

Chrysopa septempunctata Wesmael, 1841

Synonym:

Hemerobius pallens Rambur, 1838
Chrysopa bipunctata Burmeister, 1839
Chrysopa septempunctata Wesmael, 1841
Hemerobius mauricianus Rambur, 1842
Chrysopa nobilis Brauer, 1851
Chrysopa pallens (Rambur, 1838)
Chrysopa septempunctata var. *quadripunctata* Schneider, 1851
Chrysopa septempunctata var. *quinquepunctata* Schneider, 1851
Chrysopa mauricana (Rambur, 1842)
Chrysopa cognata McLachlan, 1867
Chrysopa septempunctata cognata McLachlan, 1867
Chrysopa centralis McLachlan in Fedchenko, 1875
Chrysopa (Chrysopa) septempunctata Wesmael, 1841
Nothochrysa robusta Gerstaecker, 1894
Chrysopa (Chrysopa) septempunctata var. *quinquepunctata* Schneider, 1851
Chrysopa (Maculatae) septempunctata* var. *pallens* (Rambur, 1838)
Chrysopa (Maculatae) septempunctata* Wesmael, 1841
Chrysopa septempunctata var. *pallens* (Rambur, 1838)
Chrysopa septempunctata var. *montandoni* Navás, 1910
Chrysopa ricciana Navás, 1910
Chrysopa septempunctata var. *occipitalis* Pongrácz, 1912
Chrysopa septempunctata var. *pazsiczkyi* Pongrácz, 1912
Chrysopa septempunctata var. *longicollis* Navás, 1913
Chrysopa septempunctata var. *polysticta* Navás, 1915
Chrysopa (Maculatae) septempunctata* var. *longicollis* Navás, 1913
Chrysopa (Maculatae) septempunctata* var. *montandoni* Navás, 1910
Chrysopa (Maculatae) septempunctata* var. *puncticollis* Navás, 1915
Chrysopa septempunctata var. *puncticollis* Navás, 1915
Chrysopa septempunctata var. *punctulata** Navás, 1916
Chrysopa septempunctata var. *punctulata* Navás, 1917
Chrysopa septempunctata var. *hernandezi* Navás, 1918
Cintameva septempunctata (Wesmael, 1841)
Cintameva septempunctata var. *hernandezi* (Navás, 1918)
Cintameva septempunctata var. *pallens* (Rambur, 1838)
Cintameva septempunctata var. *polysticta* (Navás, 1915)
Cintameva septempunctata var. *punctulata* (Navás, 1917)
Cintameva cognata (McLachlan, 1867)
Cintameva septempunctata var. *cognata* (McLachlan, 1867)
Cintameva cognata var. *media* Navás, 1929
Cintameva septempunctata var. *rubriceps* Navás, 1932
Cintameva cognata var. *frontalis* Navás, 1934
Chrysopa septempunctata f. *cognata* McLachlan, 1867
Chrysopa (Metachrysopa) septempunctata Wesmael, 1841
Parachrysopa pallens (Rambur, 1838)
Metachrysopa pallens (Rambur, 1838)
Metachrysopa pallens cognata (McLachlan, 1867)
Metachrysopa pallens pallens (Rambur, 1838)
Chrysopa (Parachrysopa) cognata McLachlan, 1867
Chrysopa (Parachrysopa) septempunctata Wesmael, 1841
Chrysopa hernandezi Navás, 1918
Chrysopa longicollis Navás, 1913

Chrysopa montandoni Navás, 1910
Chrysopa occipitalis Pongrácz, 1912
Chrysopa pазsiczkyi Pongrácz, 1912
Chrysopa polysticta Navás, 1915
*Chrysopa punctulata** Navás, 1916
Chrysopa quadripunctata Schneider, 1851
Cintameva frontalis Navás, 1934
Cintameva media Navás, 1929
Cintameva rubriceps Navás, 1932

DISTRIBUTION (World status) :Afganistan, Cambodia, China, Eastern Siberia, Europe, India (West Bengal, Himachal Pradesh, Uttaranchal), Iran, Iraq, Japan, Lebanon, Mauritius, North Africa, Pakistan.

Indian Distribution: West Bengal (Murshidabad, Malda, Darjeeling) Himachal Pradesh, Uttaranchal.

DIAGNOSTIC CHARACTERS (General) : Head with a black spot between antennae.Face normally with seven black spots. Forewing oval, elongated, apex subacute, pterostigma long and narrow, intramedian cell ovate and ending after first crossvein between radius and anterior &posterior media. Several costal veinlets, centre of gradate crossveins, apical portion of cubitusposterior and anal veins black. Costal veinlets, crossvein between radius and radial sector and centre of gradates of hind wings are black.

Diagnostic Character (Taxonomic):

Characters: Medium lacewing; ground colour green.

Head: Green coloured; vertex flat, depressed in the centre; one black spot between the antenna, two rounded spot just below the scape, each gena with a round black spot and an elongate black spot on each side of clypeus; maxillary palpi brown; labial palpi brown; labrum light brown. Antenna shorter than fore wing; scape broad greenish; pedicel brown; flagellum greenish yellow, darker distally; flagellar segments short, stout with four rows of dark brown setae.

Thorax: Anterior angle of pronotum oblique, marked with black; lateral sides covered by short, black hairs. Legs pale green; tarsi pale brown, hairs with 4-5 spines on each; claws brown.

Fore wing (Fig. A): Elongate, oval with subacute apex; membrane transparent; pterostigma long and narrow, conspicuous, green; 29-30 costal veinlets; 6 inner gradates, not meeting psm; 8 outer gradates; im cell oval; ends before r-m crossvein; venation green but with dark brown markings; veins and crossveins full of dark hairs.

Hind wing (Fig. B): Smaller; membrane transparent; venation green; costa straight with convex apex.

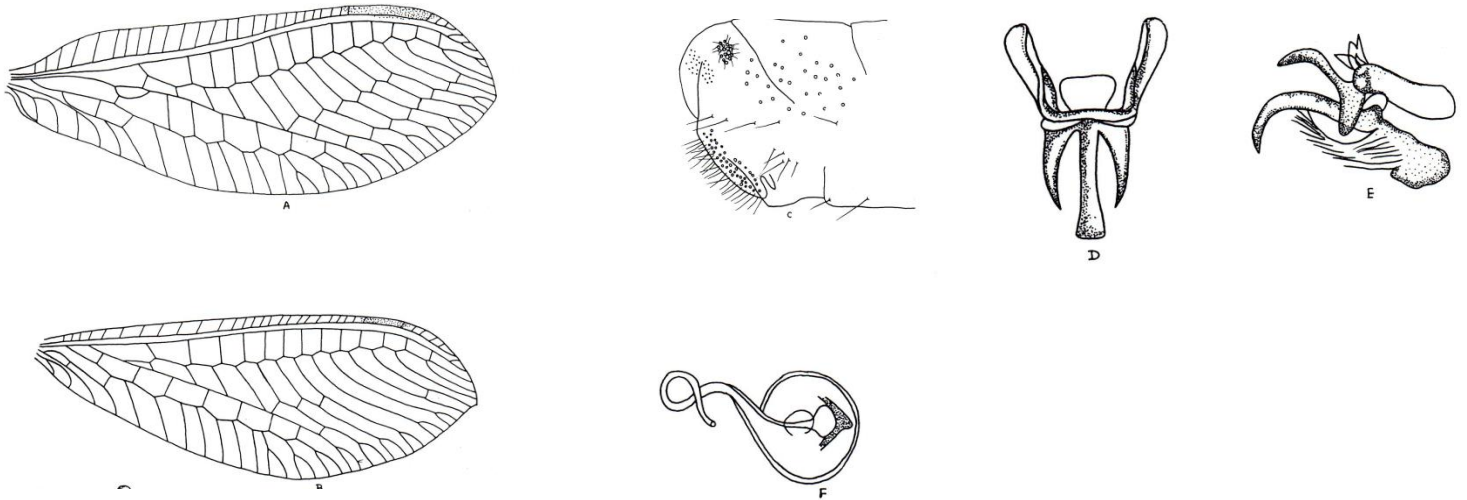
Abdomen (Fig. C): Pale green; highly worted.

Genitalia ♂ :Gonarcus arch shaped; entoprocessus blunt headed (Fig. D and E).

Genitalia ♀ :Subgenital plate bilobed; spermatheca rounded with the duct highly worted (Fig. F).

Measurements of one specimen: ♂: Fore wing 14.7 mm; hind wing 14.1 mm long.

Material examined: KOLKATA. 2 ♀ 1 ♂: 10. VI. 2018,



Remarks:It has a wide range of distribution and has been found that both the larvae and adult are efficient predators of aphids.

CROPS ASSOCIATED WITH : A total number of 57 Chrysopidae species of the order Neuroptera were reported and identified in Citrus orchards in Valencia, Spain in 1999-2001. Neuropterans like *Chrysopa septempunctata* Wesmael feed on higher prey such as *P.citrella*. Chrysopids including *Chrysopa septempunctata* were identified coexisting in both organic and sprayed agroecosystems such as Citrus orchards..

UTILITY :In northern China, *Chrysopa septempunctata* are one of the three dominant groups of generalist predators in cotton field (more than 90% of all the predators): ladybirds, lacewings and spiders. The study was focused on a predator complex which also composed of lacewings such as *Chrysopa septempunctata* Wesmael, which were reported to comprise of the most common predators in agricultural landscape of that region. These groups of predators are also common in maize, peanut and soybean fields and were thus also considered as a predator complex for these three crops. It is widely recognized that the aphid lion, *Chrysopa septempunctata* Wesmael is considered to be a useful biological control candidate in limiting the abundance of aphids, insect eggs, coccids and other soft bodied insects in cotton, corn, wheats, citrus and other cultivated crops.

BIOLOGY :It is strictly entomophagous in both the larval and adult stages and is thought to exert a significant restraint on the increase of variety of pest. Principii (1940) observed a female *Chrysopa septempunctata* Wesmael eating more than 40 individuals of *Erisomalanigerum* in less than 30 minutes. The known predatory arthropods of leaf miners include *C.septempunctata*, which is also employed as a predator for greenhouse aphids.