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FIRST REPORT OF ANASTREPHA COMPRESSA IN MEXICO AND NEW RECORDS FOR OTHER ANASTREPHA SPECIES IN THE YUCATAN PENINSULA (DIPTERA: TEPHRITIDAE)

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Anastrepha is the most economically important and diverse genus of fruit flies in the Americas, with 197 species distributed throughout tropical and subtropical areas (Norrbom et al. 2000). To date, 32 species are known to occur in Mexico, and seven of them have been reported for the Yucatan Peninsula (YP). This includes the Mexican states of Campeche, Quintana Roo and Yucatan. Anastrepha species reported for each state are: Campeche (Anastrepha fraterculus, A. hamata, A. limae, A. obliqua, A. serpentina); Quintana Roo (A. hamata, A. ludens, A. obliqua, A. serpentina); and Yucatan (A. fraterculus, A. ludens, A. serpentina, A. striata) (Hernández-Ortiz 1992).

This work provides new locality records for Anastrepha species already reported for YP, first records of three species in YP (A. ampliata, A. pallens and A. spatulata), and the first record of A. compressa for Mexico. Material examined is deposited at the Colección de Insectos, Instituto de Ecología, A.C. Xalapa, Veracruz (IEA), and Colección Entomológica Regional of the Universidad Autónoma de Yucatán (CER).

Anastrepha ampliata Hernández, 1990

This species has only been reported in the Mexican state of Chiapas, and Guatemala (Hernández-Ortiz 1990, 1992); new record for YP.

Material examined. MEXICO. CAMPECHE, Calkini, Concepción, 5-VIII-1997. Huchin (1 ♀ IEXA); QUINTANA ROO, Chunhuhub, McPhail-trap, 12-VIII-1997, Xool-Cetz (8 ♀ IEXA); YUCATAN, Dzilam Reserve, Rancho San Salvador, 30-IX-1992, light-trap, Delfín & Manrique (2 ♀ CER); Ibid. 30-XI-1992, butterfly-trap (1 ♀ CER); Colonía Yucatan, KAHAL DZONOT, 21-22-IX-1993, butterfly-trap, Delfín & Manrique (2 ♀ CER).

Anastrepha ludens (Loew, 1873)

This species ranges from southern USA (Texas) to Central America (Foote 1967). It has been reported for 25 Mexican states including Quintana Roo and Yucatan (Huerta et al. 1987; Arana et al. 1992; Hernández-Ortiz 1992). Here we report the first record for Campeche state.

Material examined. MEXICO. CAMPECHE, Tenabo, Tinún, 10-VII-1997, Herrera (1 ♂ IEXA); QUINTANA ROO, Felipe Carrillo Puerto, Chunhuhub, 5-12-VIII-1997, Xool (11 ♀, 128 ♀ IEXA); YUCATAN, Dzilam Reserve, Rancho San Salvador, 30-XI-1992, light-trap, Delfín & Manrique (1 ♀ CER); Ibid. 30-XI-1992, butterfly-trap (1 ♀ CER); colonia Yucatan, KAHAL DZONOT, 21-22-IX-1993, butterfly-trap, Delfín & Manrique (2 ♀ CER).

Anastrepha obliqua (Macquart, 1843)

This species has a wide distribution in the New World, having been recorded from the USA (Florida, Texas) to South America and the Caribbean Islands (Stone 1942). In Mexico its range in-
includes both coasts and other central states (18 states), including Campeche and Quintana Roo within YP (Hernández-Ortiz 1992).

Material examined. MEXICO. CAMPECHE, Palizada, Rancho Santa Isabel, 23-IX-1997, Cabrales (1 ♂ IEXA), Palizada, Rancho Alamilla, 7-X-1997, Cabrales (1 ♂ IEXA), Cd. del Carmen, Matamoros [no date], Domínguez (1 ♂ IEXA).

Anastrepha pallens Coquillet, 1904

This species has a known distribution in the Mexican states of Chiapas, Coahuila, Guerrero, Jalisco, Nayarit, Nuevo Leon, Oaxaca, Sinaloa, Sonora, Tamaulipas and Veracruz (Hernández-Ortiz 1999), with its northern limits in USA (Texas) and southern limits in El Salvador and Honduras (Norrbom 1998). Here we report a new record for YP. The reported hosts for this species are Sideroxylon celastrinum (Kunth) T. D. Pennington (as Bumelia angustifolia) and S. lanuginosa Michx. Baker et al. (1944) also reported as host B. spiniflora A. DC. in Mexico, probably a synonymy of S. celastrinum (see Norrbom 1998).

Material examined. MEXICO. YUCATAN, Ria Lagartos Reserve, El Cuyo, 8-11-1995, light-trap, Delfín & Manrique (1 ♂ CER).

Anastrepha serpentina (Wiedemann, 1830)

This species has a wide distribution in the New World, from USA (Texas) to South America and Trinidad (Foote 1967). In Mexico it occurs in 16 states along both coasts and in other central states, including the YP (Hernández-Ortiz 1992).

Material examined. MEXICO. QUINTANA ROO, Vallehermoso, 19-20-VII-93, butterfly-trap, Delfín & Manrique (1 ♂ CER); YUCATAN, Dzilam Reserve, Rancho San Salvador, 30-XI-1992, light-trap, Delfín & Manrique (3 ♂ CER); Ibid. butterfly-trap (1 ♂ CER).

Anastrepha spatulata Stone, 1942

This species has a known distribution in the Mexican states of Baja California Sur, Chiapas, Guerrero, Jalisco, Morelos, Nayarit, Oaxaca, Sinaloa, Sonora, Tamaulipas and Veracruz, with its northern limit in USA (Texas) and southern limit in Costa Rica and Panama (Foote 1967; Hernández-Ortiz 1992). Here we report it for the first time for YP.

Material examined. MEXICO. CAMPECHE, Hechelchacán, Blanca Flor, 20-III-1997, Dzul (1 ♂ IEXA).

Anastrepha striata Schiner, 1868

This species has a known distribution in the Mexican states of Aguascalientes, Colima, Chiapas, Guerrero, Jalisco, Mexico, Morelos, Nayarit, Oaxaca, Sinaloa, Veracruz and Yucatan, with its northern limit in USA (Texas) and a southern distribution in many countries in Central and South America (Stone 1942; Hernández-Ortiz & Aluja 1993) Here we report the first record for Quintana Roo state.

Material examined. MEXICO. QUINTANA ROO, Felipe Carrillo Puerto, Chunuhub, 26-XII-1997, Xool (1 ♂, 1 ♂ IEXA), Felipe Carrillo Puerto, Emiliano Zapata, 15-X-1997, Xool (3 ♂, 2 ♀ IEXA).

At this time, a total of 11 Anastrepha species are known to be present in the states of the Yucatan Peninsula. The current status of our knowledge of these species and the most complete list of Anastrepha in those Mexican states is as follows: Campeche, 9 species; Quintana Roo, 7 species; Yucatan, 6 species.

The species A. ludens, A. serpentina and A. obliqua are economically important for fruit crops in Mexico. At the present time, there are no reports indicating that they represent an agricultural problem for YP states. However, the presence of species detrimental to national and regional agriculture, indicates the need for a permanent surveillance campaign to evaluate population and damage levels throughout the region.

**SUMMARY**

We make an updated report for the Anastrepha species that occur in the Yucatan Peninsula. For the first time A. compressa Stone is recorded from Mexico, and the occurrence of three other species for this region is documented: A. ampliata Hernández, A. pallens Coquillet, and A. spatulata Stone. Information about localities and collection dates of voucher specimens are provided.

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