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## A new species of *Neotraginops* Prado (Diptera: Odiniidae) from Mexico and Belize, with additional records for *Odinia coronata* Sabrosky in Mesoamerica

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### Abstract

*Neotraginops mexicanus* n. sp. is described and illustrated based on specimens from Mexico and Belize, representing the second known species for the genus. Additional records for *Odinia coronata* Sabrosky from Mexico and Nicaragua are provided.

**Keywords:** Schizophora, Opomyzoidea, Neotropical Region

### Introduction

The family Odiniidae comprises near 60 described extant species classified into 14 genera of two subfamilies (Odiniinae and Traginopinae), which are distributed in almost all biogeographical regions (Gaimari & Mathis 2011). In the Neotropical Region the presence of 26 species have been recorded, including three genera and five species recently described from Brazil and Costa Rica (Gaimari 2007; Carvalho-Filho *et al.* 2009). This family is represented in Mexico by only two species, *Odinia coronata* Sabrosky, with records from the states of Morelos and Chiapas, and *Schildomyia reticulata* Prado from the state of Veracruz (Gaimari & Mathis 2011).

The genus *Traginops* Coquillett was described for the Nearctic species *T. irroratus* (Coquillett 1900). The genus was later rediagnosed by Hendel (1909) to incorporate a second species, *T. clathratus* Hendel, from Peru and Paraguay. Based on morphological features of the male genitalia observed in *T. orientalis* Meijere (Hennig 1938), and the Nearctic *T. irroratus* and *T. purpurops* Steyskal (Steyskal 1963), the new genus *Neotraginops* was described by Prado (1973) to separate out the single Neotropical species *N. clathratus*. Having been described from Peru (Vilcanota) and Paraguay, additional distributional data were recorded for Brazil (Mato Grosso, Goiás, Minas Gerais, Espírito Santo, Rio de Janeiro, Guanabara, São Paulo, Santa Catarina), and Colombia (Prado 1973; 1975). Gaimari (2010) referred to the presence of three undescribed species from Costa Rica, Belize and Panama; the one from Belize is part of the paratype series for the new species described herein.

In this work a second species of the genus *Neotraginops* is described, on the basis of specimens collected in the states of Guerrero and Veracruz (Mexico), and a male from Belize. Also new data of the distribution of *Odinia coronata* for Mexico and Nicaragua are provided.

### Material and methods

The material examined from various collections in the states of Veracruz and Guerrero (Mexico) were mainly obtained through the use of McPhail traps baited with hydrolyzed protein as attractant, but also recovered from Malaise traps and rotten-fruit traps. Specimens were preserved in 75% alcohol, and later dry mounted on insect pins. The analysis of the genitalia of both sexes was performed by removing and placing the abdomens in a 10% NaOH solution and heating for several minutes; thereafter, the structures were rinsed in distilled water and

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## References

- Carvalho-Filho, F.S., Esposito, M.C. & Oliveira dos Santos, R.C. (2009) A new species of *Helgreelia* Gaimari (Diptera: Odiniidae) from Brazil, with a key to the Neotropical species of Odiniidae. *Zootaxa*, 2219, 61–68.
- Coquillett, D.W. (1900) Two new genera of Diptera. *Entomological News*, 11, 429–430.
- Gaimari, S.D. (2007) Three new Neotropical genera of Odiniidae (Diptera: Acalyptratae). *Zootaxa*, 1443, 1–16.
- Gaimari, S.D. (2010) Odiniidae. In: Brown, B.V., Borkent, A., Cumming, J.M., Wood, D.M., Woodley, N.E. & Zumbado, M.A. (Eds.), *Manual of Central American Diptera. Vol. 2*. NRC Research Press, Ottawa, Ontario, Canada, pp. 1049–1055.
- Gaimari, S.D. & Mathis, W.N. (2011) World catalog and conspectus on the family Odiniidae (Diptera: Schizophora). *Myia*, 12, 291–339.
- Hendel, F. (1909) Über eine Dipterengattung mit türmartigem Scheitel, *Traginops* Coquillett. *Wiener Entomologische Zeitung*, 28 (2), 49–52.
- Hennig, W. (1938) (1939) Odiniidae. *Die fliegen der Palaarktischen region*, 6, 1–11.
- Prado, A.P. (1973) Contribuição ao conhecimento da família Odiniidae (Diptera, Acaliptratae). *Studia Entomologica*, 16, 481–510.
- Prado, A.P. (1975) Chapter 82 Family Odiniidae. In: Papavero N. (Ed.), *A catalogue of the Diptera of the Americas South of the United States*. Museu de Zoologia Universidade de Sao Paulo, Brazil, pp. 1–4.
- Sabrosky, C.W. (1959) Flies of the genus *Odinia* in the Western Hemisphere (Diptera: Odiniidae). *Proceedings of the United States National Museum*, 109, 223–236.  
<http://dx.doi.org/10.5479/si.00963801.109-3414.223>
- Steyskal, G.C. (1963) A second North American species of *Traginops* Coquillett (Diptera, Odiniidae). *Proceedings of the Entomological Society of Washington*, 65, 51–54.