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Corrections and additions to *Leptus* Latreille (Trombidiformes: Erythraeidae) of the world: revised classification and keys

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Saboori *et al*. (2020) in the reclassification of *Leptus*, identified 220 species and divided the genus into 8 morpho-groups, and 40 subgroups of species and made 11 synonymies. In the couplet of 18 of key to subgroups of *phalangii* species group, an explanation is added in the parentheses. The key is changed as follows:

Key to subgroups of *phalangii* species group

1. BFe III with solenidion ..... *candangus* species subgroup
– BFe III without solenidion 2
2. TFe I with ≥ 1 solenidion ..... *schedingi* species subgroup
– TFe I without solenidion 3
3. Ge I with 2 solenidia ……..... *torresianus* species subgroup
– Ge I with 1 solenidion 4
4. Ti I with 3 solenidia ..... *indianensis* species subgroup
– Ti I with 2 solenidia 5
5. Ti III with 2 solenidia ..... *hozumii* species subgroup
– Ti III with 1 solenidion 6
6. Ge II with 1 solenidion ..... *kuroshimaensis* species subgroup
– Ge II without solenidion 7
7. Solenida on Ti II absent ..... *phyllotretae* species subgroup
– Solenidia on Ti II present 8

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8. Ti II with 1 solenidion ..... *asahinai* species subgroup
– Ti II with 2 solenidia 9
9. BFe III with 2 setae ..... *guilinicus* species subgroup
– BFe III with 1 seta 10
10. Sensillary setae significantly setulose throughout the length ..... *killingtoni* species subgroup
– Sensillary setae setulose about distal half 11
11. ASens bases posterior to PL bases ..... *chelonethus* species subgroup
– ASens bases anterior to PL bases 12
12. ASens bases level with or anterior to AL bases ..... *gagzoi* species subgroup
– ASens bases between AL and PL bases 13
13. Large microsetae on Ge I-II & Ti I ..... *aldonae* species subgroup
– Microsetae on Ge I-II & Ti I normal 14
14. Chelicerae striated ..... *treati* species subgroup
– Chelicerae punctate 15
15. fD > 125 ..... *millipedius* species subgroup
– fD < 125 16
16. 100 < fD < 125 ..... *meloidarum* species subgroup
– fD < 100 17
17. Scutum distinctly longer than wide (L−W > 15 μm) ..... *gagrellae* species subgroup
– Scutum otherwise 18
18. Scutum distinctly wider than long (usually W−L ≥ 14 μm) ..... *gifuensis* species subgroup
– Scutum length and width semi-equal (L > W; or W−L < 14 μm)* 19
19. Ti I < 125 ..... *molochinus* species subgroup
– Ti I > 125 20
20. Ti III > 340 & Ti I > 280 ..... *boggohoranus* species subgroup
– Ti III < 340 or Ti I < 280 ..... *phalangii* species subgroup

* The character "L< 14 μm" in the parentheses should be replaced with "L > W; or W−L < 14 μm" in the definition of the *molochinus*, *boggohoranus* and *phalangii* species subgroups in Saboori *et al*. (2020).

Leptus (*L.*) *clelandi* Southcott, 1999 and *L.* (*L.*) *tindalei* Southcott, 1999 which were placed in the *gifuensis* species subgroup are placed in the *meloidarum* species subgroup. Thus, species in these two subgroups and the keys to species are changed as follows.

***meloidarum* species subgroup**

BFe III without solenidion, TFe I without solenidion, Ge I with 1 solenidion, Ti I with 2 solenidia, Ti III with 1 solenidion, Ge II without solenidion, Ti II with 2 solenidia, TFe III with 1 seta, sensillary setae setulose in about distal half, ASens bases between AL and PL bases, solenidia on Ti II present, microseta on Ge I-II & Ti I normal, chelicerae punctate, 100 < fD < 125.

Species included: *L.* (*L.*) *meloidarum* Beron, 1975 (syn.: *L.* (*L.*) *gyas* Fain & Amico, 1997, *L.* (*L.*) *mariae* Haitlinger, 1987*, *L.* (*L.*) *clarki* Southcott, 1989, *L.* (*L.*) *baudini* Southcott, 1999, *L.* (*L.*) *clelandi* Southcott, 1999, *L.* (*L.*) *tindalei* Southcott, 1999.

* The redescription of Southcott (1992) is considered.

Key to species of *meloidarum* species subgroup

1. Ti III/AW > 2 2
– Ti III/AW < 1.80 4

2. Ti III/AW > 2.50 ..... *L.* (*L.*) *clarki* Australia
– Ti III/AW < 2.40 3
3. L > 120, PL > 70 ..... *L.* (*L.*) *mariae* Austria, Belgium, Bulgaria, Czech Republic [N], Estonia, Hungary, Italy, Latvia, Luxembourg, Macedonia, Norway, Poland, Romania, Slovenia, Spain, Sweden, Switzerland, The Netherlands
– L < 100, PL < 50 ..... *L.* (*L.*) *tindalei* Australia
4. L > 90 5
– L < 80 ..... *L.* (*L.*) *baudini* Australia
5. W 126–133, PSens 68–75, ASens 42–45 ..... *L.* (*L.*) *meloidarum* Bulgaria, Italy, Kyrgyzstan
– W 112–115, PSens 41–45, ASens 28–32 ..... *L.* (*L.*) *clelandi* Australia

***gifuensis* species subgroup**

BFe III without solenidion, TFe I without solenidion, Ge I with 1 solenidion, Ti I with 2 solenidia, Ti III with 1 solenidion, Ge II without solenidion, Ti II with 2 solenidia, TFe III with 1 seta, sensillary setae setulose in about distal half, ASens bases between AL and PL bases, solenidia on Ti II present, microseta on Ge I-II & Ti I normal, chelicerae punctate, fD < 100, scutum distinctly wider than long (usually W−L ≥ 14 μm).

Species included: *L.* (*L.*) *gifuensis* Kawashima, 1958, *L.* (*L.*) *alberti* Haitlinger, 1991, *L.* (*L.*) *cercopius* Southcott, 1992, *L.* (*L.*) *rwandae* Fain & Jocqué, 1996, *L.* (*L.*) *admeti* Haitlinger, 1998, , *L.* (*L.*) *fisheri* Southcott, 1999, , *L.* (*L.*) *brasilicus* Haitlinger, Šundić & Pompermaier, 2017, *L.* (*L.*) *haitlingeri* Jacinavicius, BassiniSilva & Welbourn, 2019.

Key to species of *gifuensis* species subgroup

1. L < 65 ..... *L.* (*L.*) *gifuensis* Japan
– L > 70 2
2. With four hypostomal setae 3
– With two hypostomal setae 7
3. Ti III/AW < 2.30 4
– Ti III/AW > 2.40 6
4. Anterior border of scutum concave ..... *L.* (*L.*) *brasilicus* Brazil
– Anterior border of scutum nearly staight 5
5. Ti III 195, Ti I 170 ..... *L.* (*L.*) *fisheri* Australia
– Ti III 117–119, Ti I 105–108 ..... *L.* (*L.*) *rwandae* Rwanda
6. SoTa I ~30, aHy small (14 long) ..... *L.* (*L.*) *cercopius* USA
– SoTa I 62–66, aHy minute (3–4 long) ..... *L.* (*L.*) *haitlingeri* Brazil
7. AL 44, PL 60 ..... *L.* (*L.*) *alberti* Brazil
– AL > 70, PL > 80 ..... *L.* (*L.*) *admeti* Indonesia (Sumatra)

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