

KEY FOR NEOTROPICAL "LEIA" MEIGEN, 1818
(Diptera, Mycetophilidae)¹

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The authors of this paper have, during the last few years, compiled a key for the species of *Leia*. One of the difficulties which they encountered was that they were not able to see all species described up to the present. Such being the case, a good number of them had to be inserted in the key by description. Such a course sometimes leads to error. They are fully aware of this and, for this reason, have marked with an asterisk the species which they have been able to study.

1. Mesonotum mainly shining black, at most the humeral angles are narrowly marked with yellow 2
- Mesonotum mainly yellowish or brownish, or else yellowish with a blackish spot over the wing base 18
2. Scutellum with four marginal long bristles 3
- Scutellum with only two marginal long bristles 4
3. Cu.1 incomplete both at base and at tip *albicoxa* Enderlein, 1911*
- Cu.1 incomplete only at base *disgrega* Edwards, 1933
4. Haltere with yellowish stem and black knob 5
- Haltere completely yellowish 10
5. Trochanter, at most, only darkened at tip and underneath; hind femur might be dark 6
- Trochanters and basal two fifths of all femora black *diversipes* Edwards, 1933
6. Last three antennal segments black 7
- Last three antennal segments of female of the last antennal segment of male white 8
7. Without a median yellow line on the posterior third of mesonotum *nitens* (Williston, 1896)
apicalis (Kertész, 1902)
- A median yellow line present on the posterior third of mesonotum and extending anteriorly from the scutellum *paulensis* Edwards, 1933*

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8. Scutellum black; abdomen entirely shining black .. 9
 - Scutellum yellow; abdomen with complete basal yellow bands on tergites II to IV; mesonotum often with a median yellow line on the posterior third .. *paranensis* Edwards, 1933*
9. Thorax covered with black pile and setae; front and middle femora, coxae and trochanters yellow; distal wing spot entirely filling the fork of media .. *leucocera* Edwards, 1933
 - Thorax covered with yellow pile and setae; front and middle femora with apical black spots; distal wing spot not filling fork of media .. *aruaci* Lane, 1950*
10. Last antennal segments blackish .. 11
 - Last antennal segment of male and the last three segments of female white .. *monoleuca* Edwards, 1933*
11. Head and scutellum yellow .. 12
 - One or the other of these regions brown or black .. 13
uveticauda Enderlein, 1911
12. Abdomen black except for the yellow sixth segment ..
 - Abdomen with the posterior fifth of tergite I and the anterior half of II yellow .. *collariger* Enderlein, 1911
13. Wing unicolorous; scutellum yellow or with yellow markings .. 14
 - Wing hyaline with blackish spots; scutellum black .. 16
14. Mesonotum black .. 15
 - Mesonotum with two very narrow yellow lines which divide it in three portions; head black in front and yellow behind; scutellum yellow .. *anabilis* (Williston, 1900)*
15. Flagellum unicolorous; trochanters dusky; mid and hind femora with black edges; center of scutellum black but the sides yellow .. *circumiera* Fisher, 1939*
 - First four flagellar segments yellowish, chiefly on the underside, the rest blackish; trochanters and femora yellow; scutellum yellowish .. *guaycurusi* Lane, 1950*
16. Vein M.3 reaching the apex of wing .. 17
 - Vein M.3 abbreviated as well as Cu.1; spot on median cell over less than half its distal portion; femora yellowish .. *apinagei* Lane, 1950*
17. Mid and hind femora blackish; spot at apex of wing covering two thirds of the median cell ..
 - Mid and hind femur blackish on basal two thirds, the apical one yellowish; spot on median cell covering its whole surface .. *picticornis* (Kertész, 1902)*
caiapoi Lane, 1950*
18. Posterior half or two thirds of thorax black or dark brownish, the anterior half or third yellow .. 19
 - Thoracic markings not as above .. 21
19. Wing with dark markings on apical and mesial portions .. 20
 - Wing not marked, M.3 and Cu.1 not reaching margin; Cu.1 free at both ends; scutellum yellow .. *biamputata* Edwards, 1933*
20. Scutellum black .. *bipartita* Arribalzaga, 1890
 - Scutellum yellow .. *flavoscuteolata* Arribalzaga, 1890

21. Both veins Cu.1 and M.3 abbreviated at tip .. 22
 - Either Cu.1 or M.3 may be abbreviated but not both of them .. 27
22. Scutellar bristles two .. 23
 - Scutellar bristles four; first 6-8 flagellar segments light at base, darker apically .. *smithi* Edwards, 1933
23. Mesonotum with a black spot at wing base .. 24
 - Mesonotum without such a spot at wing base .. 26
24. Black spot at wing base minute or faintly colored .. 25
 - Black spot at wing base large and distinct; coxae and trochanters with black spots but mid and hind femora lacking black spots .. *axillipunctum* Enderlein, 1911*
25. Legs yellow .. *costaricensis* Fisher, 1940*
 - All femora brown at base .. *truncatovenosa* Enderlein, 1911
26. Scutellum black; abdomen with tergite VI entirely black .. *nigricauda* Edwards, 1933
 - Scutellum yellow; abdomen with tergite VI black or brown only on the basal half .. *biamputata* Edwards, 1933*
27. Mesonotum with two or three black longitudinal stripes .. 28
 - Mesonotum lacking conspicuous black longitudinal stripes .. 31
28. Mesonotum with three dark longitudinal stripes .. 29
 - Mesonotum with two longitudinal stripes or elongate marks .. 30
29. Mid and hind coxae blackish; front coxae pale yellow .. *antarctica* Bigot, 1888
 - All coxae pale yellowish; anterior surface may be brownish .. *poeciloptera* Philippi, 1865
30. Wing with one or more dark spots .. *bitunula* Wiedeman, 1828*
 - Wing completely darkened .. *junai* Lane, 1950*
31. Neither M.3 or Cu.1 abbreviated at tip .. 32
 - M.3 or Cu.1 may be abbreviated at tip .. 38
32. Pleurotergite dark-brown or black, at least partially; anepisternite may also be black .. 33
 - Pleurae yellow .. 36
33. Anepisternite yellow .. 34
 - Anepisternite black .. 35
34. Wing with a pre-apical band .. *fuscata* (Kertész, 1902)*
 - Wing with an apical band .. *fisherae* Shaw, 1950*
35. Last segments of antenna blackish as the adjacent ones .. *talculata* Edwards, 1933*
 - Last two or three segments of antenna of female white .. *andirai* Lane, 1950*
36. Mesonotum with a spot over the root of wing .. 37
 - Mesonotum without such a spot but unicolorous .. *concinna* Williston, 1896*

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| 37. Coxae and trochanters with a black spot on underside | <i>halterata</i> (Kertész, 1902)* |
| – Coxae and trochanters without such a black spot on the underside | <i>bivittata</i> Say, 1829 |
| 38. Cu.1 abbreviated at tip | 39 |
| – Cu.1 not abbreviated at tip | 42 |
| 39. Parameres straight, daggerlike | 40 |
| – Parameres shaped like a human foot and ankle | <i>pedifer</i> Edwards, 1933 |
| 40. Parameres not extending beyond genitalia | 41 |
| – Parameres extend beyond genitalia as daggerlike spines | <i>spinifer</i> Edwards, 1933 |
| 41. Style small, sickle shaped | <i>incompleta</i> Edwards, 1933 |
| – Style long, slender, curved inwards on the outer third | <i>setosicauda</i> Edwards, 1933 |
| 42. Scutellum with two strong bristles | 43 |
| – Scutellum with four strong bristles | 45 |
| 43. Hypopleura black | 44 |
| – Hypopleura yellow | <i>mgrosplenata</i> (Arribalzaga, 1892)* |
| 44. Sternopleura yellowish | <i>schmidti</i> Fisher, 1939* |
| – Sternopleura blackish | <i>elegans</i> (Kertész, 1902)* |
| 45. Mesonotum with spots over the wing roots | 46 |
| – Mesonotum and pleurae unspotted; abdomen yellow with distal black triangles; scutellar bristles four | <i>oblectabilis</i> (Loew, 1869)* |
| 46. Pteropleurites and pleurotergites black | 47 |
| – Such sclerites yellow, the pleurotergites might be dark brown | 48 |
| 47. Mesonotal spot divided by a yellow line | <i>bipunctata</i> Fisher, 1949 |
| – Mesonotal spot undivided | <i>completa</i> (Kertész, 1902) |
| 48. Pleurotergite yellow | <i>diversicornis</i> (Kertész, 1902)* |
| – Pleurotergites dark-brown | <i>schunsei</i> Edwards, 1933* |

We have been unable to include the following species in our key: *Leia interrupta* (Kertész, 1902) and *Leia muchleri* Twinn and Curran, 1928.