

The genus *Oliarus* s. str. and related genera from the Oriental Region (Homoptera: Cixiidae)

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Four new genera are described for some species of *Oliarus* s. l. from the Oriental Region.

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Redescription of practically all known Oriental species of the genus *Oliarus* s. l. by Van Stalle (1991) allows us to divide the complex *Oliarus* s. l. of the Oriental Region into more adequate and natural genera, as it was made for the Palaearctic, Ethiopian and Nearctic Regions (Mead & Kramer, 1982; Van Stalle, 1985, 1986a, 1986b, 1986c, 1986d, 1987, 1991; Emeljanov, 1993, 2001). Unfortunately, Van Stalle himself did not make such a subdivision for Oriental species of the *Oliarus* complex. Indeed, it is difficult to show the genetic relations between representatives of Pentastirini, especially of *Oliarus* s. l., because of the multiple homoplasies in external appearance and evolutionarily labile and complex construction of the male genitalia.

Typical members of *Oliarus* s. str. are characterised by the more or less narrow macrocoryphe ("vertex"); acuteangularly projecting forward anterior carina of the coryphe touching medially the anterior carina of the macrocoryphe (i. e. the acrometope subdivided into a pair of longitudinal triangles); elongate styles with thick medioventral heel tapering to the apical hook-like dilation; apical dilation usually with acute anterolateral angle and sometimes with blunt projections of posteromedial and/or posterolateral angle.

Other Oriental representatives of the *Oliarus* s. l. complex have a wider macrocoryphe with flatly arcuate, obtuse-angled or straight anterior carina of coryphe; if carina arcuate or obtuse-angled, its ends meet the lateral carina at an obtuse or at least right angle; areolet present or absent; styles with dilated or elongate apical part, usually with weakly developed heel and a tooth or projection at anterodorsal angle of api-

cal part; also well developed, sharp basal laterodorsal shelf on styles is characteristic.

Good drawings of all species mentioned are given in the revision by Van Stalle (1991).

Key to new *Oliarus*-like genera of the Indo-Malayan Region and New Guinea

- 1(4) Stylus with abrupt basal laterodorsal shelf. Spinulation of 1st and 2nd tarsomeres of hind legs usually 7/5.
 - 2(3) Basal laterodorsal angle of apical dilation of stylus usually with tooth. Lobes of pygofer symmetrical or nearly so, without marked projections or processes *Indolipa* gen. n.
 - 3(2) Basal laterodorsal angle of apical dilation of stylus without tooth; apical dilation smaller than in the precedent genus. Lobes of pygofer markedly asymmetrical, with long or complicate projections *Oliparisca* gen. n.
- 4(1) Stylus with weakly developed or not developed basal laterodorsal shelf. Spinulation of 1st and 2nd tarsomeres of hind legs 7/7, 8/8 or 9/9; sometimes 2nd segment bears by one spinule more than the 1st.
 - 5(6) Apical part of stylus large and rounded, its ventromedial margin with process directed dorsad and protruding beyond dorsolateral margin. Lateral lobes of pygofer short, nearly symmetrical *Miclucha* gen. n.
 - 6(5) Apical part of stylus rather narrow, bent, hook-like, without marked projections or processes. Lateral lobes of pygofer markedly asymmetrical, left lobe considerably longer than right *Olipa* gen. n.

Genus *Oliarus* Stål s. str.

Type species *Cixius walkeri* Stål.

Included Oriental species: *O. acuminatus* Muir, *O. anamalaiii* Van Stalle, *O. aangsensis* Van Stalle, *O. ariston* Fennah, *O. asper* Muir,

O. bilineatus Muir, *O. boninensis* Matsumura, *O. borneensis* Muir, *O. busoensis* Van Stalle, *O. carolinensis* Metcalf, *O. exiguis* Muir, *O. formosanus* Matsumura, *O. fusciceps* Metcalf, *O. geniculatus* Stål, *O. granulatus* Muir, *O. hopponis* Matsumura, *O. horishanus* Matsumura, *O. hyalinipennis* Muir, *O. impeditus* Muir, *O. incisus* Bierman, *O. insetosus* Jacobi, *O. longicauda* Muir, *O. longulus* Muir, *O. luhbra* Kirkaldy, *O. muiri* Van Stalle, *O. nigronervatus* Fennah, *O. okinawensis* Van Stalle, *O. oryzae* Matsumura, *O. pallidifrons* Muir, *O. proimpeditus* Muir, *O. prolongus* Muir, *O. prius* Muir, *O. ramiferens* Van Stalle, *O. reductus* (Walker) (*Cixius*), *O. ryukyucola* Van Stalle, *O. scalenus* Tsaur, Hsu & Van Stalle, *O. simlae* Distant, *O. speciosus* Matsumura, *O. spinosus* Bierman, *O. stigma* (Motschulsky) (*Cixius*), *O. subpunctatus* (Walker) (*Brixia*), *O. trachas* Fennah, *O. undabundus* Van Stalle, *O. velox* Matsumura, *O. walkeri* (Stål) (*Cixius*), *O. yangi* Tsaur.

Genus *Indolipa* gen. n.

Type species *Oliarus indiensis* Van Stalle.

Included species (all transferred from *Oliarus*; new combinations): *I. kurseongensis* (Distant), *I. tappanii* (Matsumura), *I. malayensis* (Van Stalle), *I. tamangensis* (Van Stalle), *I. pahangensis* (Van Stalle), *I. lawitensis* (Van Stalle), *I. sabahensis* (Van Stalle), *I. madrasensis* (Van Stalle), *I. nilgiriensis* (Van Stalle), *I. thekkadiensis* (Van Stalle), *I. indiensis* (Van Stalle), *I. greeni* (Distant), *I. brunneifrons* (Muir), *I. bidiensis* (Van Stalle), *I. binghami* (Distant), *I. fusconebulosus* (Distant).

Genus *Oliparisca* gen. n.

Type species *Oliarus muluensis* Van Stalle.

Included species (transferred from *Oliarus*, except if otherwise noted; new combinations): *O. pundaloyensis* (Van Stalle), *O. mogonopae* (Van Stalle), *O. sulawesiensis* (Van Stalle), *O. simplex* (Walker) (*Cixius simplex*), *O. muluensis* (Van Stalle), *O. inermis* (Van Stalle), *O. penrissensis* (Van Stalle), *O. modica* (Walker) (*Cixius modicus*), *O. microstylus* (Van Stalle), *O. agusani* (Van Stalle).

Genus *Mielucha* gen. n.

Type species *Oliarus laratensis* Muir.

Included species (all transferred from *Oliarus*; new combinations): *M. niugineensis* (Van Stalle), *N. laratensis* (Muir), *N. morabenensis* (Van Stalle).

Genus *Olipa* gen. n.

Type species *Oliarus decumbens* Jacobi.

Included species: *O. decumbens* (Jacobi), comb. n.

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