**Table S1.** List of *Lispe* species (Pont, 2024) classified into species groups based on recent taxonomic changes. References for the species groups and individual species within each group are given to the author who proposed and/or revised the respective group or species. The table also includes species that have not yet been assigned to any specific species group.

|  |  |  |
| --- | --- | --- |
| **Species-group/species** | **Author** | **References** |
| ***caesia*-group** |  | (Hennig, 1960; Vikhrev *et al.*, 2016; Gao *et al.*, 2022) |
| *absentiseta* | Pont, 2019 | this study |
| *albicorpus* | Shinonaga & Kano, 1989 | (Shinonaga & Kano, 1989) |
| *aquamarina* | Shinonaga & Kano, 1983 | (Zhang *et al.*, 2016) |
| *astakhovi* | Vikhrev, 2020 | (Vikhrev, 2020) |
| *bengalensis* | Robineau-Desvoidy, 1830 | (Vikhrev, 2020) |
| *caesia* | Meigen, 1826 | (Hennig, 1960; Vikhrev *et al.*, 2016) |
| *cana* | Walker, 1849 | (Vikhrev, 2020) |
| *candicans* | Kowarz, 1892 | (Hennig, 1960) |
| *cilitibia* | Pont, 2019 | this study |
| *collessi* | Pont, 2019 | this study |
| *flavicornis* | Stein, 1909 | (Zhang *et al.*, 2016) |
| *halophora* | Becker, 1903 | (Hennig, 1960) |
| *inaequalis* | (Malloch, 1922) | this study |
| *lanceoseta* | Wang & Fan, 1981 | (Zhang *et al.*, 2016) |
| *leucocephala* | Loew, 1856 | (Hennig, 1960) |
| *marina* | Becker, 1913 | (Vikhrev, 2020) |
| *odessae* | Becker, 1904 | (Hennig, 1960; Vikhrev *et al.*, 2016) |
| *palawanensis* | Shinonaga & Kano, 1989 | (Zhang *et al.*, 2016) |
| *patellitarsis* | Becker, 1914 | (Zhang *et al.*, 2016) |
| ***desjardinsii*-group** |  | (Vikhrev, 2014) |
| *desjardinsii* | Macquart, 1851 | (Vikhrev, 2014) |
| *neo* | Malloch, 1922 | (Vikhrev, 2021) |
| *pennitarsis* | Stein, 1918 | (Vikhrev, 2014) |
| *tuberculitarsis* | Stein, 1913 | (Vikhrev, 2014) |
| *zumpti* | Paterson, 1953 | (Vikhrev, 2021) |
| ***kowarzi*-group** |  | (Vikhrev, 2014; Gao *et al.*, 2022) |
| *dichaeta* | Stein, 1913 | (Vikhrev, 2016) |
| *fulvitarsus asiatica* | Vikhrev, 2014 | (Vikhrev, 2014) |
| *fulvitarsus fulvitarsus* | (Snyder, 1949) | (Vikhrev, 2014) |
| *geniseta macfiei* | Emden, 1941 | (Vikhrev, 2016, 2021) |
| *geniseta setigena* | Vikhrev & Pont, 2016 | (Vikhrev, 2016, 2021) |
| *kowarzi kowarzi* | Becker, 1903 | (Vikhrev, 2014) |
| *kowarzi pallitarsis* | Stein, 1909 | (Vikhrev, 2014) |
| *madagascariensis* | Zielke, 1972 | (Vikhrev, 2016) |
| *stuckenbergi* | Zielke, 1970 | (Vikhrev, 2016) |
| *leucosticta* | Stein, 1918 | (Vikhrev, 2016) |
| *miochaeta* | Speiser, 1910 | (Vikhrev, 2016) |
| ***leucospila*-group** |  | (Paterson, 1953; Vikhrev, 2011b; Gao *et al.*, 2022) |
| *leucospila* | (Wiedemann, 1830) | (Vikhrev, 2011b) |
| *irvingi* | Curran, 1937 | (Vikhrev, 2014) |
| *maculata* | Stein, 1913 | (Vikhrev, 2014) |
| *pectinipes* | Becker, 1903 | (Vikhrev, 2011b) |
| ***longicollis-*group** |  | (Hennig, 1960; Vikhrev, 2012a; Gao *et al.*, 2022) |
| *assimilis* | Wiedemann, 1824 | (Hennig, 1960; Vikhrev, 2012a) |
| *barbipes* | Stein, 1908 | (Vikhrev, 2012a) |
| *cilitarsis* | Loew, 1856 | (Hennig, 1960; Vikhrev, 2012a) |
| *confusa* | Vikhrev, 2021 | (Vikhrev, 2021) |
| *dmitryi* | Vikhrev, 2014 | (Vikhrev, 2014) |
| *glabra* | Wiedemann, 1824 | (Vikhrev, 2012a) |
| *longicollis* | Meigen, 1826 | (Hennig, 1960; Vikhrev, 2012a) |
| *manicata* | Wiedemann, 1830 | (Vikhrev, 2012a) |
| *microptera* | Séguy, 1937 | (Vikhrev, 2012a) |
| *nuba* | Wiedemann, 1830 | (Hennig, 1960; Vikhrev, 2012a) |
| *pacifica* | Shinonaga & Pont, 1992 | (Vikhrev, 2012a) |
| *paraneo* | Zielke, 1972 | (Vikhrev, 2021) |
| *xenochaeta* | Malloch, 1923 | (Vikhrev, 2014) |
| *weschei* | Malloch, 1922 | (Vikhrev, 2012a) |
| *wittei* | Paterson, 1956 | (Vikhrev, 2012a, 2021) |
| ***nicobarensis-*group** |  | (Vikhrev, 2015; Gao *et al.*, 2022) |
| *aceponti* | Vikhrev, 2015 | (Vikhrev, 2015) |
| *flaveola* | Vikhrev, 2015 | (Vikhrev, 2015) |
| *nicobarensis* | Schiner, 1868 | (Vikhrev, 2015) |
| *nigrimana* | Malloch, 1925 | (Vikhrev, 2015) |
| *sydneyensis* | Schiner, 1868 | (Vikhrev, 2015) |
| ***nivalis-*group** |  | (Vikhrev, 2012b; Gao *et al.*, 2022) |
| *bivittata* | Stein, 1909 | (Vikhrev, 2012b) |
| *hennigi* | Vikhrev, 2012 | (Vikhrev, 2012b) |
| *medvedevi* | Vikhrev, 2014 | (Vikhrev, 2014) |
| *nivalis* | Wiedemann, 1830 | (Vikhrev, 2012b) |
| *ochracea* | Becker, 1910 | (Vikhrev, 2021) |
| *tomkovichi* | Vikhrev, 2014 | (Vikhrev, 2014) |
| ***palposa-*group** |  | (Snyder, 1954; Hennig, 1960; Vikhrev, 2015; Gao *et al.*, 2022) |
| *apicalis* | Mik, 1869 | (Hennig, 1960; Vikhrev, 2015) |
| *approximata* | Huckett, 1966 | (Vikhrev, 2015) |
| *appendibacula* | Xue & Zhang, 2005 | (Vikhrev, 2015) |
| *bahama* | Snyder, 1958 | (Vikhrev, 2015) |
| *bohemica* | Becker, 1904 | (Snyder, 1954) |
| *brevipes* | Aldrich, 1913 | (Snyder, 1954) |
| *cinifera* | Becker, 1904 | (Hennig, 1960; Vikhrev, 2015) |
| *desertorum* | Huckett, 1966 | (Vikhrev, 2015) |
| *elkantarae* | Becker, 1907 | (Hennig, 1960; Vikhrev, 2015) |
| *ezensis* | Shinonaga & Kano, 1983 | (Vikhrev, 2015) |
| *flavicincta* | Loew, 1847 | (Hennig, 1960; Vikhrev, 2015) |
| *flavinervis* | Becker, 1904 | (Hennig, 1960; Vikhrev, 2015) |
| *frigida* | Erichson, 1851 | (Snyder, 1954; Hennig, 1960; Vikhrev, 2015) |
| *hebeiensis* | Ma & Tian, 1993 | (Vikhrev, 2015) |
| *hydromyzina* | Fallén, 1825 | (Hennig, 1960; Vikhrev, 2015) |
| *jamesi* | Snyder, 1954 | (Snyder, 1954) |
| *johnsoni* | Aldrich, 1913 | (Snyder, 1954) |
| *litorea* | Fallén, 1825 | (Hennig, 1960; Vikhrev, 2015) |
| *loewi* | Ringdahl, 1922 | (Hennig, 1960; Vikhrev, 2015) |
| *monochaita* | Mou et Ma, 1992 | (Vikhrev, 2015) |
| *neimongola* | Tian & Ma, 2000 | (Vikhrev, 2015) |
| *palposa* | Walker, 1849 | (Snyder, 1954; Vikhrev, 2015) |
| *parcespinosa* | Becker, 1900 | (Vikhrev, 2015) |
| *parcespinosa appendibacula* | Xue & Zhang, 2005 | (Vikhrev, 2015) |
| *parcespinosa bohemica* | Becker, 1904 | (Vikhrev, 2015) |
| *parcespinosa parcespinosa* | Becker, 1900 | (Vikhrev, 2015) |
| *probohemica* | Speiser, 1914 | (Snyder, 1954; Vikhrev, 2015) |
| *salina* | Aldrich, 1913 | (Snyder, 1954; Vikhrev, 2015) |
| *sordida* | Aldrich, 1913 | (Snyder, 1954; Vikhrev, 2015) |
| *superciliosa* | Loew, 1861 | (Hennig, 1960; Vikhrev, 2015) |
| *superciliosa monochaita* | Mou et Ma, 1992 | (Vikhrev, 2015) |
| *superciliosa superciliosa* | Loew, 1861 | (Vikhrev, 2015) |
| *tarsocilica* | Xue & Zhang, 2005 | (Vikhrev, 2015) |
| ***pumila-*group** |  | (Vikhrev, 2012c, 2016) |
| *angustipalpis* | Stein, 1920 | (Vikhrev, 2012c, 2016) |
| *pumila* | Wiedemann, 1824 | (Vikhrev, 2012c, 2016) |
| ***pygmaea-*group** |  | (Vikhrev, 2016; Gao *et al.*, 2022) |
| *ambigua* | Stein, 1913 | (Vikhrev, 2016) |
| *bipunctata* | Séguy, 1938 | (Vikhrev, 2016) |
| *biseta* | Stein, 1913 | (Vikhrev, 2016) |
| *keiseri* | Zielke, 1972 | (Vikhrev, 2016) |
| *pygmaea* | Fallén, 1825 | (Vikhrev, 2016) |
| *pygmoza* | Vikhrev & Pont, 2016 | (Vikhrev, 2016) |
| *setuligera* | Stein, 1911 | (Vikhrev, 2016) |
| *surda* | Curran, 1937 | (Vikhrev, 2016) |
| *vilis* | Stein, 1911 | (Vikhrev, 2016) |
| ***rigida-*group** |  | (Vikhrev, 2012b) |
| *brunnicosa* | Becker, 1904 | (Vikhrev, 2012b) |
| *kozlovi* | Vikhrev, 2012 | (Vikhrev, 2012b) |
| *rigida* | Becker, 1903 | (Vikhrev, 2012b) |
| ***scalaris-*group** |  | (Hennig, 1960; Vikhrev, 2012c; Gao *et al.*, 2022) |
| *elengatissima* | Stackelberg, 1937 | (Hennig, 1960; Vikhrev, 2012c) |
| *nubilipennis* | Loew, 1873 | (Hennig, 1960; Vikhrev, 2012c) |
| *selena* | Vikhrev, 2021 | (Vikhrev, 2021) |
| *scalaris* | Loew, 1847 | (Hennig, 1960; Vikhrev, 2012c) |
| ***tentaculata-*group** |  | (Snyder, 1954; Hennig, 1960; Vikhrev, 2011a; Gao *et al.*, 2022) |
| *capensis* | Zielke, 1971 | (Vikhrev, 2021) |
| *consanguinea* | Loew, 1858 | (Hennig, 1960; Vikhrev, 2011a) |
| *emdeni* | Vikhrev, 2012 | (Vikhrev, 2014) |
| *martirei* | Vikhrev 2014 | (Vikhrev, 2014) |
| *nana* | Macquart, 1835 | (Vikhrev, 2014) |
| *orientalis* | Wiedemann, 1824 | (Vikhrev, 2011a) |
| *patellata* | Aldrich, 1913 | (Snyder, 1954; Hennig, 1960; Vikhrev, 2014) |
| *sociabilis* | Loew, 1862 | (Snyder, 1954; Hennig, 1960; Vikhrev, 2014) |
| *sericipalpis* | Stein, 1904 | (Vikhrev, 2011a) |
| *mirabilis* | (Stein, 1918) | this study |
| *tentaculata* | (De Geer, 1776) | (Snyder, 1954; Hennig, 1960; Vikhrev, 2011a) |
| *tentaculata draperi* | Séguy, 1933 | (Hennig, 1960; Vikhrev, 2011a, 2021) |
| *triangularis* | Vikhrev 2014 | (Vikhrev, 2014) |
| ***uliginosa-*group** |  | (Snyder, 1954; Hennig, 1960; Vikhrev, 2015; Gao *et al.*, 2022) |
| *albitarsis* | Stein, 1898 | (Snyder, 1954; Vikhrev, 2015) |
| *antennata* | Aldrich, 1913 | (Snyder, 1954; Vikhrev, 2015) |
| *cotidiana* | Snyder, 1954 | (Snyder, 1954; Hennig, 1960) |
| *latana* | Snyder, 1949 | (Vikhrev, 2015) |
| *levis* | Stein, 1911 | (Vikhrev, 2015) |
| *lisarba* | Snyder, 1949 | (Vikhrev, 2015) |
| *melaleuca* | Loew, 1847 | (Vikhrev, 2015) |
| *mexicana* | Vikhrev, 2015 | (Vikhrev, 2015) |
| *nasoni* | Stein, 1898 | (Snyder, 1954; Vikhrev, 2015) |
| *neouliginosa* | Snyder, 1954 | (Snyder, 1954) |
| *nudifacies* | Snyder, 1954 | (Snyder, 1954; Vikhrev, 2015) |
| *polita* | Coquillett, 1904 | (Snyder, 1954; Vikhrev, 2015) |
| *septentrionalis* | Xue & Zhang, 2005 | (Vikhrev, 2015) |
| *serotina* | Wulp, 1896 | (Vikhrev, 2015) |
| *uliginosa* | Fallén, 1825 | (Snyder, 1954; Hennig, 1960; Vikhrev, 2015) |
| **Unassigned species** |  |  |
| *affinis* | Pont, 2019 | (Pont, 2019) |
| *albifacies* | Malloch 1929 |  |
| *albimaculata* | Stein, 1910 |  |
| *alete* | Walker, 1849 |  |
| *alkalina* | Vikhrev, 2021 | (Vikhrev, 2021) |
| *andrefana* | Vikhrev, 2021 | (Vikhrev, 2021) |
| *argentata* | Couri, Pont & Penny, 2006 | (Vikhrev, 2021) |
| *armata* | Malloch, 1925 | (Pont, 2019) |
| *attenuata* | Pont, 2019 | (Pont, 2019) |
| *aurocochlearia* | Séguy, 1950 | (Vikhrev, 2021) |
| *baluchistanensis* | Shinonaga, 2010 | (Vikhrev, 2020) |
| *boninensis* | Snyder, 1965 |  |
| *bimaculata* | Walker, 1859 |  |
| *brendana* | Pont, 2019 | (Pont, 2019) |
| *caespitosa* | Pont, 2019 | (Pont, 2019) |
| *ceylanica* | Shinonaga & Tewari, 2008 |  |
| *chui* | Shinonaga & Kano, 1989 | (Shinonaga & Kano, 1989) |
| *congensis* | Zielke, 1970 | (Zielke, 2018) |
| *crinitarsis* | Pont, 2019 | (Pont, 2019) |
| *cristata* | Pont, 2019 | (Pont, 2019) |
| *erratica* | (Malloch, 1932) |  |
| *esuriens* | Pont, 2019 | (Pont, 2019) |
| *floccosa* | Pont, 2019 | (Pont, 2019) |
| *freidbergi* | Vikhrev, 2012 | (Vikhrev, 2020) |
| *glauca* | Pont, 2019 | (Pont, 2019) |
| *gracilitarsis* | Pont, 2019 | (Pont, 2019) |
| *grisea* | Pont, 2019 | (Pont, 2019) |
| *fuscipes* | (Ringdahl, 1930) |  |
| *hamulifera* | Pont, 2019 | (Pont, 2019) |
| *hispida* | Walker, 1849 |  |
| *howeana* | Pont, 2019 | (Pont, 2019) |
| *incana* | Pont, 2019 | (Pont, 2019) |
| *isolata* | Malloch, 1929 |  |
| *lamellata* | Pont, 2019 | (Pont, 2019) |
| *longicornia* | Wei in Li & Jin, 2006 |  |
| *metatarsata* | Stein, 1900 | (Pont, 2019) |
| *niveimaculata* | Stein, 1906 | (Vikhrev, 2021) |
| *nigrimanoides* | Pont, 2019 | (Pont, 2019) |
| *orbitalis* | Pont, 2019 | (Pont, 2019) |
| *patersoni* | Vikhrev, 2021 | (Vikhrev, 2021) |
| *penicillata* | Pont, 2019 | (Pont, 2019) |
| *polonaise* | Vikhrev, 2021 | (Vikhrev, 2021) |
| *pseudohirsutipes* | Kakinuma & Kurahashi, 2015 |  |
| *rufitibialis* | Macquart, 1843 | (Fogaça & De Carvalho, 2018) |
| *sexnotata* | Vikhrev, 2021 | (Vikhrev, 2021) |
| *siamensis* | Shinonaga & Kano, 1989 | (Shinonaga & Kano, 1989) |
| *uniseta* | Malloch, 1922 | (Pont, 2019) |
| *vikhrevi* | Pont, 2019 | (Pont, 2019) |
| *vittipennis* | Thomson, 1869 |  |

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