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PROCEEDINGS

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en Moscas de la Fruta
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on Fruit Flies
of the Western Hemisphere

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Establishment of a Fruit Fly Parasitoids Mass-Rearing Facility in the Province of San Juan, Argentina

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Since 1986, the suppression strategies implemented against *Ceratitis capitata* through the National Fruit Fly Control and Eradication Program in the province of San Juan (ProCEM San Juan), have been based on integrated use of SIT, cultural and chemical controls, plus a quarantine system. In April/2008, the Biological Control has been incorporated into control activities of the ProCEM San Juan. The first step was the establishment of a colony of the parasitoid *Diachasmimorpha longicaudata* on third-instar larvae of *tsl C. capitata* strain VIENNA 8 at the San Juan facility. The rearing cages of *D. longicaudata* were held in a rearing room with 24 ± 1 °C, $65 \pm 5\%$ RH, and 12:12 (L:D) h photoperiod. This parasitoid colony was derived from a strain previously reared on late-third instar *Anastrepha fraterculus* larvae at the Insectary of PROIMI-CONICET, Biological Control Division, located in San Miguel de Tucumán, Argentina. However, the colony of *D. longicaudata* introduced to Argentina was obtained from a strain already adapted to laboratory conditions using *Anastrepha ludens* (Loew) larvae as a host in the Biological Control Laboratory of the Mexico's Moscamed-Moscafrut National Program in Metapa de Dominguez, Chiapas, México. Financial support to introduction and establishment of *D. longicaudata* in Argentina was provided by the Agencia Nacional de Promoción Científica y Tecnológica, Ministerio de Ciencia, Tecnología e Innovación Productiva de Argentina (Grants PICT/97 n° 01236 and PICTO/02 n° 12909). Currently, quality control parameters for *D. longicaudata* reared on *tsl C. capitata* strain is being analyzed in order to evaluate the rearing process and the final product. In a second phase, is planned a mass rearing of *D. longicaudata* to reach a weekly production of 5 million parasitoids. In a third phase, the parasitoids will be released in some ecologically isolated fruit-growing areas of San Juan in combination with sterile Medfly releases in order to evaluate parasitoid efficiency once released in the field. Medfly eradication might be reached in those areas with the use of environment-friendly technologies such as SIT and Biological Control.

¿Es el Tamaño del Hospedero un Indicador de la Calidad en la Cría Masiva de *Diachasmimorpha longicaudata* (Ashmead) (Hymenoptera: Braconidae)?

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