

## **Necessary Conditions for Indianmeal Moth Development on Raisins**

C. S. Burks and D. G. Brandl

The Indianmeal moth *Plodia interpunctella* (Hübner) (Lepidoptera: Pyralidae) is a cosmopolitan and extremely polyphagous pest of stored products. In California's San Joaquin Valley, the Indianmeal moth is an economically important postharvest pest of dried fruits (e.g., raisins, prunes, and dried figs) and tree nuts (e.g., almonds, walnuts, and pistachios). Previous studies have demonstrated that dried fruits are relatively poor hosts for Indianmeal moth larval development. Infestations are, however, found in dried fruit and the threat of infestation is responsible in large part for scheduled fumigation treatments of raisins in storage prior to final processing. In the present study, we examine the factors limiting the development of Indianmeal moth larvae on raisins. We present data indicating that dietary deficiencies of raisins as a host are most limiting in early larval development and less so in later development, and that extraneous sources of nutrition, such as fungal growth, greatly increase the suitability of raisins as hosts for Indianmeal moth development.