

Fruit flies (Diptera: Tephritidae) infesting common guava (*Psidium guajava* L.) (Myrtaceae) in Ecuador.

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Resumen: Las moscas de las frutas ($n = 65$) recuperadas de 18 muestras de guayaba (*Psidium guajava* L.) (Myrtaceae) (5 frutas en cada una) en 7 provincias del Ecuador, pertenecían a los géneros *Anastrepha* Schiner y *Ceratitis* Wiedemann (Diptera: Tephritidae) como sigue: *A. striata* Schiner (70.8%), *A. odonata* Aldrich (7.7%), *A. fraterculus* (Wiedemann) (3.1%) y *C. capitata* (Wiedemann) (18.5%).

Little quantitative information on the distribution and activities of frugivorous tephritid flies in nature or semi natural conditions has been gathered (Malavasi *et al.* 1983, Jirón & Hedström 1985). With the exception of the Galapagos Islands (see Foote 1982), no data have been published on the geographical distribution of true fruit flies (Diptera: Tephritidae) in Ecuador.

In November 1986 and February 1987, 18 infested fruit samples of common guava (*Psidium guajava* L.) (Myrtaceae) were collected in 8 localities in Ecuador (Fig. 1). Each sample consisted of 5 infested fruits, which were placed in wide mouth jars as described by Jirón & Zeledón (1979), with sawdust instead of sand in the bottom. The vegetation zones of Ecuador presented here follow Holm-Nielsen (1975).

The total number of adults that emerged was 65 (Table 1). Of this total, 53 (81.5%) belonged to the genus *Anastrepha* Schiner as follows: *A. striata* Schiner (70.8%), *A. odonata* Aldrich (7.7%), and *A. fraterculus* (Wiedemann) (3.1%), and 12 (18.5%) belonged to *Ceratitis capitata* (Wiedemann).

A. striata occurred in evergreen seasonal forest (Milagro, province of Los Ríos, and Santo Domingo de los Colorados, province of Pichincha), and in tropical and lower montane rain forest (Puyo and Mera, province of Pastaza). *C. capitata* emerged only in the very

center of Guayaquil, which is surrounded by savanna and deciduous seasonal forest. *A. fraterculus*, which is a major pest of numerous commercial and noncommercial fruits in Brazil (Malavasi *et al.* 1983), was found only in south Ecuadorian dry scrub (Paute, province of Azuay)

A. striata and *A. odonata* (the latter of which is known only from Ecuador, A. L. Norrbom, pers. comm.) are sympatric in the Amazonian facing slopes (approximately 1500 m) in the evergreen seasonal forest vegetation zone (Río Negro, province of Tungurahua, and Santa Rosa de Quijos, province of Napo). At the latter study site, both species were observed foraging on the same individual guava fruits (November 1986 and February 1987), but no interference competition between the two species was seen.

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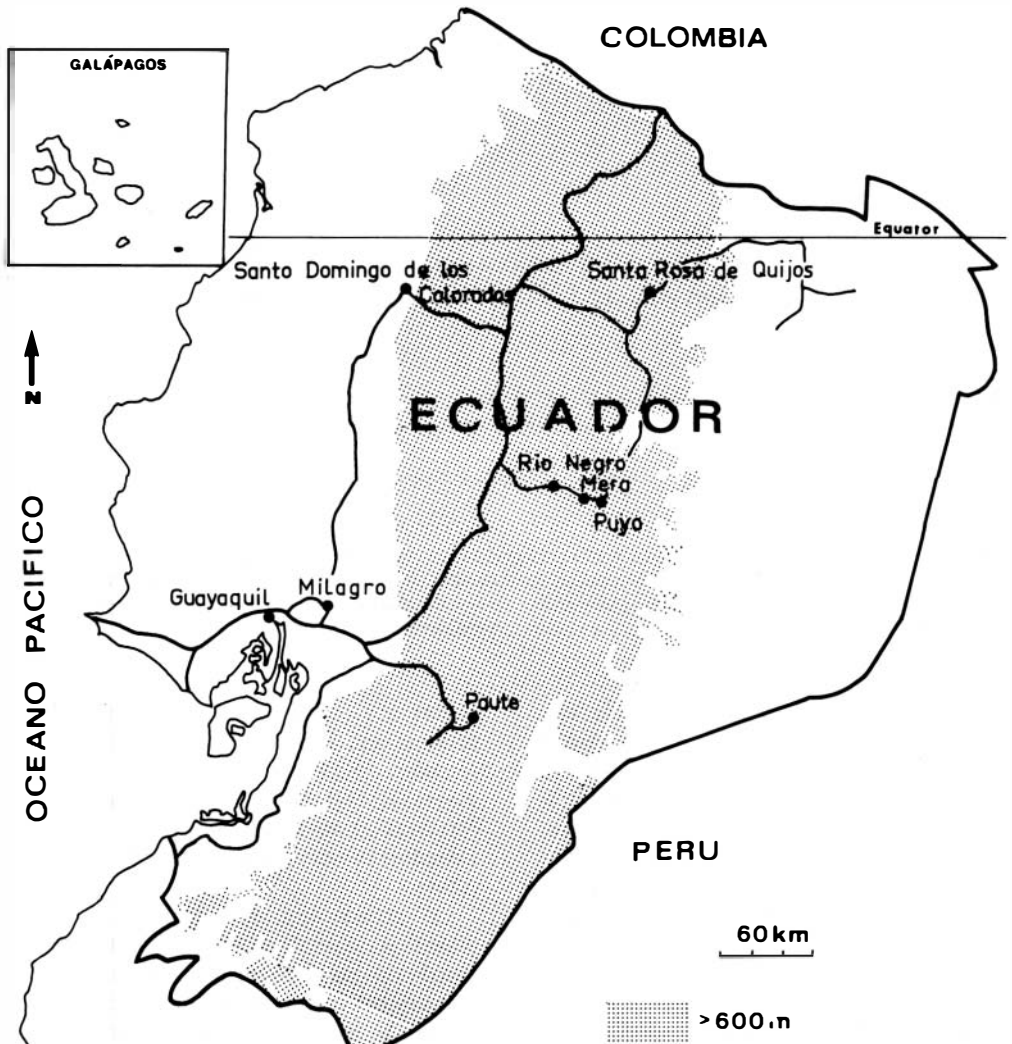


Fig. 1 Study sites in Ecuador; November 1986 and February 1987.

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