

THE GENOTYPES OF THE CHRYSIDIDAE

(HYMENOPTERA: TUBULIFERA)

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The Chrysididae have been neglected by workers in this country for many years, and as a result erroneous impressions of the genera and misidentifications of the species are all too common. This paper is presented as a preliminary step toward a revision of the entire group with the object of providing a definite basis for future taxonomic work and clarifying certain problems which have arisen in connection with various interpretations of the scope of the several genera.

The following system has been used in citing the designations under the name and reference to each genus: first, the type of the genus as recorded in the original publications; then, within brackets, the type species as originally described and any pertinent synonymy followed by the present taxonomic status of the type, insofar as I have been able to determine. The method by which the type designation was made is in parenthesis. Statements regarding isogenotypy have been added, and liberal use has been made of footnotes for discussion of special problems.

During the search for the genotypes, certain facts have been uncovered which clearly indicate that several of the names proposed by Lichtenstein in 1876 for subgenera of *Chrysis* must be replaced by older names. A summary of these necessary changes will be found in an appendix at the end of this paper.

The original references to all the genera and subgenera have been seen by the writer, and all generic names known to the author which have been applied to the Chrysididae have been included in this paper.

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LIST OF GENERIC AND SUBGENERIC NAMES ¹

Achrysis Semenov Tian Shanskij, 1892. Hor. Soc. Ent. Ross., xxvi, p. 486.

TYPE: *Pseudochrysis* (*Achrysis*) *unicolor* (Dahlbom) [= *Chrysis* (*Hedychrum*) *unicolor* Dahlbom, 1831 = *Spinolia unicolor* (Dahlbom)]. (Monobasic and by original designation.)

Isogenotypic with *Gonochrysis* Lichtenstein, 1876, q. v.

Acrotoma Mocsary, 1902. Termesztetrajzi Fuzetek, xv, p. 537.

TYPE: *Acrotoma braunsii* Mocsary, 1902. (Monobasic.)

Adelphe Mocsary, 1890. Termesztetrajzi Fuzetek, XIII, p. 46.

TYPE: *Adelphe mexicana* Mocsary, 1890. (Monobasic.)

Allocoelia Mocsary, 1889.² Monogr. Chrysid., p. 62.

TYPE: *Allocoelia capensis* (Smith) [= *Anthracias capensis* Smith, 1874 = *Allocoelia capensis* (Smith)]. (Monobasic.)

Isogenotypic with *Anthracias* Klug, 1839 *nec* Dejean, 1833, q. v.

Amisega Cameron, 1888. Biol. Centr.-Amer., Hym., I, p. 457.

TYPE: *Amisega cuprifrons* Cameron, 1888. (Monobasic.)

Anthracias Klug, 1839 *nec* Dejean, 1833. Bericht. K. Preuss. Akad.

Wiss., Berlin, p. 2. [No species.] Smith, 1874. Trans. Ent. Soc.

London, p. 455. [One species.]

TYPE: *Anthracias capensis* Smith, 1874 [= *Allocoelia capensis* (Smith)]. (Fixed by Smith, 1874.)

Isogenotypic with *Allocoelia* Mocsary, 1889.

Brugmoia Radoszkowsky, 1877. [In Fedtschenko], Reise in Turkestan, II, p. 27.

TYPE: *Brugmoia pellucida* Radoszkowsky, 1877 [= *Euchroeus pellucidus* (Radoszkowsky)]. (Monobasic.)

Buyssonia Mocsary, 1902. Termesztetrajzi Fuzetek, xxv, p. 536.

TYPE: *Buyssonia dybowskii* (Buysson) [= *Hedychridium dybowskii* Buysson, 1897 = *Buyssonia dybowskii* (Buysson)]. (Monobasic.)

Calliste Lepeletier & Serville, 1825.³ Encycl. Meth., x, p. 253. Nomen nudum.

¹ This list is believed to be complete up to the end of December, 1937.

² Proposed by Mocsary for *Anthracias* Klug, 1839 which is preoccupied by *Anthracias* Dejean, 1833.

³ In 1825 Lepeletier & Serville gave only the vernacular form *Calliste* for the genus they evidently wished to call *Callistus*. In 1828 when they completed volume ten, they found their name *Callistus* had been used previously by Bonelli (1813) [footnote, Encycl. Meth., x, p. 494] and therefore proposed the name *Pyria* for their group. The name *Calliste* cannot be validated as of 1828 since this form had been used in 1826 by Boie for a genus of birds.

Cephalochrysis Semenov Tian Shanskij, 1909.⁴ Rev. Russ. Ent., ix, p. 224. [Three species.]

TYPE: *Chrysis* (*Cephalochrysis*) *sabulosa* (Radoszkowsky) [= *Chrysis sabulosa* Radoszkowsky, 1874 = *Platycoelia sabulosa* (Radoszkowsky) = *Chrysis* (*Chrysis*) *sabulosa* Radoszkowsky]. (Type by present designation.)

Cephaloparnops Bischoff, 1910. Mitt. K. Zool. Museums Berlin, iv, p. 435.

TYPE: *Cephaloparnops elegans* (Klug) [= *Parnopes elegans* Klug, 1845 = *Cephaloparnops elegans* (Klug)]. (Monobasic.)

Chryaspis Saussure, 1887. Soc. Ent., Zurich, II, p. 25.

TYPE: *Chryaspis grandidieri* Saussure, 1887. (Monobasic.)

Chrysellampus Semenov Tian Shanskij, 1932. Hor. Soc. Ent. Ross., XLII, p. 5.

TYPE: *Chrysellampus heros* Semenov, 1932. (By original designation and monobasic.)

Chrysidea Bischoff, 1913. Gen. Insect., Fasc. 151, p. 34. [Twenty-one species.]

TYPE: *Chrysidea pumila* (Klug) [= *Chrysis* (*Spintharis*) *pumila* Klug, 1845 = *Chrysidea pumila* (Klug)]. (By original designation.)

Chrysidium Brauns, 1928. Entom. Mitt., xvii, p. 390.

TYPE: *Chrysidium antiquum* Brauns, 1928. (Monobasic.)

Chrysis Linnaeus, 1761. Faun. Suec., Second Edition, p. 414. [Five species.]

TYPE: *Chrysis ignita* (Linnaeus) [= *Sphex ignita* Linnaeus, 1758 = *Chrysis* (*Chrysis*) *ignita* (Linnaeus)]. (By designation of Latreille, 1810, Consid. Gen., Tab. Meth., p. 437.)

Chryzogona Förster, 1853. Ver. Naturhist. Ver. preuss. Rheinl. u. Westf., x, p. 327.

TYPE: *Chryzogona gracillima* Förster, 1853 [= *Chrysis* (*Chryzogona*) *gracillima* (Förster)]. (Monobasic.)

Chrysura Dahlbom, 1845. Dispos. Meth. Hym., II, p. 6. [Ten species.]

TYPE: *Chrysura austriaca* (Fabricius) [= *Chrysis austriaca* Fabricius, 1805 = *Chrysis* (*Chrysura*) *austriaca* (Fabricius)]. (Type by present designation.)

Cleptes Latreille, 1802. Hist. nat. Crust. & Insect., III, p. 316.

TYPE: *Cleptes semiaurata* (Linnaeus) [= *Sphex semiaurata* Linnaeus, 1761 = *Cleptes semiaurata* (Linnaeus)]. (Monobasic.)

⁴ Semenov, [Rev. Russ. Ent., XII, p. 201, 1912], states that *Platycoelia* Dahlbom, 1845 is preoccupied by *Platycoelia* Dejean, 1833 and places *P. ehrenbergi* Dahlbom (type of *Platycoelia* Dahlbom) in *Cephalochrysis*. However, *Platycoelia* Dahlbom (Dispos. Meth. Hym., II, table of genera, 1845) is merely a typographical error for *Platycoelia* Dahlbom (*op. cit.*, p. 8) *q. v.*

Cymura Dahlbom, 1845. Dispos. Meth. Hym., II, p. 4.

TYPE: *Cymura splendida* Dahlbom, 1845 [= *Hedychrum coelestinum* Spinola, 1838]. (Monobasic.)

Dichrysis Lichtenstein, 1876. Petit. Nouv. Entom., II, p. 27. [No species.]

Mocsary, 1889, Monogr. Chrysid., p. 316. [Four species.]

TYPE: *Chrysis (Dichrysis) bihamata* (Spinola) [= *Chrysis bihamata* Spinola, 1838 = *Chrysis (Dichrysis) bihamata* (Spinola)]. (Type by present designation.)

Dictenus Semenov Tian Shanskij, 1932. Hor. Soc. Ent. Ross., XLII, p. 6.

[Sixteen species.]

TYPE: *Ellampus (Dictenus) specularis* Semenov, 1932 [= *Omalus (Dictenus) specularis* (Semenov)]. (By original designation.)

Diplorrhos Aaron, 1885. Trans. Amer. Ent. Soc., XII, p. 216.

TYPE: *Diplorrhos plicatus* Aaron, 1885. (Monobasic.)

Duckeia Da Costa Lima, 1936. Livre Jubilaire de M. E. L. Bouvier, p. 174.

TYPE: *Duckeia cyanea* da Costa Lima, 1936. (Monobasic.)

Elampus Dahlbom, 1854. Hymen. Europ., II, p. xv, (fig.)

Typographical error for *Ellampus* Spinola in text figure.

Elampus Spinola, 1806.⁵ Ins. Liguræ, I, p. 10. [Five species.]

TYPE: *Elampus panzeri* Fabricius, 1805. (By designation of Latreille, 1810, Consid. Gen., Tabl. Meth., p. 437.)

Isogenotypic with *Ellampus* Agassiz, 1846, and *Notozus* Förster, 1853, q. v.

Ellampus Agassiz, 1846. Nomen. Zool., Index Univ., pp. 135, 136.

Emendation for, and isogenotypic with *Elampus* Spinola, 1806, q. v.

Euchroeoides Nurse, 1904. Journ. Bombay Nat. Hist. Soc., XVI, p. 23.

TYPE: *Euchroeoides oblatum* Nurse, 1904. (Monobasic.)

Euchroeus Latreille, 1809. Gen. Crust. & Ins., IV, p. 578.

TYPE: *Euchroeus purpuratus* (Fabricius) [= *Chrysis purpuratus* Fabricius, 1787 = *Euchroeus purpuratus* (Fabricius)]. (Monobasic.)

Gaullea Buysson, 1910. Rev. d'Ent., Caen, XXVIII, p. 173.

TYPE: *Gaullea argentina* Buysson, 1910. (Monobasic.)

Gonochrysis Lichtenstein, 1876. Petit. Nouv. Entom., II, p. 27. [Eighteen species.]

TYPE: *Chrysis (Gonochrysis) albipennis* (Klug) [= *Chrysis albipennis* Klug, 1854 (in Dahlbom) = *Chrysis (Hedychrum) unicolor* Dahlbom, 1831 = *Spinolia unicolor* (Dahlbom)]. (By designation of Ashmead, 1902, Can. Ent., XXXIV, p. 227.)

Isogenotypic with *Achrysis* Semenov, 1892, q. v.

⁵ Cf. footnote 9 under *Notozus* Förster.

Halopyga Tournier, 1878. Mitt. Schweiz. Ent. Ges., v, p. 305.

Typographical error or *lapsus calami* for *Holopyga* Dahlbom, 1854.

Hedychridium Abeille de Perrin, 1878. Diagn. Chrys. Nouv., p. 3.⁶ [Two species.]

TYPE: *Hedychridium minutum* (Lepeletier)⁶ [= *Hedychrum minutum* Lepeletier, 1806 = *Chrysis ardens* Coquebert, 1801 = *Hedychridium ardens* (Coquebert)]. (Type designated by Ashmead,⁵ 1902, Can. Ent., xxxiv, p. 227.)

Hedychrum Latreille, 1802. Hist. Nat. Crust. & Ins., III, p. 317.

TYPE: *Hedychrum lucidulum* Latreille, 1802 [= *Sphex nobilis* Scopoli, 1763 = *Hedychrum nobile* (Scopoli)]. (Monobasic.)

Hedycrum Say, 1825. [In Keating], Narr. Exp. St. Peter's Riv., App., p. 65.

Typographical error or *lapsus calami* for *Hedychrum* Latreille, 1802.

Heptachrysis Mocsary, 1889. Monogr. Chrysid., p. 594.

TYPE: *Chrysis (Heptachrysis) festina* (Smith) [= *Chrysis festinus* Smith, 1874 = *Chrysis (Heptachrysis) festina* (Smith)]. (Monobasic.)

Heterochrysis Brauns, 1928. Ent. Mitt., xvii, p. 392.

TYPES: *Chrysidium (Heterochrysis) braini* Brauns, 1928. (Monobasic.)

Heterocoelia Dahlbom, 1854. Hym. Europ., II, p. 21.

TYPE: *Heterocoelia nigriventris* (Dahlbom) [= *Cleptes nigriventris* Dahlbom, 1845 = *Heterocoelia nigriventris* (Dahlbom)]. (Monobasic.)

Hexachrysis Lichtenstein, 1876. Petit. Nouv. Entom., II, p. 27. [Five species.]

TYPE: *Chrysis (Hexachrysis) micans* (Rossi) [= *Chrysis micans* Rossi, 1792 = *Chrysis sexdentata* Christ, 1791 = *Chrysis (Pyria) sexdentata* (Christ)]. (Type by present designation.⁷)

[H]olochrysis Rye, 1878. Zool. Record, 1876, XIII, Ins., p. 134.

Emendation for, and isogenotypic with *Olochrysis* Lichtenstein, *q. v.*

⁶ In this paper Abeille describes three varieties of *Hedychridium minutum*: *homeopathecum*, *infans*, and *reticulatum*. Since a variety has no nomenclatorial standing, the species must be taken as the type. Ashmead selected *Chrysis ardens* Coquebert, 1801 as the type. Although this name does not appear in the original description of the genus, Dalla Torre's catalogue of the group had appeared previous to Ashmead's designation, and there *H. minutum* Lepeletier, 1806 is listed as a synonym of *H. ardens* Coquebert, 1801. Since Ashmead has followed, with but one exception, the synonymy of Dalla Torre in his designation of genotypes in the Chrysididae, it is safe to assume that Ashmead had seen a copy of Dalla Torre's work and was thus guided in choosing the name for his type.

⁷ Ashmead, [1902, Can. Ent. xxxiv, p. 226], designated *Chrysis ignita* Linnaeus, 1758 as type of *Hexachrysis* Lichtenstein. This designation is invalid as *ignita* Linnaeus was not among the species originally included by Lichtenstein in *Hexachrysis*.

Holophris Mocsary, 1890. Termeszetrzaji Fuzetek, XIII, p. 51.

TYPE: *Ellampus (Holophris) marginellus* Mocsary, 1890. (Monobasic.)

Holopyga Dahlbom, 1845. Dispos. Meth. Hym., II, p. 4. [Three species.]

TYPE: *Holopyga amoenula* Dahlbom, 1845 [= *Chrysis gloriosa* Fabricius, 1793 = *Holopyga gloriosa* (Fabricius)]. (By designation of Ashmead, 1902, Can. Ent., xxxiv, p. 227.)

Homalus Saunders, 1873. Trans. Ent. Soc. Lond. 1873, p. 411.

Emendation for and isogenotypic with *Omalus* Panzer, 1801, q. v.

Isadelphia Semenov Tian Shanskij, 1902.⁸ Rev. Russ. Ent., II, p. 353.

TYPE: *Isadelphia schmiedeknechti* (Mocsary) [= *Parnopes schmiedeknechti* Mocsary, 1900 = *Isadelphia schmiedeknechti* (Mocsary)]. (Monobasic.)

Isogenotypic with *Isadelphus* Semenov, 1901, nec Förster, 1868, q. v.

Isadelphus Semenov Tian Shanskij, 1901 nec Förster, 1868. Rev. Russ. Ent., I, p. 27.

TYPE: *Isadelphus schmiedeknechti* (Mocsary) [= *Parnopes schmiedeknechti* Mocsary, 1900 = *Isadelphia schmiedeknechti* (Mocsary)]. (Monobasic.)

Isogenotypic with *Isadelphia* Semenov, 1902, q. v.

Mesitiopterus Ashmead, 1902. Can. Ent., xxxiv, p. 231.

TYPE: *Mesitiopterus kahlII* Ashmead, 1902. (Monobasic.)

Monochrysis Lichtenstein, 1876. Petit. Nouv. Entom., II, p. 27. [Three species.]

TYPE: *Chrysis (Monochrysis) hybrida* (Lepelletier) [= *Chrysis hybrida* Lepelletier, 1806 = *Chrysis (Chrysurus) hybrida* (Lepelletier)]. (By designation of Ashmead, 1902, Can. Ent., xxxiv, p. 226.)

Nemophora Dahlbom, 1854 nec Illiger, 1798 nec Hübner, 1816. Hym. Europ., II, p. 168.

TYPE: *Nemophora carinata* Spinola (in Dahlbom, 1854) [= *Chrysis carinata* Spinola (in Dahlbom, 1854) nec Say, 1828 nec Guerin, 1842 = *Chrysis capensis* Mocsary, 1887 = *Chrysis (Chryzogona) capensis* (Mocsary)]. (Monobasic.)

Notozus Förster, 1853.⁹ Verh. Naturhist. Ver. preuss. Rheinl. u. Westf., x, p. 351. [Five species.]

⁸ This name was proposed by Semenov for the genus *Isadelphus* Semenov, 1901, which, however, is preoccupied by *Isadelphus* Förster, 1868.

⁹ Richards, [1937, Gen. Names Brit. Ins., Part V, p. 84 and p. 120], proposes that, in view of the confusion which would result from the dropping of *Notozus* Förster, the name *Elampus* Spinola, 1806 be suppressed. I am of the opinion that this would be a highly desirable action since the name *Notozus* Förster has been consistently used for the group of species origi-

TYPE: *Notozus frivaldszki* Förster, 1853 [= *Hedychrum spina* Lepeletier, 1806 = *Chrysis panzeri* Fabricius, 1805 = *Elampus panzeri* (Fabricius)]. (By designation of Ashmead, 1902, Can. Ent., xxxiv, p. 228.)

Isogenotypic with *Elampus* Spinola, 1806.

Odontochrydium Brauns, 1928. Ent. Mitt., xvii, p. 389.

TYPE: *Odontochrydium trautmanni* Brauns, 1928. (Monobasic.)

Olochrysis Lichtenstein, 1876. Petit. Nouv. Entom., II, p. 27. [Thirty-five species.]

TYPE: *Chrysis (Olochrysis) aerata* (Dahlbom) [= *Chrysis aerata* Dahlbom, 1854 = *Chrysis trimaculata* Förster, 1853 = *Chrysis (Chrysur) trimaculata* (Förster)]. (By designation of Ashmead, 1902, Can. Ent., xxxiv, p. 226.)

Omalus Panzer, 1801. Faun. Ins. Germ., Fasc. 85, nr. 13.

TYPE: *Omalus aeneus* (Fabricius) [= *Chrysis aenea* Fabricius, 1787 = *Omalus aeneus* (Fabricius)]. (Monobasic.)

Parachrysis Gribodo, 1879. Ann. Mus. Civ. Stor. Nat. Genova, xiv, p. 334.

TYPE: *Chrysis (Parachrysis) longirostris* Gribodo, 1879. (Monobasic.)

Parellampus Semenov Tian Shanskij, 1932. Hor. Soc. Ent. Ross., XLII, p. 7.

TYPE: *Parellampus praeteritorum* Semenov, 1932. (Monobasic.)

Parnopes Latreille, 1796. Prec. Car. Gen. Ins., p. 126. [No species.]

Latreille, 1802, Hist. Nat. Crust. & Ins., III, p. 317. [One species.]

TYPE: *Parnopes carnea* (Fabricius) [= *Chrysis carnea* Fabricius, 1775 = *Chrysis grandior* Pallas, 1771 = *Parnopes grandior* (Pallas)]. (Monobasic.)

Parnopidea Brauns, 1903. Ann. Mus. Hungary, I, p. 460.

TYPE: *Parnopidea mocsaryi* Brauns, 1903. (Monobasic.)

Pentachrysis Lichtenstein, 1876. Petit. Nouv. Entom., II, p. 27. [Three species.]

TYPE: *Chrysis (Pentachrysis) amoena* (Eversmann) [= *Chrysis amoena* Eversmann, 1857 = *Chrysis (Pentachrysis) amoena* (Eversmann)]. (By designation of Ashmead, 1902, Can. Ent., xxxiv, p. 226.)

Isogenotypic with *Teratochrysis* Semenov Tian Shanskij, 1912, q. v.

Philoctetes Abeille de Perrin, 1870. Ann. Soc. Linn. Lyon, xxvi, supp., p. 26. [Three species.]

TYPE: *Holopyga (Philoctetes) cicatrix* Abeille, 1870 [= *Elampus micans* Klug, 1835 = *Philoctetes micans* (Klug)]. (By designation of Ashmead, 1902, Can. Ent., xxxiv, p. 228.)

nally intended by Förster, whereas *Elampus* (and its emendation *Ellampus*) has been variously used to indicate those species placed in *Omalus* Panzer, 1801 or for both *Omalus* and *Notozus* together.

Platycelia Dahlbom, 1845. Dispos. Meth. Hym., II, p. 8.

TYPE: *Platycelia ehrenbergi* Dahlbom, 1845 [= *Chrysis (Chrysis) ehrenbergi* (Dahlbom)]. (Monobasic.)

Platycoelia Dahlbom, 1845 *nec* Dejean, 1833. Dispos. Meth. Hym., II, Table of Genera.

Typographical error or *lapsus calami* for *Platycelia* Dahlbom, 1845, *q. v.* See also *Cephalochrysis* Semenov, 1909.

Pleurocera Guérin, 1842. Rev. Zool., v, p. 149.

TYPE: *Pleurocera viridis* Guérin, 1842 [= *Chrysis (Pleurocera) viridis* (Guérin)]. (Monobasic.)

Poecilochroa Dahlbom, 1854. Hym. Europ., II, p. 236.

TYPE: *Chrysis (Poecilochroa) alternans* Klug (in Dahlbom, 1854) [= *Chrysis aurifascia* Brullé, 1846 = *Chrysis (Chrysis) aurifascia* (Brullé)]. (Monobasic.)

Polyodontus Radoszkowsky, 1877 *nec* Solier, 1849. [In Fedtschenko], Reise in Turkestan, II, p. 27.

TYPE: *Polyodontus stchurovskyi* Radoszkowsky, 1877 [= *Euchroeus stchurovskyi* (Radoszkowsky)]. (Monobasic.)

Protochrysis Bischoff, 1916. Schrift. Phys.-Ökonom. Ges. Königsberg, LVI, p. 139.

TYPE: *Protochrysis succinalis* Bischoff, 1916. (Monobasic.)

Pseudepyris Ducke, 1902. Zeitschr. Hym. Dipt., II, p. 204.

TYPE: *Pseudepyris paradoxa* Ducke, 1902. (Monobasic.)

Pseudhedychrum Abeille de Perrin, 1878. Ann. Soc. Linn. Lyon, xxvi, suppl., p. 27. [Three species.]

TYPE: *Holopyga (Pseudhedychrum) fervida* (Fabricius) [= *Chrysis fervida* Fabricius, 1781 = *Holopyga fervida* (Fabricius)]. (Type by present designation.)

Pseudochrysis Semenov Tian Shanskij, 1891. Hor. Soc. Ent. Ross., xxv, p. 444. [Two species.]

TYPE: *Pseudochrysis (Spintharis) virgo* Semenov, 1891 [= *Pseudochrysis (Pseudochrysis) virgo* Semenov]. (By designation of Richards, 1935, Trans. Roy. Ent. Soc. Lond., LXXXIII, p. 158.)

Pseudogonochrysis Bischoff, 1910. Mitt. K. K. Zool. Museums, Berlin, IV, p. 448. [Three species.]

TYPE: *Pseudogonochrysis guineensis* (Mocsary) [= *Chrysis (Tetrachrysis) guineensis* Mocsary, 1889 = *Pseudogonochrysis guineensis* (Mocsary)]. (Type by present designation.)

Pseudohexachrysis Bischoff, 1910. Mitt. K. K. Zool. Museums, Berlin, iv, p. 448.

TYPE: *Pseudohexachrysis splendens* (Dahlbom) [= *Chrysis splendens* Dahlbom, 1854 = *Pseudohexachrysis splendens* (Dahlbom)]. (Monobasic.)

Pseudomalus Ashmead, 1902. Can. Ent., xxxiv, p. 229.

TYPE: *Pseudomalus semicircularis* (Aaron) [= *Omalus semicircularis* Aaron, 1885]. (Monobasic and by original designation.)

Pseudotetrachrysis Bischoff, 1910. Mitt. K. K. Zool. Museums, Berlin, iv, p. 447. [Three species.]

TYPE: *Pseudotetrachrysis oxygona* (Mocsary) [= *Chrysis (Tetrachrysis) oxygona* Mocsary, 1890 = *Pseudotetrachrysis oxygona* (Mocsary)]. (Type by present designation.)

Pyria Lepeletier & Serville, 1828. Encycl. Meth., x, p. 494. [Four species.]

TYPE: *Pyria armata* Lepeletier & Serville, 1828 [= *Chrysis lincea* Fabricius, 1775 = *Chrysis (Pyria) lincea* (Fabricius)]. (By designation of Ashmead, 1902, Can. Ent., xxxiv, p. 225.)

Pyrochloris Klug, 1839. Ber. Akad. Wissensch. Berlin, p. 2. [No species.]

Pyrosoma Dahlbom, 1854 *nec* Peron, 1804. Hym. Europ., II, p. 96. [Nomen nudum.]

Spinolaia Schulz, 1906. Spolia Hymenopterologica, p. 154.

Emendation for *Spinolia* Dahlbom, 1854, q. v.

Spinolia Dahlbom, 1854. Hym. Europ., II, p. 363.

TYPE: *Spinolia magnifica* Dahlbom, 1854 [= *Chrysis lamprosoma* Förster, 1853 = *Spinolia lamprosoma* (Förster)] (Monobasic.)

Spintharina Semenov Tian Shanskij, 1892. Hor. Soc. Ent. Ross., xvi, p. 485. [Three species.]

TYPE: *Pseudochrysis (Spintharina) vagans* (Radoszkowsky) [= *Chrysis vagans* Radoszkowsky, 1877 = *Pseudochrysis (Spintharina) vagans* (Radoszkowsky)]. (By original designation.)

Spintharis Klug, 1845. Symbolae Physicae, plate XLV. [Ten species.]

TYPE: *Chrysis (Spintharis) humeralis* Klug, 1845 [= *Chrysis pallidicornis* Spinola, 1838 = *Spintharis (Spintharis) pallidicornis (Spinola)*]. (By designation of Richards, 1935, Trans. Roy. Ent. Soc. Lond., lxxxiii, p. 158.)

Stilbichrysis Bischoff, 1910. Mitt. K. K. Zool. Museums, Berlin, iv, p. 448.

TYPE: *Stilbichrysis biselerata* Bischoff, 1910. (Monobasic.)

Stilbum Spinola, 1806. Ins. Liguriae, I, p. 9. [Two species.]

TYPE: *Stilbum calens* Spinola, 1806 [= *Chrysis cyanura* Forster, 1771 =

Stilbum cyanurum cyanurum (Forster)¹⁰. (By designation of Latreille, 1810, *Consid. Gen., Tab. Meth.*, p. 437.)

Teratochrysis Semenov Tian Shanskij, 1912. *Rev. Russ. Ent.*, XII, p. 198.
[Four species.]

TYPE: *Chrysis* (*Teratochrysis*) *amoena* (Eversmann) [= *Chrysis amoena* Eversmann, 1857 = *Chrysis* (*Pentachrysis*) *amoena* (Eversmann)]. Type by present designation.)

Isogenotypic with *Pentachrysis* Lichtenstein, 1876, *q. v.*

Tetrachrysis Lichtenstein, 1876. *Petit. Nouv. Entom.*, II, p. 27. [Forty-three species.]

TYPE: *Chrysis* (*Tetrachrysis*) *aeruginosa* (Dahlbom) [= *Chrysis aeruginosa* Dahlbom, 1854 = *Chrysis succincta* Linnaeus, 1767 = *Chrysis* (*Chrysis*) *succincta* (Linnaeus)]. (By designation of Ashmead, 1902, *Can. Ent.*, XXXIV, p. 226.)

Trichrysis Lichtenstein, 1876. *Petit. Nouv. Entom.*, II, p. 27.

TYPE: *Chrysis* (*Trichrysis*) *cyanea* (Linnaeus) [= *Sphex cyanea* Linnaeus, 1758 = *Chrysis* (*Trichrysis*) *cyanea* (Linnaeus)]. (Monobasic.)

Wollmania Mocsary, 1909. *Arch. Zool., Budapest*, I, p. 2.

TYPE: *Wollmania concinna* Mocsary, 1909. (Monobasic.)

APPENDIX

On Changes in the Nomenclature of the Subgenera of Chrysis

In 1876, J. Lichtenstein published a brief paper¹¹ in which he gave names of subgeneric rank to the eight "Phalanges" of Dahlbom's Hymenoptera Europaea of 1854. Under each name were listed the species which Lichtenstein knew belonged to the various groups.

During the course of this work on the genotypes certain facts were brought to light which indicate that at least five of the subgeneric names proposed by Lichtenstein are congeneric with earlier names and hence must be relegated into synonymy. These names, because of their descriptive quality, have been of great convenience in the classification of the genus, but this aspect of the situation must be laid aside and the law of priority adhered to if the family is to attain any uniformity in its nomenclature. Moreover, taxonomic studies are now beginning to indicate that

¹⁰ See Zimmermann, 1937, *Arch. Naturgesch.*, VI, pp. 649-657 for a discussion of the synonymy and varieties of *Stilbum cyanurum* (Forster).

¹¹ *Petites Nouvelles Entomologiques*, (Paris), II, p. 27, (1876).

these conventional subgenera are probably very unnatural groups of species and that in time when our knowledge of the specific affinities within the genus is more complete it may be necessary to redefine the subgenera with a consequent re-allocation of the various species.

The five subgeneric names of Lichtenstein which must be changed are as follows:

Olochrysis. Congeneric with *Chrysura*, Dahlbom, 1845.

Gonochrysis. Isogenotypic with *Achrysis* Semenov Tian Shanskij, 1892, which is congeneric with *Spinola* Dahlbom, 1854. Thus Lichtenstein's *Gonochrysis* is not the *Gonochrysis* of authors which is congeneric with and for which Förster's 1853 name, *Chrysogona*, must be used.

Monochrysis. Congeneric with *Chrysura* Dahlbom, 1845.

Tetrachrysis. Congeneric with *Chrysis* Linnaeus, 1761 (*sensu stricto*).

Hexachrysis. Congeneric with *Pyria* Lepeletier & Serville, 1828.

The three remaining subgenera of Lichtenstein, *Dichrysis*, *Trichrysis*, and *Pentachrysis*, remain unchanged.