

Revised checklist of Blowflies (Diptera: Calliphoridae) from India

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Abstract

A revised checklist of blowflies (Diptera: Calliphoridae) is prepared due to new records, new species and shuffling, resulting in the need for this. Now, the family Calliphoridae is represented by 9 subfamilies, 32 genera and 125 species from India. Out of them 21 species are endemic to this region.

Keywords: Taxonomy, blowflies, Calliphoridae, Diptera

Introduction

Blow flies (Diptera: Calliphoridae) are extremely important group of insects from multiple points of view having considerable medical, veterinary and forensic importance. Unfortunately, this family has remained ignored at the hands of Indian taxonomists, as is clear from the review of relevant literature. Most of the workers, who described Indian Calliphoridae, were foreigners and since Senior-White's 'Fauna of British India and Oriental Region (Diptera: Calliphoridae, Vol-VI)' nothing considerable has been contributed on this family from India in terms of the taxonomy of this group. Consequently, the holotypes or paratypes are lying scattered in different museums of the world. On the other hand, Indian museums have a very poor collection of this family. Time to time, research inputs in the form of new species or records have appeared from national and international workers but no data in term of number of species appeared since checklists by Singh & Sidhu 2004^[19]; Nandi, 2004^[15]; Bharti, 2008^[1], 2011. Different work inputs were scrutinized by the author from 2011 to till date while preparing the current checklist (Sidhu & Singh 2005; Singh & Sidhu 2007^[20]; Bharti 2014a^[3], b; 2015a, b, c, 2018, 2019; Bharti & Bunchu 2016^[12, 13]; Bharti & Verves 2016^[12, 13]; Bharti & Singh 2017^[10]; Bharti & Rognes 2018^[11]; Fahd & Zambare 2017)^[14].

This Checklist is compiled with the hope that it would be helpful to fill the gaps in information about the present status of taxonomy of Indian Calliphoridae. It will add to our information about the biodiversity of our country and help the future workers to undertake various kinds of studies on these insects with updated knowledge.

Family: Calliphoridae

Subfamily: Ameniinae

Tribe: Catapicephalini

Genus: *Catapicephala* Macquart, 1850

Catapicephala ingens (Walker, 1860)

Catapicephala pattoni Senior-White, Aubertin & Smart, 1940

Catapicephala micans (Fabricius, 1805)

Catapicephala splendens Macquart, 1851

Tribe: Ameniini

Genus: *Silbomyia* Macquart, 1843

Silbomyia asiatica Crosskey, 1965

Silbomyia parvula Baranov, 1938

Subfamily: Helicoboscinae

Genus: *Gulmargia* Rognes, 1992

Gulmargia angustisquama Rognes, 1993

Subfamily: Calliphorinae

Tribe: Calliphorini

Genus: *Aldrichina* Townsend, 1934

Aldrichina grahami (Aldrich, 1930)

Genus: *Calliphora* Robineau-Desvoidy, 1830

Calliphora vicina Robineau-Desvoidy, 1830

Calliphora pattoni Aubertin, 1931

Calliphora vomitoria (Linnaeus, 1758)

Calliphora loewi Enderlein, 1903

Tribe: Phumosiini

Genus: *Phumosia* Robineau-Desvoidy, 1830

Phumosia indica (Surcouf, 1914)

Phumosia testacea (Senior-White, 1923)

Subfamily: Bengaliinae

Tribe: Bengaliini

Genus: *Bengalia* Robineau-Desvoidy, 1830

Bengalia emarginatoides Rognes, 2009

Bengalia labiata Robineau-Desvoidy, 1830

Bengalia hastativentris Senior-White, 1923

Bengalia jejuna (Fabricius, 1787) (= *B. evanfoneae*, Lehrer, 2005)

Bengalia jejuna var. *quadrinotata* (Bigot, 1887)

Bengalia lateralis Macquart, 1843

Bengalia martin-leakei Senior-White, 1930 (= *B. Krishna* Lehrer, 2005, *B. gandhiana* Lehrer, 2005)

Bengalia escheri Bezzi, 1913

Bengalia xanthopyga Senior-White, 1924

Bengalia surcoufi Senior-White, 1923

Bengalia varicolor (Fabricius, 1805) (= *B. bezzi* Senior-White, 1923, *B. pallidicoxa* Seguy, 1946,

B. chromatella Seguy, 1946) Rognes, 2009

Bengalia torosa (Wiedemann, 1819)

Subfamily: Melanomyiinae

Genus: *Melinda* Robineau-Desvoidy, 1830

Melinda abdominalis (Malloch, 1931)

Melinda bengalensis Nandi, 1994
Melinda chambensis Singh and Sidhu, 2007
Melinda chandigarhensis Singh and Sidhu, 2007
Melinda flavibasis (Malloch, 1931)
Melinda pusilla indica Kurahashi, 1970
Melinda pusilla pusilla (Villeneuve, 1927)
Melinda scutellata (Senior-White, 1923)

Subfamily: Luciliinae**Tribe:** Luciliini

Genus: *Hemipyrellia* Townsend, 1917
Hemipyrellia ligurriensis (Wiedemann, 1830)
Hemipyrellia pulchra (Wiedemann, 1830)

Genus: *Hypopygiopsis* Townsend, 1916
Hypopygiopsis infumata (Bigot, 1877)
Hypopygiopsis tumrasvini Kurahashi, 1977

Genus: *Lucilia* Robineau-Desvoidy, 1830
Lucilia ampullacea Villeneuve, 1922
Lucilia bazini Seguy, 1934
Lucilia calviceps Bezzi, 1927
Lucilia cuprina (Wiedemann, 1830)
Lucilia illustris (Meigen, 1826)
Lucilia papuensis Macquart, 1843
Lucilia porphyrina (Walker, 1856)
Lucilia sericata (Meigen, 1826)

Subfamily: Polleniinae**Tribe:** Polleniini

Genus: *Pollenia* Robineau-Desvoidy, 1830
Pollenia hazarae (Senior-White, 1923)
Pollenia rudis (Fabricius, 1794)

Tribe: Melanodexiini

Genus: *Morinia* Robineau-Desvoidy, 1830
Morinia argenticincta (Senior-White, 1923)

Genus: *Wilhelmina* Schmitz & Villeneuve, 1932
Wilhelmina indica Sidhu & Singh, 2005

Genus: *Polleniopsis* Townsend, 1917
Polleniopsis annamensis Kurahashi
Polleniopsis bomdilaensis Bharti & Verves
Polleniopsis kashmirensis Kurahashi & Okadome, 1976
Polleniopsis pilosa (Townsend, 1917)

Genus: *Tainanina* Villeneuve, 1926
Tainanina pilisquama (Senior-White, 1925)
Tainanina sarcophagoides (Malloch, 1931)

Genus: *Onesia* Robineau-Desvoidy, 1830
Onesia atriapalpis (Malloch, 1935)
Onesia khasiensis (Senior-White, 1922)

Genus: *Dexopollenia* Townsend, 1917
Dexopollenia testacea (Townsend, 1917)
Dexopollenia flava Aldrich, 1930

Subfamily: Chrysomyinae**Tribe:** Chrysomyini

Genus: *Chrysomya* Robineau-Desvoidy, 1830
Chrysomya albiceps (Wiedemann, 1819)
Chrysomya bezziana Villeneuve, 1914

Chrysomya chani Kurahashi, 1979
Chrysomya indiana Fahd & Zambare
Chrysomya megacephala (Fabricius, 1794)
Chrysomya nigripes Aubertin, 1932
Chrysomya phaonis (Seguy, 1928)
Chrysomya pinguis (Walker, 1858)
Chrysomya putoria (Wiedemann, 1830)
Chrysomya rufifacies (Macquart, 1843)
Chrysomya thanomthini Kurahashi & Tumrasvin 1977
Chrysomya villeneuvei Patton, 1922

Subfamily: Rhiniinae**Tribe:** Rhiniini

Genus: *Chlororhinia* Townsend, 1917
Chlororhinia exempta (Walker, 1856)
Chlororhinia tamenensis Joseph & Rao, 1972

Genus: *Idiella* Brauer & Berensteamn, 1889
Idiella divisa (Walker, 1861)
Idiella euidielloides Senior-White, 1923
Idiella mandarina (Wiedemann, 1830)
Idiella tripartita (Bigot, 1874)

Genus: *Idiellopsis* Townsend, 1917
Idiellopsis xanthogaster (Wiedemann, 1820)

Genus: *Rhinia* Robineau-Desvoidy, 1830
Rhinia apicalis (Wiedemann, 1830)
Rhinia mallochi (Senior-White, Aubertin & Smart, 1940)

Genus: *Stomorphina* Rondani, 1861
Stomorphina discolor (Fabricius, 1794)
Stomorphina lunata (Fabricius, 1805)
Stomorphina melastoma (Wiedemann, 1830)
Stomorphina procula (Walker, 1849)
Stomorphina siamensis Kurahashi et Tumrasvin, 1992
Stomorphina townsendi Kurahashi, 1997
Stomorphina unicolor (Macquart, 1851)
Stomorphina xanthogaster (Wiedemann, 1820)

Tribe: Cosmini

Genus: *Cosmina* Robineau-Desvoidy, 1830
Cosmina bicolor (Walker, 1856)
Cosmina limbipennis (Macquart, 1848)
Cosmina prasina (Brauer & Bergenstamm, 1889)
Cosmina simplex (Walker, 1858)
Cosmina viridis Townsend, 1917

Genus: *Thoracites* Brauer & Bergenstamm, 1891
Thoracites abdominalis (Fabricius, 1805)

Tribe: Isomyiini

Genus: *Isomyia* Walker, 1860
Isomyia aurifacies James, 1970
Isomyia borneensis James, 1970
Isomyia delectans Walker, 1860
Isomyia electa Villeneuve, 1927
Isomyia facialis James, 1970
Isomyia fulvicornis (Bigot, 1887)
Isomyia gomezmenori (Peris, 1951)
Isomyia nebulosa (Townsend, 1917)
Isomyia nigrofasciata (Peris, 1951)
Isomyia oestracea (Seguy, 1934)
Isomyia perisi James, 1970

Isomyia pictifacies (Bigot,1877)

Isomyia pseudonepalana (Senior-White, Aubertin & Smart,1940)

Isomyia pseudoviridana (Peris,1952)

Isomyia versicolor (Bigot,1877)

Isomyia zeylanica Senior-White, Aubertin & Smart,1940

Genus: *Strongyloneura* Bigot, 1886

Strongyloneura nudus Ghezta and Kumar,1991

Strongyloneura prolata (Walker,1860)

Tribe: Rhyncomyiini

Genus: *Borbororhinia* Townsend,1917

Borbororhinia bivittata (Walker,1856)

Genus: *Metallea* van der Wulp,1880

Metallea flavibasis Senior-White,1922

Metallea notata van der Wulp,1880

Metallea setosa (Townsend,1917)

Genus: *Rhyncomya* Robineau-Desvoidy,1830

Rhyncomya callopus Loew,1856

Rhyncomya catalypsa Seguy,1946

Rhyncomya divisa (Walker,1856)

Rhyncomya flavipes Robineau-Desvoidy,1830

Rhyncomya pollinosa (Townsend,1917)

Rhyncomya sarotes Seguy,1928

Rhyncomya viridaurea Wiedemann,1824

Genus: *Cynomya* Robineau-Desvoidy, 1830

Cynomya mortuorum (Linnaeus, 1761)

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