



World revision of the wasp genus *Liosphex* Townes, 1977 (Hymenoptera: Rhopalosomatidae)

VOLKER LOHRMANN^{1,3} & MICHAEL OHL²

Museum für Naturkunde, Leibniz-Institut für Evolutions- und Biodiversitätsforschung an der Humboldt-Universität zu Berlin,
Invalidenstraße 43, D-10115 Berlin, Germany. E-mail: ¹volker.lohrmann@mfn-berlin.de; ²michael.ohl@mfn-berlin.de

³Corresponding author

Table of contents

| | |
|--|----|
| Abstract | 1 |
| Introduction | 2 |
| Material and methods | 2 |
| Systematic descriptions | 4 |
| Genus <i>Liosphex</i> Townes, 1977 | 4 |
| Key to the species of <i>Liosphex</i> of the world | 7 |
| Species descriptions | 8 |
| <i>Liosphex achuar</i> Lohrmann sp. nov. | 8 |
| <i>Liosphex atratus</i> Lohrmann sp. nov. | 12 |
| <i>Liosphex boreus</i> Lohrmann sp. nov. | 14 |
| <i>Liosphex bribri</i> Lohrmann sp. nov. | 16 |
| <i>Liosphex darien</i> Lohrmann sp. nov. | 18 |
| <i>Liosphex guanabara</i> Lohrmann sp. nov. | 20 |
| <i>Liosphex guarani</i> Lohrmann sp. nov. | 22 |
| <i>Liosphex longicornis</i> Lohrmann sp. nov. | 24 |
| <i>Liosphex maleku</i> Lohrmann sp. nov. | 25 |
| <i>Liosphex micropterus</i> Lohrmann sp. nov. | 27 |
| <i>Liosphex quechua</i> Lohrmann sp. nov. | 29 |
| <i>Liosphex trichopleurum</i> Townes, 1977 | 30 |
| <i>Liosphex tupi</i> Lohrmann sp. nov. | 33 |
| <i>Liosphex varius</i> Townes, 1977 | 35 |
| Specimens with unclear affinities | 39 |
| Acknowledgements | 41 |
| References | 41 |

Abstract

The wasp genus *Liosphex* Townes 1977 is revised and twelve new species are described: *Liosphex achuar* **sp. nov.** (Costa Rica, Ecuador, Panama and Peru), *L. atratus* **sp. nov.** (Costa Rica and Mexico), *L. boreus* **sp. nov.** (Mexico, Kentucky and Mississippi, USA), *L. bribri* **sp. nov.** (Costa Rica, Panama and Peru), *L. darien* **sp. nov.** (Panama), *L. guanabara* **sp. nov.** (Brazil), *L. guarani* **sp. nov.** (Brazil and Argentina), *L. longicornis* **sp. nov.** (Costa Rica), *L. maleku* **sp. nov.** (Costa Rica and Mexico), *L. micropterus* **sp. nov.** (southern Brazil and Paraguay), *L. quechua* **sp. nov.** (Peru), and *L. tupi* **sp. nov.** (Brazil). The male of *L. trichopleurum* Townes, 1977 is described for the first time. A redescription of *L. varius* Townes, 1977, including new diagnostic characters, is provided since the original description was based on a heterogeneous type series of specimens from different species. The revision includes images of all fourteen species, illustrations of the main diagnostic characters, an identification key to species and distribution maps for all species.

Key words: Rhopalosomatidae, *Liosphex*, new species, taxonomy, Argentina, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Indonesia, Malaysia, Mexico, Panama, Paraguay, Peru, Philippines, USA, Nearctic, Neotropics, Oriental