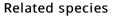
# Chirothrips manicatus

## Distinguishing features

Female fully winged, varying considerably in body size. Body, antennae and legs brown, tarsi paler, fore wings light brown. Antennae 8-segmented; segment II asymmetric with prolonged external margin bearing terminal seta-like sensorium; segments III & IV with sense cone simple and stout. Head small, prolonged in front of eyes with long preocellar area; 3 pairs of ocellar setae present, pair III anterolateral to fore ocellus. Pronotum trapezoidal, 2 pairs of prominent posteroangular setae. Metanotum reticulate, sculpture forming arches around posterior midpoint; median setae not at anterior margin, smaller than lateral pair. Fore wings pointed; first vein distal half with 2 setae, second vein with 4 setae. Abdominal tergites with transverse sculpture lines medially; posteromarginal craspedum with weak lobes; ovipositor weak with faint teeth. Posterior margin of sternites with distinctive tubercles. Male effectively wingless, wing lobe minute; no ocelli; sternites



III-VII with small circular pore plate.

Currently there are 42 species worldwide placed in the genus *Chirothrips*, and Nakahara & Foottit (2012) provided an account of the species from the Americas. The genus was treated in a much broader sense by zur Strassen (1960), whereas Bhatti (1990) created six new genera for several species. In









Antenna Female head & pronotum







Meso & metanota

Thoracic sternites Female tergites I-III







Female tergites VII-VIII

Sternites of female

Male sternites



Fore wing

particular, *Arorathrips* was erected for a group of New World species that have the mesothoracic endofurca reduced.

### Biological data

Breeding and pupating within individual florets of various Poaceae species including cereal crops, with no recorded specificity; probably also in the flowers of some Cyperaceae. Sometimes associated with reduction of yeild in Poaceae grown for seed production.

#### Distribution data

Originally from Europe, but now widespread around the world in temperate areas, presumably because each pupa remains within the floret of a grass and these pupae are then distributed in grass seeds.

#### Family name

THRIPIDAE - THRIPINAE

#### Species name

Chirothrips manicatus (Haliday)

#### Original name and synonyms

Thrips (Chirothrips) manicatus Haliday, 1836: 444
Thrips longipennis Burmeister, 1838: 413
Chirothrips antennatus Osborn, 1883: 154
Chirothrips fusca Coesfeld, 1898: 470
Chirothrips similis Bagnall, 1909: 35
Chirothrips albicornis Priesner, 1926: 140
Chirothrips ammophilae Bagnall, 1927: 564

Chirothrips takahashii Moulton, 1928: 289 Chirothrips productus Bagnall, 1932: 184 Chirothrips laingi Bagnall, 1932: 185 Chirothrips ambulans Bagnall, 1932: 185 Chirothrips testacea Hukkinen, 1935: 90 Chirothrips bagnalli Hood, 1938: 162 Chirothrips longisetis Priesner, 1949: 170

#### References

Bhatti JS (1990) On some genera related to *Chirothrips* (Insecta: Terebrantia: Thripidae). *Zoology* (*Journal of Pure and Applied Zoology*) **2**: 193–200.

Nakahara S & Foottit RG (2012) Review of *Chirothrips* and related genera (Thysanoptera: Thripidae) of the Americas, with one new genus and four new species. *Zootaxa* **3251**: 1–29.

zur Strassen R (1960) Key to and catalogue of the known species of *Chirothrips* Haliday, 1836 (Thysanoptera: Thripidae). *Journal of the entomological Society of southern Africa* **23**: 144–176.