

عنوان مقاله:

Nutritional indices of the willow leaf beetle, *Plagioder a versicolor a* (Coleoptera: Chrysomelidae) on different host plants

محل انتشار:

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خلاصه مقاله:

Nutritional indices of the willow leaf beetle, *Plagioder a versicolor a* Laicharting, third instar larvae and adults were studied on four host plants including *Salix alba* L., *Salix aegyptica* L., *Populus caspica* Bornm. and *Populus alba* L. at 22 ± 2 °C, 70 ± 10 % R.H., and a photoperiod of 16:8 h (L: D). The results showed that the highest consumed food by the larvae and adults (148.5 ± 18.0 and 175.21 ± 4.51 mg dry weight, respectively) was on *P. caspica*. The larvae fed on *S. alba* and *S. aegyptica* had the highest efficiency of conversion of ingested food (ECI) (2.3 ± 0.33 and 2.23 ± 0.67 %, respectively) and efficiency of conversion of digested food (ECD) (2.5 ± 0.35 and 2.41 ± 0.72 %, respectively). Approximate digestibility (AD) of larvae was the highest on *P. caspica* and *P. alba* (98.51 ± 0.25 and 98.14 ± 0.1 %, respectively). The lowest relative consumption rate (RCR) of the larvae and adults was on *S. alba* (0.14 ± 0.001 and 0.13 ± 0.006 mg/mg/day, respectively). ECI and ECD values of the adults fed on various host plants were not significantly different. Adults fed on *P. caspica* had the highest values of RCR (0.59 ± 0.01 mg/mg/day), relative growth rate (RGR) (0.02 ± 0.008 mg/mg/day) and AD (98.72 ± 0.24 %). These results demonstrated the higher feeding performance of the willow leaf beetle on *P. caspica* and its poorer performance on *P. alba*.

کلمات کلیدی:

nutritional indices, willow leaf beetle, *Plagioder a versicolor a*, host plants

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