

VESPERUS LIGUSTICUS, NEW ITALIAN LONGHORN SPECIES
(Coleoptera, Cerambycidae, Vesperinae)
- ENGLISH TRANSLATION FOR PRIVATE USE -
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Résumé: *Vesperus ligusticus* nov. sp. est reconnue comme espèce séparée de *Vesperus strepens* (Fabricius, 1792), espèce endémique de Provence. Cette espèce, endémique de Ligurie et du sud du Piémont, à phénologie imaginale toujours hivernale, est caractérisée par des mâles avec une forme, en particulier de la tête et des élytres plus allongée, les tempes toujours parallèles, les lobes du tegmen plus longues que la partie basale et densément pubescents à l'intérieur et par des femelles avec une taille plus mince, la tête presque carrée, les élytres plus allongées, nettement plus claires que le prothorax et déhiscents en arrière seulement, après la moitié.

Key-words: Coleoptera, Cerambycidae, Vesperinae, *Vesperus*, new species, Italy.

Introduction

For a long time a species with a particular imaginal phenology has been well known, findable in wintry season around the lights of streets, especially common in the hills of the surroundings of Genoa but widespread in all Middle-Western Liguria and in Southern Piedmont.

The attribution of this species to *Vesperus strepens* (Fabricius, 1792), species of Provence, has never been questioned, even if it results from a careful examination that the literature relative to the French form (MAYET, 1890; XAMBEU, 1900; PICARD, 1929; BALACHOWSKY, 1962; STURANI, 1981; BENSE, 1995) was always about a summer one, while the one related to the Italian form (BINAGHI, 1951; GRANDI, 1951; OLMI, 1974) was about a wintry one.

The French literature also distinguished a form ("morph" according to VILLIERS, 1978) characterized by not-inflate temples, especially widespread in the Maritime Alps, having a summer emerging too, known with the name of *litigiosus* Mulsant, 1863, and to which the Italian form looked similar.

VILLIERS (1978) complicated this topic referring to the typical form (with inflate temples) a wintry and plain emerging and to the *litigiosus*-form a summer and mountain one. Nonetheless, he noticed that both forms lived together in time a space and that it was herewith impossible to split them as subspecies.

After collecting abundant material in Provence and Liguria, I have noticed that the forms of Liguria (always with wintry emerging) and those of Provence (with summer emerging) are morphologically so different and split regarding space and time that they constitute two distinct entities.

The temples have no main importance since it is about a very variable character in many other congeners (*V. xatarti* Dufour, *V. conicicollis* Fairmaire & Coquerel, *V. brevicollis* Graells, *V. sanzi* Reitter). Actually, as it was already noticed in the past, the plain forms of Provence (dept. Var) have very developed and salient temples (typical form), while the mountain ones (dept. Maritime Alps) have parallel or even backward restricted temples (form *litigiosus*). In the Italian species they are nearly always parallel in both sexes, or sometimes, a bit inflate in some females.

Nevertheless, there are other characters, morphometric and genital, that clearly distinguish the forms of Liguria from the ones of Provence, actually still recognizable at the first look.

Vesperus ligusticus nov. sp.

Size (from front to elytral apex): ♂ 23-27 mm, ♀ 19-25 mm.

Extremely similar to *Vesperus strepens* (Fabricius, 1792), it is distinguished through the following characters:

♂ - Head elongated, 1.20-1.28 times as long as wide (in *strepens* sub-quadrate or nearly transverse, 0.91-1.03 as long as wide; nevertheless in the form *litigiosus* only 1.08-1.13 as long as wide)

Elytra elongate, 2.75-3.18 times as long as wide at the shoulders (in the typical *strepens* and in the form *litigiosus* only 2.54-2.75 times as long as wide at the shoulders).

Lobes of the tegmen longer than the basal part (shorter in *strepens* and in the form *litigiosus*) and densely pubescent at the inner side (sparsely pubescent or glabrous in *strepens* and in the form *litigiosus*).

♀ - Head sub-quadrate, 0.97-1.06 times as long as wide (in the typical *strepens* and in the form *litigiosus* transverse, 0.72-0.92 times as long as wide)

Elytra elongate, 2.4-2.7 times as long as wide at the shoulders (in the typical *strepens* and in the form *litigiosus* only 2.0-2.5 times as long as wide at the shoulders).

Body slender, elytral color a bit darker than that one of ♂ and distinctly lighter than the one of the avant-corps, elytra posteriorly dehiscent after the middle of their length, letting visible only the last or the one before the last visible abdominal tergite (in *strepens* robust body, uniform chocolate-brown color, elytra dehiscent after the first basal third, letting visible all abdominal tergites).

Wintry imaginal phenology, from December, exceptionally from October, to March (in the typical *strepens* and in the form *litigiosus*, summer phenology from May to August).

Distribution: Middle-Western Liguria (on the basis of all specimens I could examine) and Piedmont (on the basis of the imaginal phenology stated in the literature).

Etymology: *ligusticus* = inhabitant of Liguria.

Examined material

Holotype: Genoa Camaldoli, 320 m, 14.II.1997, A. & F. Vitali lgt., 1 ♂; allotype: idem, 1 ♀ (deposed in Zoologische Staatssammlung Munich).

Paratypes: Rapallo (Genoa), 24.II.1998, A. & F. Vitali lgt., 1 ♂; idem, 3.III.1998, A. Vitali lgt., 3 ♂♂; Recco (Genoa), 9.III.1992, A. Vitali lgt., 1 ♀; Pieve Alta (Genoa), 6.I.1998, G. Troiano lgt., 3 ♂♂; Genoa Quarto, 7.III.1984, A. Vitali lgt., 1 ♀; Genoa Camaldoli, 320 m, 14.II.1997, A. & F. Vitali lgt., 8 ♂♂, 4 ♀♀; idem, 25.II.1998, A. & F. Vitali lgt., 3 ♂♂, 3 ♀♀; Genoa Madonna del Monte, 145 m, II.1991, M. Meli lgt., 1 ♂, 1 ♀; idem, XII.1992, M. Meli lgt., 1 ♂, 1 ♀; idem, 14.II.1997, F. Vitali lgt., 1 ♂; Genoa Quezzi, III.1990, G. Lo Pinto lgt., 1 ♂; idem, III.1997, G. Lo Pinto lgt., 1 ♂; Genoa Staglieno, III.1991, C. Aristarchi lgt., 1 ♂, 1 ♀; idem, 26.I.1993; C. Aristarchi lgt., 1 ♀; idem, III.1995, C. Aristarchi lgt., 1 ♂; idem, 10.II.1997, A. Vitali lgt., 1 ♀; Genoa Preli, 21.III.1987, G. Lo Pinto lgt., 1 ♀; Mt. Righi (Genoa), 300 m, 1.III.1998, G. Lo Pinto lgt., 1 ♀; Genoa surroundings, IV.1927, C. Mancini lgt., 1 ♀; Toirano, Salto del Lupo (Savona), 18.X.1997, L. Marchisio lgt., 1 ♂; Laigueglia (Savona), 3.XII.1955, G. Liberti lgt., 1 ♀ (author's collection).

Vesperus strepens (Fabricius): Breil (Maritime Alps), 265 m, 7.VII.1989, A. & F. Vitali lgt., 2 ♂♂; Col de Brouis (Maritime Alps), 870 m, 8.VII.1989, A. & F. Vitali lgt., 1 ♀; Sospel (Maritime Alps), 350 m, 13.VII.1989, A. & F. Vitali lgt., 1 ♂; Roquebillière (Maritime Alps), 590 m, 8.VII.1989, A. & F. Vitali lgt., 1 ♂; Saint-Martin-Vesubie (Maritime Alps), 1000 m, 9.VII.1989, A. & F. Vitali lgt., 1 ♂, 1 ♀; Les-Adrests-l'Eglise (Var), 14.VI.1998, A. & F. Vitali lgt., 1 ♂; Nans-Les-Pins (Var), 450 m, 16-17.VII.1996, A. & F. Vitali lgt., 9 ♂♂ (author's collection).

Vesperus aragonicus Baraud: Sant Privat de'n Bas, la Vall de'n Bas (Girona), 600 m, 6.VII.1997, J. Muñoz lgt., 1 ♂; Les Viles de Turbo, Torre la Ribera (Huesca), 1350 m, 21.VII.1995, J. Muñoz lgt., 1 ♂; San Victorian, Peña Montañosa, Las Puña (Huesca), 2000 m, 9.VIII.1985, J. Muñoz lgt., 1 ♂ (author's collection).

Remarks

V. ligusticus looks very similar to *V. strepens* and to *V. aragonicus* Baraud, 1964, to which it is closely related. The characters could make one think of a subspecies of the former, but the particular imaginal phenology allows no panmissy with *V. strepens* and markedly splits both entities. These two species passed through a condition of ecological subspecies, characterized by the different phenology, and later to the current one, of vicarious species.

The morphometric characters clearly split *V. ligusticus* both from *V. strepens* and from *V. aragonicus* (which look similar between them), while the structure of the tegmen moves closer the Italian species to the Spanish one.

In particular, *V. ligusticus* is the only species of the genus with wintry phenology, in a group, even mysterious regarding to the systematics, already characterized by species with almost unusual phenology, sometimes displaced to Fall (*luridus* Rossi) or the beginning of Spring (*xatarti* Dufour).

V. ligusticus substitutes *V. strepens* in Liguria and Piedmont, in an area that seems limited at the East of the Entella river (near Chiavari), while in the West I could examine specimens up to Laigueglia (near Imperia). All French specimens I could examine belong to *V. strepens*. The two species could be split from each other by some rivers, even not perennial, between Liguria and Provence, probably the Roya, analogously as the Rhône splits *V. strepens* from *V. aragonicus*. Moreover, it is necessary to notice that it is about a species emerging in winter, herewith more sensible than other *Vesperus*-species to the presence of torrents, which can be full of water in winter constituting, because of the apteral condition of females, an insurmountable barrier to the spreading of both species.

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Fig. 12, *Vesperus ligusticus* nov. sp.
(HT & AT)



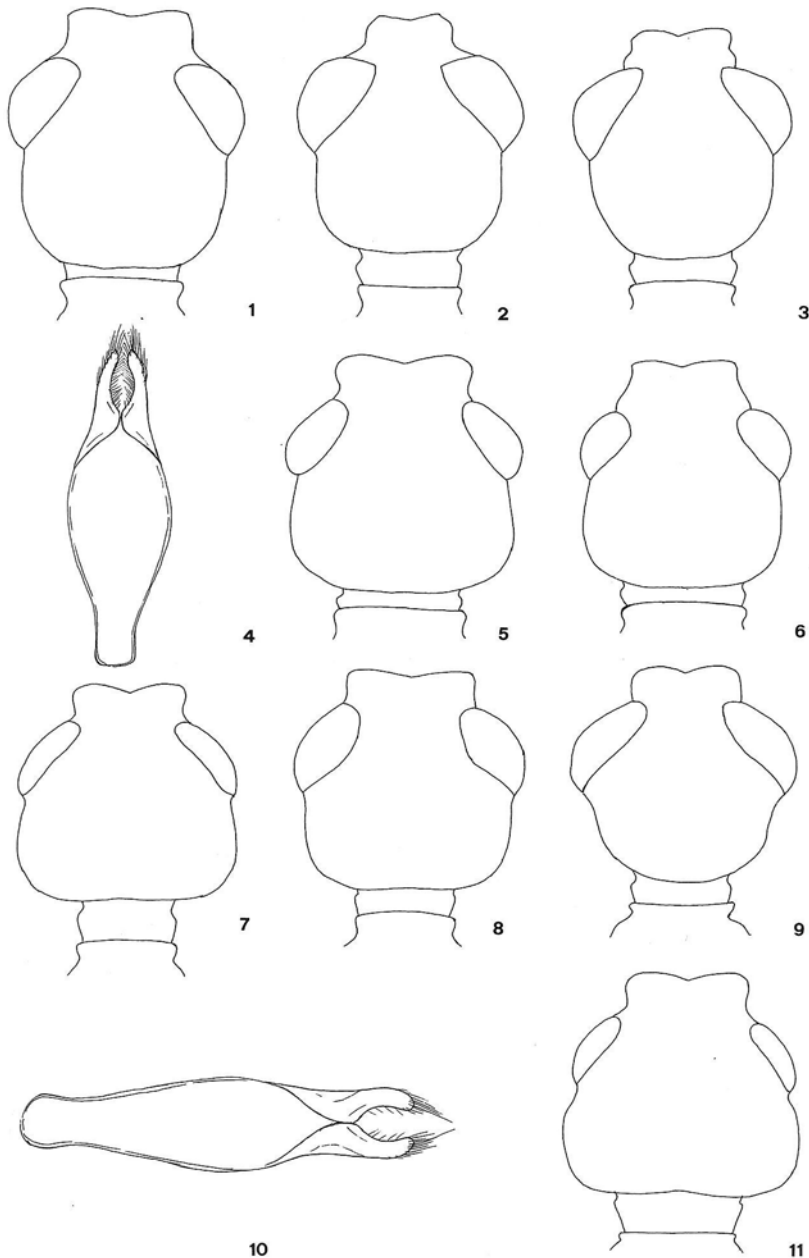


Fig. 1-6, *Vesperus ligusticus* nov. sp. - 1, ♂ of Genoa Camaldoli, head. - 2, ♂ of Rapallo, head. - 3, ♂ of Pieve Ligure, head. - 4, tegmen. - 5, ♀ of Genoa Quarto, head. - 6, ♀ of Genoa Madonna del Monte, head.

Fig. 7-11, *Vesperus strepens* (Fabricius). - 7, ♂ of Nans-Les-Pins, head. - 8, ♂ of Sospel, head. - 9, ♂ of Sant-Matin-Vesubie, head (form *litigiosus* Mulsant). - 10, tegmen. - 11, ♀ of Col de Brouis, head.