

ON THE STANDING OF THE GENUS *LIBURNIA* STÅL

(Hemiptera, Fulgoridæ)

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In zoological nomenclature it probably is impossible to formulate any rule or set of rules that will fit all cases. There always will be the element of personal judgment to interject itself into the application of such rules. One of these puzzling cases is that of *Liburnia* Stål. No student of nomenclature questions for a moment the rule that the type of a genus must be found among the species included in the genus at the time it was founded. However, the name *Liburnia* was first given by Stål, not as a new genus, but as a name for what was at that time an old and well known generic concept. Therefore to find its type, one must first locate the type of the genus that had been masquerading under that name. The whole trouble comes from the fact that Stål, in 1866, called that genus *Delphax* Auct. instead of *Delphax* Latreille. Stål's meaning will become perfectly plain to anyone who will look up the history of the generic name *Delphax*. To ignore these facts and misinterpret Stål's use of *Delphax* Auct. is a mere quibble.

Here are a few pertinent facts: Latreille, in 1796, described a genus *Cercopis* in his "Precis" (p. 91) for which he substituted *Asiraca* at page 202 but without the mention, in either place, of a species. This genus *Asiraca*, he validated in 1802 by including the species *longicornis* Latr., *clavicornis* Fabr. and *crassicornis* Fabr. In the meantime (1798), however, Fabricius had established his genus *Delphax* with *crassicornis* and *clavicornis* as species, and in 1803 he added eight other species. In 1804 Latreille reaffirms his genus *Asiraca*, complains that Fabricius had redescribed it as *Delphax*, and lists nine species, among them *clavicornis*, *crassicornis* and *pellucida*, thus making his *Asiraca* equivalent to *Delphax* of Fabricius. But in 1807 he recognizes *Asiraca* with *clavicornis* and four other species, and *Delphax* Fabr. with "pellucida Fabr. *ejusd.* *Delphacies flavescens, striata, marginata, minuta.*" This statement by Latreille distinctly designates *pellucida* as the type of his genus *Delphax* and it is this generic concept that was used by practically all hemipterists until Stål corrected the liberties Latreille

had taken with Fabricius' genus, by renaming *Delphax* of Latreille as *Liburnia*. This genus *Liburnia*, as named by Stål in 1866, was so used by Scott in his revision of the family in 1870-1871, by Sahlberg in 1871, by Fieber in his Katalog of 1872 and in his monograph of 1875, by Melichar in 1896 and by me in 1897. Until the time of Muir, the only work of a monographic character in which the name *Delphax* was used in place of *Liburnia* was that by Kirschbaum, and it is probable that this work (1868) was written before Kirschbaum had seen Stål's *Hemiptera Africana*.

The validity of the name *Delphax* Fabricius does not affect the standing of genus *Liburnia* Stål and need not be considered here.

## BIBLIOGRAPHY

## GENUS DELPHAX Fabr.

1796. Latreille, *Precis des Caracteres Generiques des Insectes*, p. 91 (*Cercopis*), p. 202, *Asiraca*.
1798. Fabricius, *Entomologiæ Systematicæ, Supplementum*, pp. 511, 522.
1802. Walckenaer, *Faune Parisienne, Insectes*, vol. 2, p. 329, *Delphax (crassicornis & clavicornis)*.
1802. Latreille, *Histoire Naturelle des Crustaces et des Insectes*, vol. 3, p. 259. *Asiraca (longicornis, clavicornis and crassicornis)*.
1803. Fabricius, *Systema Rhyngotorum*, p. 83. (Equals *Delphax* Auct.).
1804. Latreille, *Histoire Naturelle des Crustaces et Insectes*, vol. 12, p. 316. (*Asiraca*, equals *Delphax* Auct.)
1807. Latreille, *Genera Crustacearum et Insectorum*. Vol. 3, p. 167 (*Asiraca*), p. 168 *Delphax (pellucida "ejusd. flavescens"* and three more.
1810. Latreille, *Considerations Generales*, p. 263 and 434. (*Asiraca*, type *clavicornis* Fab., *Delphax*, type *striata* Fab.)
1815. Leach, Article Entomology in Brewster's *Edinburgh Encyclopedia*, vol. 9, pp. 57-175, p. 125. (*Asiraca* for *clavicornis* and *Delphax* for *pellucida*.)
1818. Germar, *Mag. Ent.*, vol. 3, p. 205; continued in vol. 4, p. 105, 1821. (*Asiraca* for *clavicornis* and *Delphax* for other species.)
1826. Fallen, *Hemipt. Sueciæ, Cicadariæ*, p. 73. (*Delphax*, includes *crassicornis, pellucida* and allies.)
1828. Zetterstedt, *Fauna Insectorum Lapponica*, p. 547. (*Delphax pellucida* and three others.)
1829. Germar, *Thon's Entomologische Archiv*, vol. 2, p. 57. (*Asiraca* with eight species, *Delphax* with *pellucida* and nine other species.)

1835. Burmeister, Handbuch der Entomologie, vol. 2, p. 150. (*Delphax*, three species, *Asiraca*, two species.)
1837. Curtis, British Entomology, vol. 7, plate 657 (for *longipennis*, names *minuta* pseudotype. Plate 445 *Asiraca pulchella*.)
1839. Spinola, Essai sur les Fulgorelles, in Ann. Soc. Ent. Fr., ser. 3, vol. 8, pp. 329-337. (*Delphax pellucida* and five other species, *Araeopus* n.g. for *crassicornis*, *Asiraca* for *clavicornis*.)
1840. Zetterstedt, Insecta Laponica. Column 305. (*Delphax* for *pellucida* and three other species.)
1840. Westwood, Introduction to the Modern Classification of Insects, vol. 2. Suppl. p. 116. (*Asiraca*, type *clavicornis*; *Delphax*, type *minuta* Fabr. not an original species.)
1840. Blanchard, Histoire des Insectes, vol. 3, pp. 176, 177. (*Asiraca* for *clavicornis* and *crassicornis*; *Delphax* for *limbata* and *marginata*.)
1851. Walker, List of Specimens of Homopterous Insects in the British Museum, p. 350. (Equals *Delphax* of Latreille, lists 51 species.)
1854. Stål, Of. Kongl. Vet. Akad. Forh., vol. 11, pp. 189 to 197. (Monographic but omits *Asiraca*.)
1859. Dohrn, Catalogus Hemipterorum, p. 61. (Lists 80 species of *Delphax* Auct.)
1861. Flor, Rhynchoten Livlands, vol. 2, p. 25. (Equals *Delphax* Auct. Lists 28 species.)
1866. Fieber, Grundzuege zur generischen Theilung der Delphacini. Verh. d. k. k. Zool. Bot. Ges. Band 16, pp. 517-534. (Equals *Delphax* Auct., monographic.)
1868. Kirschbaum. Die Cicadinen der gegen von Wiesbaden und Frankfurt. pp. 19 to 40. (Monographic, 45 species.)

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1866. Stål, Hemiptera Africana, vol. 4, p. 179. (New name for *Delphax* of Authors.)
- 1870-1871. Scott, Revision of the Family Delphacidae with descriptions of several new species of the Genus *Delphax* of authors. (Ent. Monthly Mag., vol. 7, pp. 22, 67, 193, monographic.)
1871. Sahlberg, Of. af Finlands och den Skandinaviska Halfons Cicadariae, p. 422. (Monographic for that fauna.)
1872. Fieber, Katalog der europaischen Cicadinen, p. 5 (for *Delphax* Auct.)
1875. Fieber, Les Cicadines d'Europe; Rev. Mag. Zool., vol. 26, p. 89 and 1879, pp. 1 to 78. (Monographic.)
1896. Melichar, Cicadinen von Mittel-Europa, pp. 69-94. (Monographic.)