

Nomenclatural Act

urn:lsid:zoobank.org:pub:563D2321-E7B1-4992-8715-D3D44EC1E73A

Psychoda mimica Quate, 1996, a junior synonym of *Psychoda divaricata* Duckhouse, 1968 (Diptera: Psychodidae)

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Edited by: Daniell R. R. Fernandes¹

Received: December 22, 2025. Accepted: July 14, 2026. Published: July 23, 2026.

Abstract. Study of the holotype of *Psychoda mimica* Quate, 1996 n. syn. (Diptera: Psychodidae), reveals it is a junior synonym of the widely distributed species *Psychoda divaricata* Duckhouse, 1968.

Keywords: Moth fly, Psychodini, Taxonomy.

The species *Psychoda divaricata* Duckhouse, 1968 (Diptera: Psychodidae), was originally described from the state of Santa Catarina, southern Brazil, based on male and female specimens. Cordeiro et al (2011) revised the species and proposed an updated diagnosis, with the following combination of characters: eye-bridge separated by 1.0 facet diameters on males, and 1.5 on females; antenna with 14 flagellomeres, 12th and 13th partially fused, 11th with a basiconic sensillum; male epandrial appendages longer than 1.5 the length of epandrium; parameres inflated, with two acute projections apically; aedeagus with two arms, one laterally flattened and leaf shaped, the other slender, with acute apex; internal ornamentation of the female hypopygium U-shaped, with two small sac-like structures at the base.

In addition to the type locality, this species was further recorded from North to South of Brazil (specifically in the states of Pará, Bahia, Espírito Santo and Paraná) (Bravo et al. 2006; Cordeiro et al. 2011), as well as Morocco and Corsica, France (Gibernau & Albre 2022; Saidoun et al. 2025). There are also molecular data attributed to *Psychoda divaricata* in Barcode of Life Database (BOLD), adding Mexico, Honduras, Costa Rica, Peru and Argentina to this list.

The species *Psychoda mimica* Quate, 1996 was described based solely on female specimens from Costa Rica. Description of species based solely on female specimens is not unusual for the genus *Psychoda* Latreille, 1796 as the females are abundant and show relevant diagnostic characters in the terminalia (Quate 1962). In the original description, Quate (1996) presented a diagnosis to *P. mimica* that is compatible with *P. divaricata* – "Small grey species with U-shaped ridge on innerface of subgenital plate; antenna with 14 flagellomeres, terminal 3 unequal in size" – but with no comparison or mention to *P. divaricata*. The name *P. mimica* was further recorded for Nicaragua and Colombia (Collantes & Martínez-Ortega 1999; Bejarano 2006), with again, no comments or mention of *P. divaricata* in those papers.

In this study we compared the holotype of *P. mimica* to several specimens positively identified as *P. divaricata*. The studied specimens were preserved on slides, fixed in Canada Balsam, and examined using a Leica DM750 optical microscope. The holotype of *P. mimica* was photographed with a Leica M205C with Leica K3C camera. The specimens belong to one of the following institutions, as specified in the examined material section: the Prof. Johann Becker Entomological Collection of the Museum of Zoology of the State University of Feira de Santana, Bahia, Brazil (MZFS), the Instituto Nacional de Biodiversidad (INBIO) and the Entomological Collection of the University Museum

of Bergen, University of Bergen, Norway (ZMNB). The general morphological terminology follows Cumming & Wood (2017). Additional information not included in the specimen labels has been added in brackets.

We understand that there are no apparent differences between these species, and we propose *P. mimica* to be a junior synonym of *P. divaricata*. This automatically expands the distribution of *P. divaricata* to Costa Rica, Nicaragua and Colombia.

Psychoda divaricata Duckhouse, 1968

Psychoda divaricata Duckhouse, 1968 – Duckhouse 1968: 37 (original description type locality); Bravo et al. 2006: 5 (new records and comments); Bravo 2008: 58 (citation); Cordeiro & Bravo 2008: 116 (citation); Cordeiro et al. 2011: 11 (new records and description); Bravo & Araujo 2013: 85 (citation); Gibernau & Albre 2022: 85 (new records); Saidoun et al. 2025: 156 (new records and habitat description).

Chodopsycha divaricata (Duckhouse, 1968) – Ježek 1984: 138 (combination).

Psychoda mimica Quate, 1996 (new synonym) – Quate 1996: 73 (original description and type locality); Collantes & Martínez-Ortega 1999: 22 (new records); Bejarano 2006: 49 (new records); Bravo et al. 2006: 12 (citation).

Type specimens: Holotype of *P. mimica*, 1 male Costa Rica, Limon, Puerto Viejo de Talaman. [Talamanca]., 20-22/vii/93, Light Trap, Sealevel, L.W. Quate, Euparal, INBIO CRI001 469590. Male and female paratypes of *P. divaricata* were previously studied by DPC for Cordeiro et al. (2011).

Other material: 2 female Brazil, Bahia, Igrapiúna, Reserva Ecol. Michelin/Vila 5, 28.V–12.VII.2012, Malaise [trap], Aragão, M., Menezes, E., Mota, E., Andena, S. [cols] (MZFS); 1 female Brazil, Bahia, Igrapiúna, Reserva Ecol. Michelin Pacangê/Malaise [trap], 22.IX–28.X.2012, Aragão, M., Menezes, E., Mota, E., Andena, S. [cols] (MZFS). 1 ♀ Morocco: Chrafate, 11.v.2012, leg. Belqat, det. G. Kvifte, 2014 (ZMNB); 2 male Morocco: Chrafate, 11.v.2013, leg. Belqat, det. G. Kvifte, 2014 (ZMNB).

In the holotype of *P. mimica* (Figs. 1–2), all analysed features of head, antenna, legs, wing and female genitalia confirm the synonym with *P. divaricata*. Interestingly, the species was named after the Latin "*mimicus*" for the fact that Quate considered there were similarities with the female terminalia of *Psychoda entolopha* Quate,

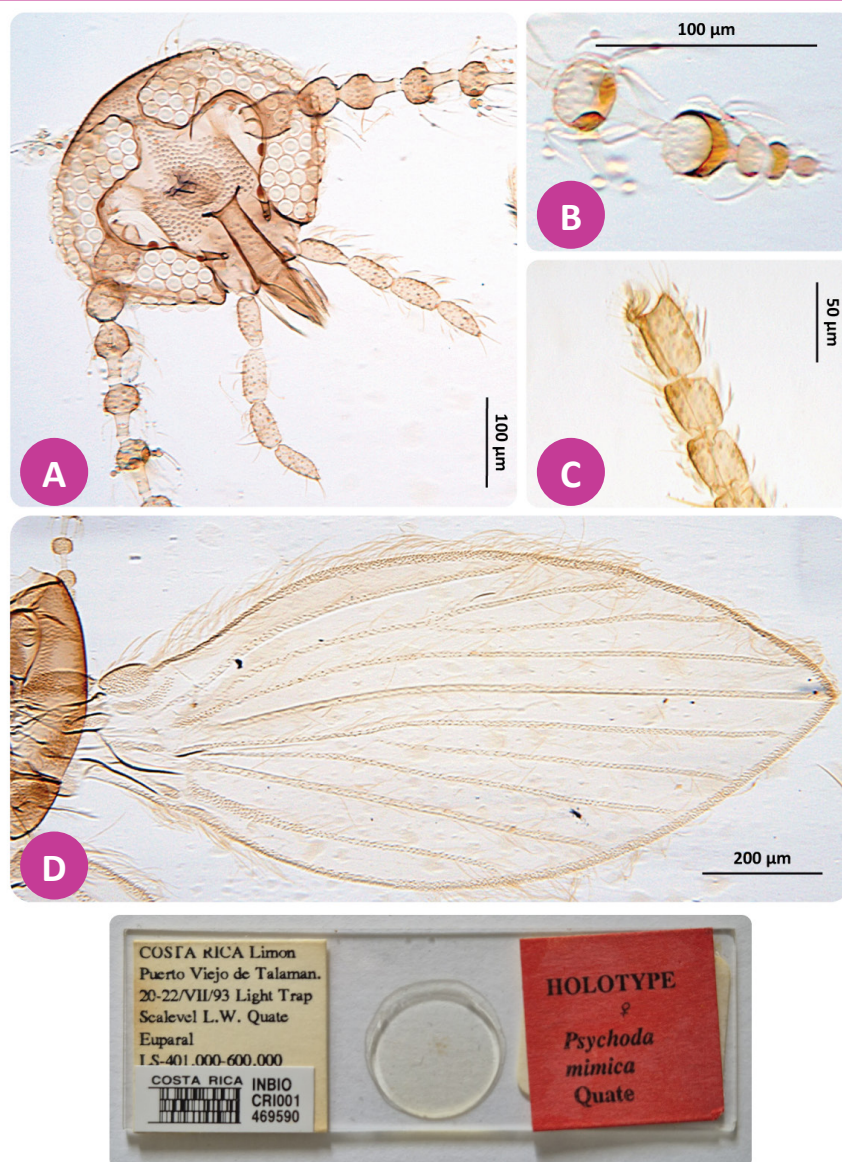


Figure 1. Holotype of *Psychoda mimica* Quate, 1996 (Diptera: Psychodidae) (female) body. A – Head; B – antenna distal flagellomeres; C – distitarsus; D – wing.



Figure 2. Holotype of *Psychoda mimica* Quate, 1996 (Diptera: Psychodidae) (female) terminalia. A – hypogynium in dorsal view; B – hypogynium in ventral view. Both showing the U-shaped ridge.

1996. However, although *P. entolopha* also has a U-shaped internal ornamentation in the hypogynium, the external morphology of the hypogynium of *P. entolopha* is very distinct from that of *P. divaricata*.

Taxonomic Authorities

Chodopsycha divaricata (Duckhouse, 1968) in Duckhouse 1968. *Psychoda* Latreille, 1796 in Latreille 1976. *Psychoda divaricata* Duckhouse, 1968 in Duckhouse 1968. *Psychoda entolopha* Quate, 1996 in Quate 1996. *Psychoda mimica* Quate, 1996 in Quate 1996.

Acknowledgments

This work was carried out with the support of the Fundação de Amparo à Pesquisa da Bahia (FAPESB). The Leica DM750 microscope was financed by PPBio Semiárido (MCTI) and the Leica M205C was financed by FINEP. We are very grateful to Msc. Eliomar da Cruz Menezes, Msc. Emerson Mota da Silva, Msc. Marcos Aragão and Dr. Sergio Ricardo Andena for the specimens collected at the Plantações Michelin da Bahia, with the support of Michelin Ouro Verde Bahia. We are also grateful to Dr. Steffen Roth, who managed the loan of the specimens from the University Museum of Bergen.

Funding Information

GSV: Fundação de Amparo à Pesquisa da Bahia (FAPESB) (BOL0700/2022) provided scholarships support.

Authors' Contributions

GSV: Conceptualization, Investigation, Writing – original draft; DPC: Resources, Supervision, Validation, Writing – review & editing.

Conflict of Interest Statement

The authors declare there are no conflicts of interest.

Ethical Approval

Not applicable.

Data Availability

Not applicable.

Generative AI Statement

No AI content was used in this study.

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