



MEMORIAS PROCEEDINGS

7a Reunión
del Grupo de Trabajo
en Moscas de la Fruta
del Hemisferio Occidental



7th Meeting
of the Working Group
on Fruit Flies
of the Western Hemisphere

Noviembre/November 2-7, Mazatlán, Sinaloa, México



Memorias

de la

7^a Reunión del Grupo de Trabajo en Moscas de la Fruta del Hemisferio Occidental

Proceedings

of the

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Mazatlán Sinaloa, México

Noviembre/November 2 – 7, 2008

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parasitoids emerged from the pupa were *Doryctobraon aerolatus* (91,1%), *Utetes anastrephae* (6.5%), *Asobara anastrephae* (2.4%).

Colonization and Domestication of Seven Species of Larval-Prepupal and Pupal Native New World Hymenopterous Fruit Fly (Diptera: Tephritidae) Parasitoids

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Techniques used to colonize and domesticate seven native New World species of hymenopterous parasitoids that attack flies within the genus *Anastrepha* (Diptera: Tephritidae) were developed: *Doryctobracon areolatus* (Szépligeti), *Doryctobracon crawfordi* (Viereck), *Opius hirtus* (Fischer), *Utetes anastrephae* (Viereck) (all Braconidae, Opiinae), *Aganaspis pelleranoi* (Bréthes) and *Odontosema anastrephae* Borgmeier (both Figitidae, Eucoilinae) (all larval-pupal parasitoids), and the pupal parasitoid *Coptera haywardi* (Ogloblin) (Diapriidae, Diapriinae) were reared successfully on Mexican fruit fly, *Anastrepha ludens* (Loew) larvae or pupae reared on artificial diet. Descriptions of the different rearing techniques used throughout the domestication process are described to help researchers to colonize local parasitoids. We also describe handling procedures such as number of hosts in parasitization units and compare optimal host and female age, differences in parasitism rate, developmental time, life expectancy and variation in sex ratios in each parasitoid species over various generations. In the case of *D. crawfordi* and *C. haywardi* we also provide partial information on mass-rearing techniques such as cage type, parasitization unit, larval irradiation dose and adult handling.