

## ABSTRACT

*MACROCENTRUS IRIDESCENS* (HYMENOPTERA: BRACONIDAE),  
A PARASITOID OF THE OBLIQUBANDED LEAFROLLER  
(LEPIDOPTERA: TORTRICIDAE)

Obliquebanded leafroller (OBLR), *Choristoneura rosaceana* (Harris) can cause substantial crop loss in California pistachios. *Macrocentrus iridescens* (French) frequently parasitizes OBLR in the San Joaquin Valley. The biology of this important parasitoid was evaluated in laboratory for an augmentation program. Results show that *M. iridescens* parasitizes all larval stages of OBLR, with the exception of fifth and sixth instar larvae. Broods are exclusively males, exclusively females, or mixed broods, with an average of 32.9, 23.9, and 32.6 individuals per brood, respectively. The lower temperature development threshold is 7.6°C; optimal development was at 27°C (36.1 days in average). Development time ranged from 115.8 to 36.5 days at 13.9 and 25.8°C, respectively. Adult females live on average 16.7 days at 25°C if provided with honey and water. Based on host stage, mortality, and development rate, production of parasitoids would be best performed using second and third instars OBLR larvae at temperatures near 27°C.

Rodrigo Krugner  
May 2003