

New host of *Anastrepha parishi* Stone (Diptera: Tephritidae) reported in Brazil

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The description of *Anastrepha parishi* Stone, 1942 was based on specimens collected in Guyana, but the species is also present in Costa Rica (González et al., 1988), Suriname, Venezuela (Caraballo, 1981) and, recently, in Brazil (Jesus et al., 2008). Its only known hosts are *Psidium guajava* (Myrtaceae) in Venezuela (Caraballo, 1981) and *Oenocarpus bacaba* (Arecaceae) in Brazil (Jesus et al., 2008).

On March 30, 2010, during a fruit sampling procedure aiming to collect fruit flies in the vicinity of Urubu River, in the Serra da Lua region within the municipality of Boa Vista (02° 21' N and 60° 02' W), state of Roraima, a total of 17 fruits (117.69 g) of *Myrciaria dubia* (Kunth) McVaugh (Myrtaceae) were collected. *Myrciaria dubia* is commonly known as camu-camu, açari or araçá-de-água.

The camu-camu is native to a region extending from the Northwest Brazilian Amazon to Peru, with distribution limited to flooded areas or margins of rivers and streams. The species is also found in Colombia and Venezuela. It is an evergreen shrub, up to 4 m tall, in rare cases reaching 8-10 m tall. The fruit is a spherical berry (2-2.5 cm in diameter), with a thin, smooth, glossy skin of a red colour that becomes purplish-black at the end of the ripening period. The pulp is succulent and very acidic, and is consumed in natura or in processed form (juices, ice creams, wines, liqueurs, jams, etc.). However, the importance of the camu-camu lies in the great economic potential offered by its main attribute, namely the high content of vitamin C in its pulp, which is much higher than the amount found in acerola and other fruits (Cavalcante, 1996; Siqueira, 1998; Donadio et al., 2002; Lorenzi et al., 2006).

From the fruits of *M. dubia*, we obtained two puparia (infestation rate: 0.1 puparium/fruit and 17.0 puparia/kg), from which two specimens of *Anastrepha* emerged (1 female and 1 male). The female was identified as *Anastrepha parishi* Stone (voucher specimen deposited in the Instituto Biológico collection).

Myrciaria dubia is a newly reported host of *A. parishi* in Brazil. The species has already been reported as a host of *Anastrepha obliqua* (Macquart) in the state of Amazonas

(Silva, 1993). This is also the first report of *A. parishi* in the state of Roraima, which previously had been collected only in the state of Amapá (Jesus et al., 2008). *Anastrepha parishi* therefore deserves further study, as this is the third report of a host (two plant families) of the species.

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References

- CARABALLO, CJ., 1981. *Las moscas de frutas del genero Anastrepha Schiner, 1868 (Diptera, Tephritidae) de Venezuela*. Maracay: Universidad Central de Venezuela. 210 p. Tesis de Maestria.
- CAVALCANTE, PB., 1996. *Frutas comestíveis da Amazônia*. 6nd ed. Belém: CNPq/Museu Paraense Emílio Goeldi. 279 p.
- DONADIO, LC., MÔRO, FV. and SERVIDONE, AA., 2002. *Frutas brasileiras*. Jaboticabal: Novos Talentos. 288 p.
- GONZÁLES, IM., LEZANA, HJ. and JIRÓN, LF., 1988. *Anastrepha* fruit flies in Costa Rica: three new records. *Revista de Biología Tropical*, v. 36, p. 333-335.
- JESUS, CR., OLIVEIRA, MN., SOUZA-FILHO, MF., SILVA, RA. and ZUCCHI, RA., 2008. First record of *Anastrepha parishi* Stone (Diptera, Tephritidae) and its host in Brazil. *Revista Brasileira de Entomologia*, v. 52, p. 135-136. <http://dx.doi.org/10.1590/S0085-56262008000100023>
- LORENZI, H., BACHER, L., LACERDA, M. and SARTORI, S., 2006. *Frutas brasileiras e exóticas cultivadas: de consumo in natura*. São Paulo: Instituto Plantarum de Estudos da Flora. 672 p.
- SILVA, NM., 1993. *Levantamento e análise faunística de moscas-das-frutas (Diptera: Tephritidae) em quatro locais do Estado do Amazonas*. Piracicaba: Escola Superior de Agricultura "Luiz de Queiroz", Universidade de São Paulo. 152 p. Tese de Doutorado em Ciências.
- SIQUEIRA, GCL., (Coord.), 1998. *Camu-camu: produtos potenciais da Amazônia*. Brasília: MMA-SUFRAMA. 31p.

