Scientific Note

New records of Odonata from La Altagracia, Punta Cana, Dominican Republic

Nuevos registros de Odonata para La Altagracia, Punta Cana, República Dominicana

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Abstract. This paper reports six new faunistic records from La Altagracia, Dominican Republic increasing the knowledge of the diversity of Odonata within the province to 15 species. Thus records extend the known geographic range of these species east of Hispaniola.

Key words: Hispaniola, occasional records, Libellulidae.

Resumen. Este trabajo notifica seis nuevos registros faunísticos de La Altagracia, República Dominicana, aumentando el conocimiento de la diversidad de Odonata dentro de la provincia a 15 especies. Además, los registros amplían el rango geográfico conocido de dichas especies al este de La Española.

Palabras clave: La Española, registros ocasionales, Libellulidae.

According to the checklist of the dragonflies of Hispaniola, 68 species are known in Dominican Republic, of which only eight are endemic to the island. Concerning the odonate fauna reported from La Altagracia, there are a small number of investigations catalog the species that inhabit it (Paulson 1982; Daigle 1993; Fernández-Martínez 2004; Flint *et al.* 2006; Márquez-Rodríguez 2019). The eastern half of the Dominican Republic is scantily sampled and poorly known (Flint *et al.* 2006). Even today, the lack of prospecting in this area is highly manifest. Until 2006 only eight species had been recorded for La Altagracia province (Flint *et al.* 2006). A short time later, occasional records of *Triacanthagyna trifida* for the easternmost Dominican province were recently published (Márquez-Rodríguez 2019). Thanks to naturalists going to generally anthropogenic aquatic environments to take occasional photographs of insects nearby to the rest areas, there are records of species, not catalogued there. This faunistical note refers to six species of Libellulidae reported from La Altagracia province for the first time. This research expands up to 15 especies of Odonata reported from La Altagracia province.

The methodology that has been used has taken into account the guidelines followed by other authors to record the specimens without disturbing them through the use of digital photography (Cordero Rivera 2015; Sesma *et al.* 2015). The author of this paper has identified and confirmed determinations of the photographs published by their authors online, using specific taxonomic keys (Trapero and Naranjo 2004).

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Family Libellulidae

Brachymesia herbida Gundlach, 1888 (Fig. 1)

This species has been recorded from Samaná in Dominican Republic by Calvert (1901-1908). This dragonfly is present in Hispaniola from Barahona, La Vega, Monseñor Nouel and Distrito Nacional (Daigle 1993); and later also recollected no new provincial records (Flint *et al.* 2006). Later, on February 07, 2019 (EXIF Info), Gillian Mastromatteo photographed this species on the exterior of a resort from Punta Cana (La Altagracia province) forwarded the photograph to on an on-line platform (Fig. 1) (www.pbase.com/jewelwing/tropical_odes).

Erythrodiplax fervida (Erichson, 1848)

This species was also recorded by Calvert (1901-1908). This dragonfly is present in La Vega, Monseñor Nouel, Samaná, Distrito Nacional, Puerto Plata and San Cristóbal (Daigle 1993). Later, Flint *et al.* (2006) added Barahona as new provincial record. Finally, on 2019 Gillian Mastromatteo photographed this species from La Altagracia province.

Erythrodiplax justiniana (Sélys, 1857)

This species has been recorded from Samaná by Calvert (1901-1908); also in Santiago (Borror 1942); La Vega, Distrito Nacional, San Cristóbal (Daigle 1993); Azua, Barahona and Peravia (Flint *et al.* 2006). This species was recently photographed in Bayahibe from La Altagracia province (image 9245 2009-12.07, www.eimagesite.net); also in autumn, as the records of the last three provinces cited.

Micrathyria aequalis (Hagen, 1861)

This species has been recorded from Samaná in Dominican Republic by Calvert (1901-1908). This dragonfly is present in Barahona, Monseñor Nouel, Distrito Nacional and Peravia (Daigle 1993). According to Flint *et al.* (2006) who also collected it, this species is widely distributed around the Caribbean. On 2019, Gillian Mastromatteo photographed a doubtful specimen of this species from La Altagracia province. However, *M. aequalis* is the first species of this genus that was detected more than a century ago and the most widespread on the island.

Micrathyria hagenii Kirby, 1890

This dragonfly is distributed much as *M. aequalis* (Flint *et al.* 2006) and this species differs easily from the previous one by the greater presence of yellow in its thorax and abdomen. This species has been also recorded from Samaná by Calvert (1901-1908), El Seibo and Distrito Nacional (Daigle 1993). Later, on December, 2009 (EXIF Info), Ron Hay photographed an undeterminated dragonfly of this species outside of Bavaro Princess, Punta Cana (La Altagracia province) (www.flickr.com). Confirmation of the presence of this species in the area is documented thanks to a photograph taken by Franklin Howley-Dumit Serulle in Salvaleón de Higüey, on August, 2019 (https://www.naturalista.mx).

Perithemis domitia (Drury, 1773)

Just a genus of *Perithemis* is present in Hispaniola (Bastardo and Sánchez-Rosario 2017). This species was recorded from Samaná and Distrito Nacional (Calvert 1901-1908). This

dragonfly is also present in Hispaniola from La Vega, Pedernales, San Cristóbal and Santiago (Daigle 1993). Later, Flint *et al.* (2006) added Barahona, Dajabón, La Romana, Peravia, Puerto Plata and Sánchez Ramírez as new provincial records (Flint *et al.* 2006). Finally, on November, 2009 (EXIF Info), Ron Hay photographed this species outside of Bavaro Princess, Punta Cana (La Altagracia province), forwarded the photograph of the specimen (undetermined) to on two on-line platform (www.flickr.com; www.megapixeltravel.com). Howley-Dumit photographed this species in the province, on August, 2019 (https://www.naturalista.mx).



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