A Key to Neotropical species of Rivellia (Diptera, Platystomatidae)

| 1. | Basal, radial median transverse and discal median transverse brown bands each terminate independently | |
|----|---|--|
| - | Some or all of the brown bands converge and join | |
| 2. | Base of wing with limited small brown spot at base of <i>br;</i> basal brown transverse band expanding at apex in m_4 ; radial median transverse brown band displaced in $dm;$ | |
| - | Basal brown transverse band originates in wing base | |
| 3. | Basal brown transverse band curving posteriorly at apex; radial median transverse and discal median transverse brown bands and apical marginal band narrower than length of <i>r-m</i> ; | |
| | 1 pprn & 1 dc macroseta present; thorax brown; fore-femur yellowish; abdomen black, surface appearance of abdominal tergites smooth, but dull. | |
| - | Basal brown transverse band continuing straight, not curving posteriorly; radial median transverse and discal median transverse brown bands and apical marginal band nearly as wide as length of <i>r-m</i> | |
| 4. | Basal and radial median transverse brown bands terminate at M_1 ; wing membrane around node of RS entirely brown | |

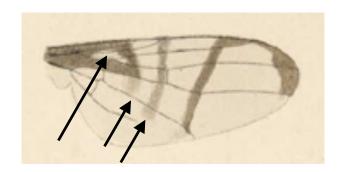
1 pprn & 1 dc macroseta present; thorax & abdomen with a distinctive black-green metallic lustre; fore-femur yellowish; abdominal surface appearance of abdominal tergites shining, but rugose. There is noting in Say's description to distinguish *R. ligata* from *R. micans*, other than describing the former as being 'plumbeous' and 'coppery' potentially suggesting that the thorax may have purple rather than green lustre. Hence the two species exit the key here together - this is not to imply that they are considered synonyms and no type specimens have been examined in the construction of this key.

Mexico

Basal and radial median transverse brown bands terminate at or a little beyond *M*₄; basal brown band fading in *dm*, radial median transverse brown band faded throughout; wing membrane around node of RS hyaline.....

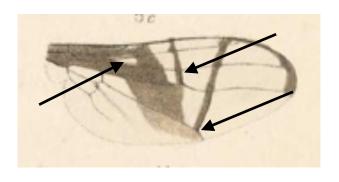
..R. longicornis van der Wulp, 1898

Mexico



Mexico, Costa Rica

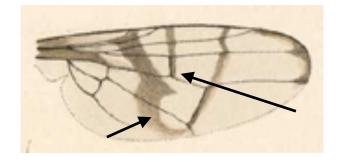
- Basal and radial median brown transverse bands join over *r-m*; discal median brown transverse band joins at apex of *M*₄; radial median and discal median brown transverse band narrower than length of *r-m*; wing membrane surrounding RS node hyaline............



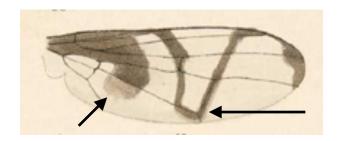
7. Radial median transverse band terminates independently; basal band makes an noticeable loop before joining discal median brown transverse band; radial median band terminates independently; radial median and discal median brown transverse bands are narrower than length of *r-m*; wing membrane surrounding RS node hyaline............

...R. submetallica van der Wulp, 1898

1898 Mexico



 8. Radial median and discal median brown transverse bands join together along apex of M_4 , both are narrower than length of r-m; basal band doubly as broad as length of r-m, terminating independently of radial median and discal median brown transverse bands after crossing M_4 into m_4 where it fades....



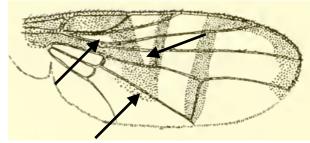
..... R. flexuosa van der Wulp, 1898

Mexico

- 9. Basal and radial median transverse brown bands join midway over dm; hyaline wedge between them extending to M_1 ; base of r_1 immediately anterior to RS node hyaline

...... *R. tersa* Namba, 1956

Mexico USA: Arizona, New Mexico

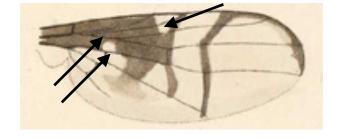


1 pprn & 1 dc macroseta present; thorax orange-brown; fore-femur yellowish; abdomen brown to dark brown, surface appearance of abdominal tergites shining, but rugose.

- Basal and radial median transverse brown bands join broadly over *br*; hyaline wedge between them extending to *R*₂₊₃; wing membrane surrounding *RS* node brown and a hyaline spot midway along *br*; radial median and discal median brown transverse bands narrower than length of *r-m*

.... R. connecta van der Wulp, 1898

Mexico



References

- Hendel, F. 1914a. Diptera Fam. Muscaridae Subfam. Platystominae. *Genera Insectorum* **157**: 1 179. [precedence over Hendel, 1914b according to date: see McAlpine, D.K., 1994: 118 119].
- Hendel, F., 1914b. Die Arten der Platystominen. -- Abhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien 8(1): 1-409.
- Namba, R. 1956. A Revision of the Flies of the Genus *Rivellia* (Otitidae, Diptera) of America North of Mexico. *Proceedings of the United States National Museum* **106** (3363): 21 - 84.
- van der Wulp, F.M. 1898. *In*: Godman, F. D. and Salvin, O. (eds.) *Biologia Central-Americana*. *Insecta. Diptera* (1899-1900): **2**: 380-384.

Credits:

Wing sketches: van der Wulp 1898, Hendel, 1914 and Namba, 1956.