth,
Simyra dentinosa (Lep.: Noctuidae), on Different Weedy Spurge Species**

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Abstract

The larvae of *Simyra dentinosa* F. are biological control agents on *Euphorbia* spp. weeds. More information on feeding rate and preferred host plant of the larvae of *S. dentinosa* could be useful in biological control programs. In this research, the feeding indices of *S. dentinosa* larvae were determined on five *Euphorbia* species: *Euphorbia macroclada* Boiss., *E. denticulate* Lam., *E. seguieriana* Neck., *E. boissieriana* Prokh. and *E. heteradena* Jaub & Spach. in laboratory conditions at 19±1°C, 65±5% RH and a photoperiod of 14: 10 (L: D)h. The experiments were conducted during larval period of the moth (four larval groups and each group containing 8 larvae) inside the plastic transparent containers (14 cm diameter and 19 cm height). The results indicated that the maximum (7.93 g) and the minimum (4.98 g) rate of larval feeding were significantly ($P<0.05$) on *E. macroclada* and *E. heteradena*, respectively. The mean weight of feces of five *Euphorbia* species had almost the same trend as mentioned about the rate of larval feeding. The comparison of the mean weight of larvae on five *Euphorbia* species did not significantly different indicating the high rate of efficiency of conversion of ingested food on *E. heteradena*. It could be concluded that all five *Euphorbia* species are the host plants of *S. dentinosa* larvae and these larvae can be used in biological control programs of the mentioned weeds.

Key words: *Simyra dentinosa*, *Euphorbia*, feeding indices, spurge leaf defoliator moth

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