

Biological Control

Assessing the biologies of key indigenous leafroller parasitoids

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Abstract: In organic orchards in the southern interior of British Columbia, obliquebanded *Choristoneura rosaceana* (Harris) and three-lined leafrollers, *Pandemis limitata* (Robinson) (Lepidoptera: Tortricidae), are hosts to a rich complex of parasitoid species. There is a significant inverse correlation between the density of leafrollers in the organic orchards studied and the percent parasitism within generation and therefore parasitoids appear to be playing a major role in controlling leafroller density. Key parasitoid species have been colonized. Attributes of the parasitoids are being evaluated as to their potential to effectively decrease leafroller populations before field releases of a single or complex of species are carried out. Evaluated attributes include the parasitoid's fecundity and longevity, host specificity, impact on host's food consumption and host feeding.