

## Nomenclature of the type species of the genus *Rexa* Navás, 1920 (Neuroptera, Chrysopidae)

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**Abstract.** – The nomenclature and distinguishing characteristics of the chrysopid genus *Rexa* are reviewed. Currently, the genus contains two valid species that are commonly referred to as *Rexa almerai* (Navás, 1919) and *Rexa raddai* (Hölzel, 1966). Here we show that an older species name *Chrysopa corsica* Hagen, 1864, is among the available names for *Rexa almerai* (Navás, 1919) (syn. *Rexa lordina* Navás, 1920, *Chrysopidia jordani* Navás, 1929, *Chrysopa corsicana* Hölzel, 1965). Thus, *Rexa corsica* (Hagen, 1864) is identified as the valid name for this species, and *Chrysopa almerai* Navás, 1919, as a new synonym of *R. corsica*. A neotype is designated for *Chrysopa corsica*, and a redescription of the species, based on living specimens, is given. Synonymies and bibliographic records referring to the genus *Rexa* and its two species are compiled.

**Résumé.** – Nomenclature de l'espèce-type du genre *Rexa* Navás, 1920 (Neuroptera, Chrysopidae). La nomenclature et les caractères distinctifs du genre *Rexa* sont passés en revue. Le genre est formé à l'heure actuelle de deux espèces valides identifiées comme *Rexa almerai* (Navás, 1919) et *Rexa raddai* (Hölzel, 1966). Nous établissons ici que l'ancien taxon *Chrysopa corsica* Hagen, 1864, est disponible parmi les noms susceptibles d'être utilisés pour *Rexa almerai* (Navás, 1919) (syn. *Rexa lordina* Navás, 1920, *Chrysopidia jordani* Navás, 1929, *Chrysopa corsicana* Hölzel, 1965). De ce fait, *Rexa corsica* (Hagen, 1864) est reconnu comme le nom valide pour cette espèce et *Chrysopa almerai* Navás, 1919, devient un nouveau synonyme de *R. corsica*. Un néotype est désigné pour *Chrysopa corsica* et une redescription de l'espèce, basée sur des spécimens vivants, est donnée. Les synonymies ainsi que de nombreuses références bibliographiques se rapportant au genre *Rexa* et à ses deux espèces constitutives sont données.

**Keywords.** – Taxonomy, nomenclature, *Chrysopa corsica*, neotype designation.

Amongst the Chrysopidae, *Rexa* Navás, 1920, constitutes a rather peculiar genus. It contains few species —currently only two: *Rexa almerai* (Navás, 1919) and *Rexa raddai* (Hölzel, 1966)— characterized by adult and larval morphological traits, distinguishing biological features, as well as an exclusively Mediterranean distribution. The genus *Rexa* was described by NAVÁS (1920a) based on a single female from Algeria. *Rexa lordina* Navás, 1920 was designated as the type species of the genus. This species remained as the sole *Rexa* species until the publication by HÖLZEL (1973). In addition to synonymizing *Chrysopa almerai* Navás, 1919, *Chrysopidia jordani* Navás, 1929, and *Chrysopa corsicana* (Hölzel, 1965) with *R. lordina*, this work also synonymized the genus *Eurochrysa* Esben-Petersen, 1925, with *Rexa* (type species *Chrysopa corsica* Hagen, 1864), and included *Eurochrysa* [syn. *Chrysopa*] *raddai* (Hölzel, 1966) as a species of *Rexa*. Subsequently, the combinations *Rexa corsica* (Hagen, 1864) and *R. raddai* (Hölzel, 1966) were used by LERAUT (1981), BROOKS & BARNARD (1990), ASPÖCK *et al.* (2001) and MONSERRAT & DÍAZ-ARANDA (2012). More recently, MONSERRAT (2016) provided new information concerning the publication dates for the two taxa *R. almerai* and *R. lordina* which rendered the former as having priority over *R. lordina* and the other synonym of the name.

Although the synonymy of *Chrysopa corsica* Hagen, 1864, and *R. lordina* (syn. *R. almerai*) was generally accepted among neuropterists, the strength of its supporting evidence is worthy

of re-examination. The aim of the present note is to compile and summarize our knowledge relating to these green lacewings and to give new information on the nomenclature of the type species of the genus.

## MATERIAL AND METHODS

**Origin of the specimens.** – The specimens of *Rexa corsica* we used in the study come from southern France and Spain.

– Site 1, in the civil parish forest of Fontcouverte ( $43^{\circ}10'N$  -  $2^{\circ}41'E$ ), Alaric Mountain, Aude, France, about 200 m of altitude, 13.VI.1986, 1 ♂ ex-larva (*M. Canard*).

– Sites 2 to 4, in Spanish olive orchards: 2) Huesca, Barbastro ( $42^{\circ}02'10''N$  -  $0^{\circ}07'35''E$ ), 340 m of altitude, 14.VI.1983, 1 ♀ at light (*V. J. Monserrat*); 3) Granada, Piñar ( $37^{\circ}26'33''N$  -  $3^{\circ}26'26''W$ ), 950 m of altitude, 1.VII.2016, 1 ♀ ex-larva on *Olea europaea*, 15.VII.2016, 2 ♂ and 1 ♀ (*F. Ruano*); 4) Granada, Loja, Los Arenales ( $37^{\circ}10'N$  -  $4^{\circ}09'W$ ), 485 m of altitude, V.2000, 1 ♀ on *Olea europaea* (*F. Ruano*).

**Rearing.** – Several larvae (one L<sub>2</sub> and six L<sub>3</sub>) were collected in site 1 at the beginning of June in a dense bush of the Narrow-leaved Filaria *Phillyrea angustifolia* L. The bush hosted a population of pseudococcine mealy bugs flush with the soil. The larvae were reared in the laboratory, fed on *Ephestia kuehniella* Zeller, 1879, eggs and various instars of *Acyrtosiphon pisum* (Harris, 1776). Maturation occurred without any larval arrest of development. The full-grown larvae entered diapause within the cocoons and overwintered outside, protected from direct sunlight, under the natural winter conditions of southern France, Toulouse.

**Abbreviations for bibliographic references.** – Author, year and page are indicated with main content: **bio**, biology; **d**, description; **dis**, distribution; **e**, egg; **key**, identification key; **la**, larva; **list**, list; **mf**, morphology; **nt**, note; **rf**, reference; **tx**, taxonomy.

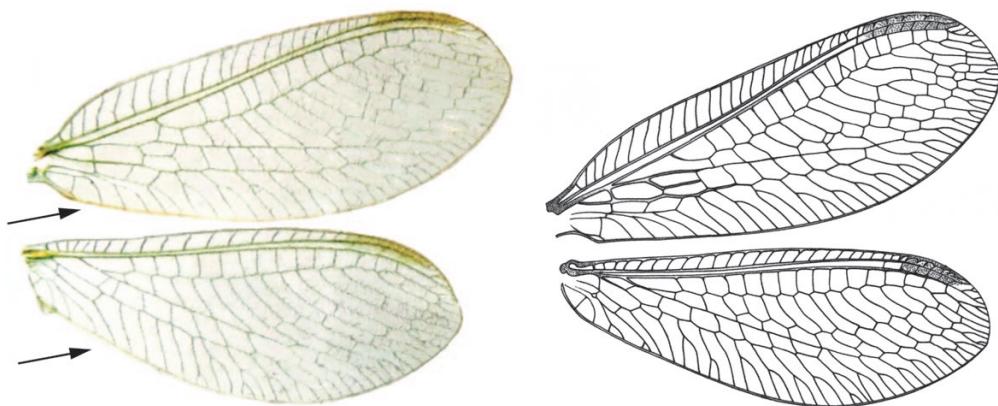
## RESULTS

### Genus *Rexa* Navás, 1920

*Rexa* Navás, 1920a: 289. Type species: *Rexa lordinia* Navás, 1920. NAVÁS, 1920a: 289 (d); HÖLZEL, 1973: 78 (tx); ASPÖCK *et al.*, 1980: 270 (bio, dis, mf, tx), 61 (key); ŞENGINCA, 1980: 70 (dis, mf); ŞENGINCA, 1981: 129 (bio, dis, mf); BROOKS & BARNARD, 1990: 150 (key), 234 (dis, mf, tx), 275 (list); OSWALD & PENNY, 1991: 52 (list, tx); DÍAZ-ARANDA, 1992: 211 (la); DÍAZ-ARANDA & MONSERRAT, 1995: 177 (key, la); BROOKS, 1997: 273 (rf); ASPÖCK *et al.*, 2001: 118 (dis, tax); DÍAZ-ARANDA *et al.*, 2001: 66, 68 (key, la); NEW, 2001: 26 (mf); MONSERRAT, 2016: 38 (tx), 30, 46 (key). Syn. *Eurochrysa* Esben-Petersen, 1925: 68. Type species: *Chrysopa corsica* Hagen, 1864. ESBEN-PETERSEN, 1925: 68 (d); HÖLZEL, 1970: 48 (mf); ASPÖCK *et al.*, 1980: 270 (tx); BROOKS & BARNARD, 1990: 234 (list, tx), 275 (tx); OSWALD & PENNY, 1991: 52 (list, tx); ASPÖCK *et al.*, 2001: 118 (list).

**Description of adults.** – Species belonging to the genus *Rexa* are characterized by several traits that were presented in earlier descriptions (NAVÁS, 1919, 1920a) and in several other related papers such as HÖLZEL (1965, 1973), ASPÖCK *et al.* (1980), CANARD (1981), CANARD & LABRIQUE (1989), BROOKS & BARNARD (1990), MONSERRAT (2016). From these reports and from our own study here, one may note the following distinctive traits:

- labrum indented;
- palpi truncated, apically flattened;
- claws not bluntly enlarged at basis;
- wings ovate, rounded (fig. 1);
- transverse veinlets in costal area of forewings sinuous;
- vein Rs sub-parallel to R in both wings;
- transversal veinlets between R and Rs sometimes bifurcated;
- intra-median cell elongated, usually quadrangular;



**Fig. 1.** – *Rexa corsica* (Hagen), wings showing the yellow marginal stripes (arrows), and outline.

- gradate veinlets numerous; inner series irregular, outer series more evenly spaced, in a single line, with numerous extra veinlets between inner and outer series, especially in forewing;
- posterior margin of the forewing enlarged, its marginal veinlets mostly forked;
- radial sector rather narrow;
- sternites 8 and 9 of male terminalia more or less fused but if so, showing a thin suture;
- internal male genitalia (fig. 2-7) having gonarcus, entoprocessus, arcessus with three apical short strong thorns and two median horns, gonapsis broad with two long V-shaped needles (fig. 4, 7), but no tignum or pseudopenis;
- external female genitalia with long basal extension of subgenital plate;
- presence of spermatophore [confirmed in MONSERRAT (2008)].

**Biological features.** – *Rexa* species are stenotopic with Oleaceae, *Olea europaea* L. and *Phillyrea angustifolia* L. (CANARD & LABRIQUE, 1989; MONSERRAT & MARÍN, 1994, 2001; MONSERRAT, 2008, 2016), and they express the following characteristics:

- generally localized and scarce, but occasionally abundant (MONSERRAT, 2008);
- development pattern univoltine with a spring flight (CANARD & LABRIQUE, 1989; MONSERRAT & MARÍN, 1994; MONSERRAT, 2008);
- larvae feeding on jumping plant lice or mealy bugs producing cottony wax (CANARD, 2001);
- adult diet glycophagous and correlatively, tracheal trunks to the crop large: in *R. corsica* they measure from 89 to 111 µm in diameter, i.e. 6 to 8 times larger than the esophageal ones, and so of a size similar to that of *Nothochrysa capitata* (Fabricius, 1793) (CANARD *et al.*, 1990);
- larvae debris-carriers (CANARD & LABRIQUE, 1989; DÍAZ-ARANDA, 1992; DÍAZ-ARANDA & MONSERRAT, 1995; DÍAZ-ARANDA *et al.*, 2001; MONSERRAT & DÍAZ-ARANDA, 2012).

**Separating the species.** – Currently, the genus includes two species: *Rexa corsica* (Hagen, 1864) and *R. raddai* (Hölzel, 1966), distinguished by referring to table I.

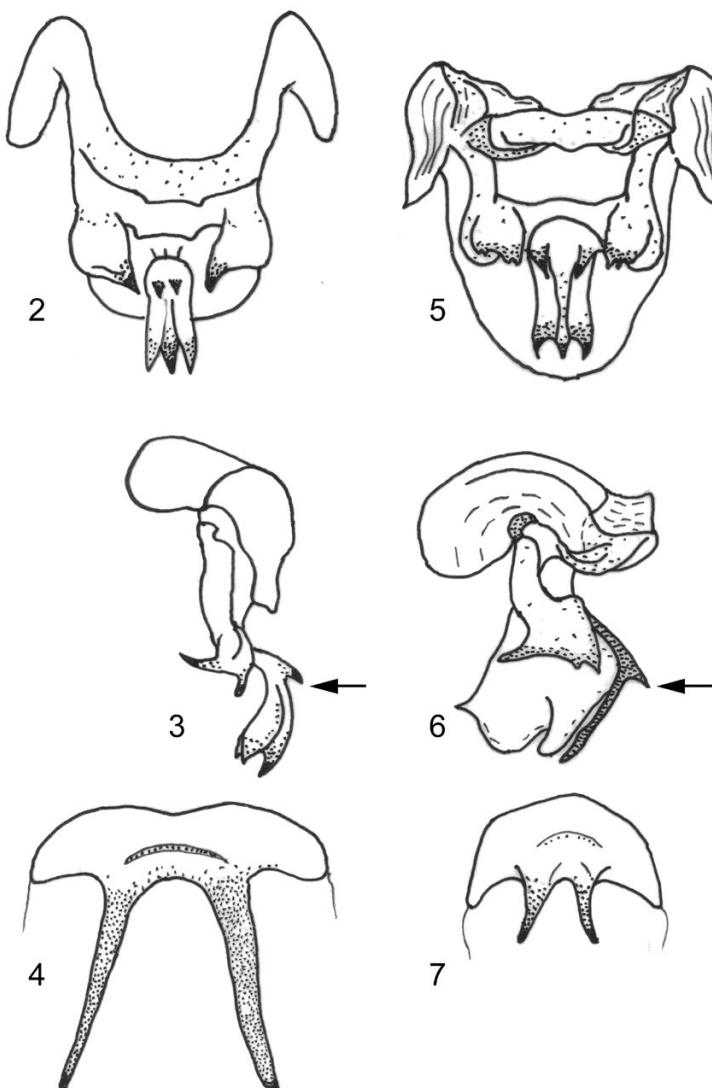
**Distribution.** – The genus *Rexa* is restricted to a small part of the southwestern Palaearctic region (ASPÖCK *et al.*, 1980, 2001; HÖLZEL, 1984) (fig. 15).

#### *Rexa corsica* (Hagen, 1864)

*Chrysopa corsica* Hagen, 1864: 40. Original description from Corsica, type missing. HAGEN, 1864: 40 (d); McLACHLAN, 1868: 208 (tx); ESBEN-PETERSEN, 1925: 68 (tx); HÖLZEL, 1970: 49 (rf); ASPÖCK *et al.*, 1980: 270 (list), 409 (list); BROOKS & BARNARD, 1990: 234 (tx); OSWALD & PENNY, 1991: 52 (list, tx); ASPÖCK *et al.*, 2001: 118 (list), 314 (list).

**Table I.** – Main characters of the species of *Rexa*.

|                                    | <i>R. corsica</i>     | <i>R. raddai</i>  |
|------------------------------------|-----------------------|---|
| <b>Facial color</b>                | Bright red            | Yellow, black spots on genae  |
| <b>Antennae</b>                    | Yellow                | Yellowish to pale brown, articles of flagellum ringed with brown distally |
| <b>Costal veinlets in forewing</b> | Sinuous, green        | Straight, black (the six first)   |
| <b>Pronotum</b>                    | Greenish laterally    | Fringed with red laterally  |
| <b>Gradates</b>                    | Pale green            | Green   |
| <b>Arcessus</b>                    | Thick, arcuate        | Thin, angular   |
| <b>Gonapsis</b>                    | With two long needles | With moderately long needles  |



**Fig. 2-7.** – *Rexa* Navás, genital structures. – 2-4, *R. corsica* (Hagen); 2, dorso-caudal views of internal structures; 3, lateral view showing the arcessus (arrow); 4, gonapsis. – 5-7, *R. raddai* (Hölzel); 5, dorso-caudal views of internal structures; 6, lateral view showing the arcessus (arrow); 7, gonapsis.

- Rexa corsica* (Hagen); LERAUT, 1981: 242 (list); BROOKS & BARNARD, 1990: 275 (list, tx); ASPÖCK *et al.*, 2001: 314 (list); MONSERRAT & DÍAZ-ARANDA, 2012: 119 (rf).
- Nothochrysa corsica* (Hagen); McLACHLAN, 1868: 208 (tx); BRAUER, 1876: 292 (dis).
- Eurochrysa corsica* (Hagen); EBBEN-PETERSEN, 1925: 68 (dis, rf); HÖLZEL, 1970: 51 (list).
- Syn. *Chrysopa almerai* Navás, 1919: 15. Original description from Murcia, Spain, type in the "Museo di Zoología de Barcelona", Spain. NAVÁS, 1919: 15 (d); NAVÁS, 1924a: 112 (dis, mf); NAVÁS, 1924b: 158, (mf); NAVÁS, 1925: 47 (key), 57 (dis, mf); VIDAL Y LÓPEZ, 1943: 19 (dis); HÖLZEL, 1973: 78, 79 (tx); ASPÖCK *et al.*, 1980: 270 (list); MONSERRAT, 1985a: 237 (list); MONSERRAT, 1985b: 91 (rf); ASPÖCK *et al.*, 2001: 118 (list); MONSERRAT, 2016: 37 (tx), 79 (tx, bio, dis).
- Rexa almerai* (Navás); LERAUT, 1981: 242 (list); BROOKS & BARNARD, 1990: 275 (list, tx); MONSERRAT, 2016: 37, 38 (tx), 79 (bio, dis, tx).
- Syn. *Rexa lordinia* Navás, 1920a: 289. Original description from Algeria, type not located. NAVÁS, 1920a: 289 (d); HÖLZEL & OHM, 1972: 133, 140, 142 (dis), 142 (nt); HÖLZEL, 1973: 78 (dis, mf, tx); ASPÖCK *et al.*, 1980: 12, 198, 270 (bio, dis, mf, tx), 62 (key); LERAUT, 1981: 242 (list); CANARD, 1981: 101 (rf); MONSERRAT, 1982: 78 (dis); CAMPOS & RAMOS, 1983: 221 (bio, dis); ALRUECHDI, 1984: 148 (bio, dis); HÖLZEL, 1984: 62, 66 (dis); MONSERRAT, 1984: 41 (dis); SÉMÉRIA, 1984: 170 (rf); MONSERRAT, 1985b: 91 (rf); DÍAZ-ARANDA & MONSERRAT, 1988: 223 (rf); CANARD & LABRIQUE, 1989: 151 (bio, dis, e, la); MONSERRAT & DÍAZ-ARANDA, 1989: 264 (dis); BROOKS & BARNARD, 1990: 235 (bio, mf), 275 (list, tx); OSWALD & PENNY, 1991: 52 (list, tx); SÉMÉRIA, 1991: 112 (rf); DEVETAK, 1992a: 98 (dis); DEVETAK, 1992b: 113 (dis, list); DÍAZ-ARANDA, 1992: 211 (bio, dis, la); PANTALEÃO *et al.*, 1993: 429 (bio, dis); MONSERRAT & MARÍN, 1994: 122 (bio); PANTALEONI, 1994: 209 (dis); DÍAZ-ARANDA & MONSERRAT, 1995: 172, 174 (la); IORI *et al.*, 1995: 9 (list, dis); MONSERRAT, 1996: 14 (list); CARVALHO, 1997: 5, 7 (dis); CANARD, 1998: 68 (bio); ASPÖCK *et al.*, 2001: 118 (bio, dis, mf, tx); CAMPOS, 2001: 492, 493 (bio, dis); CANARD, 2001: 118 (bio); CANARD & VOLKOVICH, 2001: 131, 133 (bio); DÍAZ-ARANDA *et al.*, 2001: 64, 70 (la); MONSERRAT & MARÍN, 2001: 426, 427, 433 (bio); NEW, 2001: 21, 25, 26 (mf, rf); SZENTKIRÁLYI, 2001: 200, 203, 205 (bio); CANARD *et al.*, 2007: 292-297 (rf); MONSERRAT, 2008: 190 (bio, dis); MONSERRAT & DÍAZ-ARANDA, 2012: 119 (bio, dis, la, mf); LETARDI *et al.*, 2013: 35 (list); MONSERRAT, 2013: 294 (rf); MONSERRAT *et al.*, 2014: 29 (bio, dis); RIBEIRA & MELIC, 2015: 10 (dis); MONSERRAT, 2016: 37, 38 (tx), 79 (tx).
- Syn. *Chrysopidia jordani* Navás, 1929: 58. Original description from Algeria, type in Natural History Museum at Tring, and later lodged in the Natural History Museum, London, United Kingdom. NAVÁS, 1929: 58 (d); NAVÁS, 1934: 169 (dis); KIMMINS, 1959: 66 (rf); HÖLZEL, 1970: 49 (rf); HÖLZEL, 1971: 59 (rf, tx); HÖLZEL, 1973: 78, 79 (dis, mf, tx); ASPÖCK *et al.*, 1980: 270 (list); ASPÖCK *et al.*, 2001: 118 (list).
- Eurochrysa jordanii* (Navás); HÖLZEL, 1970: 51 (list).
- Rexa jordanii* (Navás); LERAUT, 1981: 242 (list); BROOKS & BARNARD, 1990: 275 (list, tx).
- Syn. *Chrysopa corsicana* Hölzel, 1965: 457. Original description from Corsica, type in Wiener Naturhistorischen Museums, Austria. HÖLZEL, 1965: 457 (d); HÖLZEL, 1966: 73 (rf); HÖLZEL, 1970: 49 (rf); HÖLZEL, 1973: 78 (dis, mf, tx); ASPÖCK *et al.*, 1980: 270 (list); ASPÖCK *et al.*, 2001: 118 (list).
- Rexa corsicana* (Hölzel); LERAUT, 1981: 242 (list); BROOKS & BARNARD, 1990: 275 (list, tx).
- Eurochrysa corsicana* (Hölzel); HÖLZEL, 1970: 51 (list); ASPÖCK *et al.*, 1980: 270 (list).

**Coloration of the imago (from a laboratory reared specimen).** – Ground body coloration yellow to greenish.

*Head* yellow, adorned as follows: the superior part of the labrum, the clypeus, the genae together with the basal part of the frons bright red, orange yellow anterior to the antennal base and on the full vertex. Eyes dorsally edged with a thin red line. Sometimes two minute inter-antennal spots. Scapes marked laterally and behind with red, pedicel yellow, globular, flagellum reddish brown, darker in its distal part. First two segments of maxillary palpi dark brown, labial palpi pale brown. Ventral side of head marked with red on stipe and basal part of mentum.

*Thorax* green, with large orange median stripe; reddish brown band on each side of pronotum. Cervical membrane laterally marked with bright red. Sternal surface of thorax yellow greenish. Legs pale green, except distal part of tibiae and tarsi brown-yellowish. Hairs black.

*Wings* green and strongly iridescent. All longitudinal veins green, except the posterior marginal ones of the two wings lemon yellow (fig. 1), so that when the wings are in resting position, these veins fall into alignment with the thoracic median yellow stripe, forming large axial yellow bright vitta all along body. All transverse veinlets in forewings yellow to greenish, darker on hindwings. Pterostigma lemon green.

*Abdomen* greenish yellow bearing on each tergite two brownish red spots. Pleural membrane tinged with purplish-blue brown. Sternite 8 of male short, subtriangular in lateral view, more or less fused with 9<sup>th</sup> showing a thin suture between them (HÖLZEL, 1965).

**Eggs.** – Eggs are yellowish green, becoming pinkish during incubation. Laid singly, on a pedicel of about 7.2 mm long ( $n = 26$ ), they were 1.13 mm long  $\times$  0.69 mm in diameter ( $n = 31$ ), weighing  $89 \pm 4 \mu\text{g}$  ( $n = 30$ ) (CANARD *et al.*, 1996).

**Larvae** (fig. 8-13). – The three instars were described earlier (CANARD & LABRIQUE, 1989; DÍAZ-ARANDA, 1992; DÍAZ-ARANDA & MONSERRAT, 1995; DÍAZ-ARANDA *et al.*, 2001; MONSERRAT & DÍAZ-ARANDA, 2012). They are debris-carrier. Body strongly humped (fig. 8), bearing numerous setae curved, only slightly hooked at their apex (fig. 9). Head (fig. 10) short so that the ratio of its length (L) to its width (W) is  $L/W = 0.89$ . Jaws MdMx (fig. 11) as long as or shorter than the head:  $\text{MdMx}/L = 0.92$ ; labial palpi (fig. 12) very short:  $\text{Pmx}_2/L = 0.56$ . Claws triangularly dilated at the base (fig. 13).

**Distribution.** – *Rexa corsica* is found exclusively within the olive-tree range of the western Mediterranean zone. It occurs in North Africa: Morocco, Algeria (ASPÖCK *et al.*, 2001); Spain (HÖLZEL & OHM, 1972; MONSERRAT, 1982), Portugal (MONSERRAT, 2008; RIBEIRA & MELIĆ, 2015), mainland southern France (CANARD, 1981; LERAUT, 1981) and Corsica (HAGEN, 1864; LETARDI *et al.*, 2008), mainland Italy and Sardinia (PANTALEONI, 1994) and Croatia (DEVETAK, 1992a). It never extends southwards out of the Maghreban sea-shore plain, northwards to the  $43^\circ\text{N}$  in the French Provence-Alpes-Côte-d'Azur region, or eastwards beyond  $17^\circ\text{E}$  on the Croatian coast.

**Designation of a neotype for *Chrysopa corsica*.** – Specifically, the type specimen for *C. corsica* has not been found in its presumed depository (the Selys' collection in the Institut

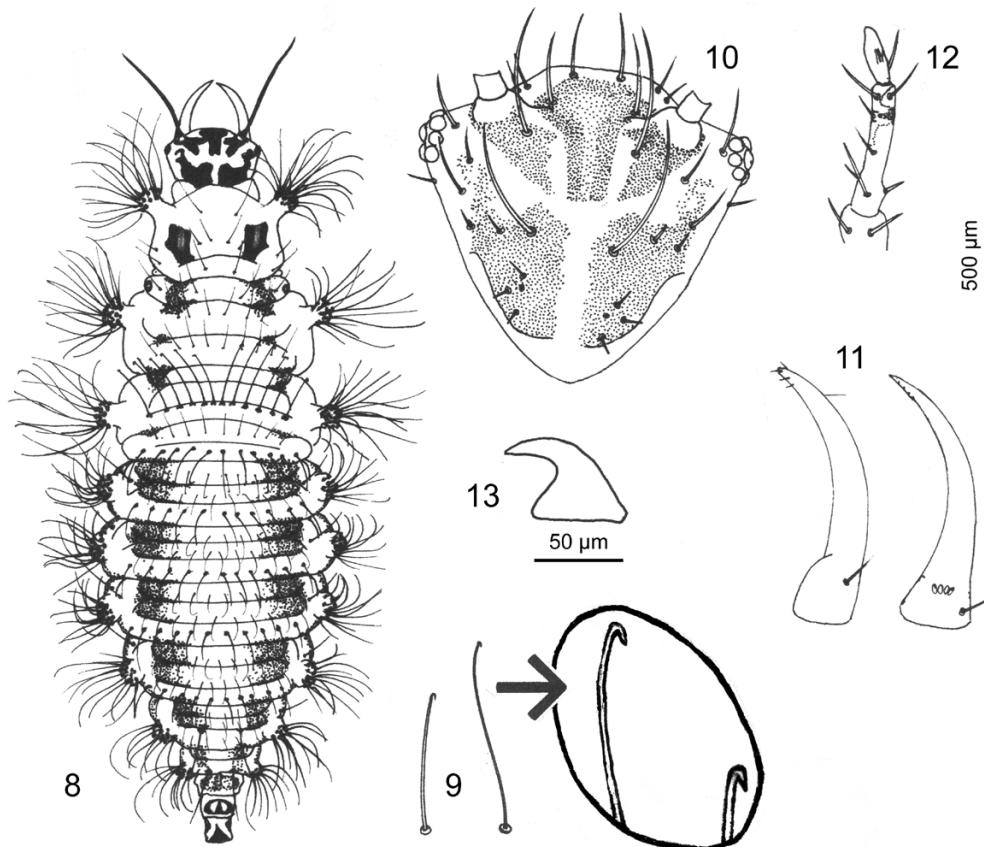


Fig. 8-13. – *Rexa corsica* (Hagen), third instar larva. – 8, Outline. – 9, Tip of lateral setae. – 10, Head (dorsal view). – 11, Jaws. – 12, Labial palp. – 13, Claw (after DÍAZ-ARANDA, 1992).

Royal des Sciences Naturelles de Belgique, Brussels), or elsewhere. The original type series, apparently consisting of a single specimen of unknown origin, was held with additional specimens collected in Corsica in 1860 and 1861 by M. Bellier de la Chavignerie (see HAGEN, 1864). Now, because of the important position of *C. corsica* as the senior synonym of several names that refer to the type species of the genus *Rexxa*, we consider that the designation of a neotype is both appropriate and necessary (also see BROOKS & BARNARD, 1990). Below, we take this action and also present revisionary material for the genus.

According to the International Code of Zoological Nomenclature (Article 75.3.6), the neotype of *Chrysopa corsica* should originate from Corsica (topotype). Unfortunately, it was not possible, despite our efforts, to find native specimens. Many thanks to all the colleagues and institutions that replied to our request to look for specimens of *R. corsica* from the island. *Rexxa corsica* is a very rare green lacewing in the field, probably because of its predatory specificity as larvae on the olive-tree psyllid *Euphyllura olivina* (Costa, 1839) and/or mealy bugs (*Pseudococcines*), its univoltine annual cycle, and its brief spring flight period. As a result, we choose specimens from olive orchards in Granada, southern Spain, where *R. corsica* is sometimes abundant in McPhail traps [CAMPOS & RAMOS (1983), reported as *R. lordina*]. The NEOTYPE (**present designation**) comes from Spain, Granada, Piñar, 15.VII.2016, 1 ♂ (dry) ex-larva collected on *Olea europaea*, F. Ruano leg. It is deposited and stored (fig. 14) in the Museo de Entomología de la Universidad Complutense de Madrid (UCME) in the Insect and Spider Collections of the World, information in: <http://ucme.bioucm.es>.

#### *Rexxa raddai* (Hölzel, 1966)

*Chrysopa raddai* Hölzel, 1966: 73. Original description from specimens of Greece and Turkey, type in the author's collection, c/o Aspöck's coll. HÖLZEL, 1966: 73 (d); HÖLZEL, 1970: 49 (rf); ASPÖCK *et al.*, 1980: 270 (bio, dis, mf, tx); ASPÖCK *et al.*, 2001: 119 (list).

*Rexxa raddai* (Hölzel); CANARD *et al.*, 1979: 607 (bio, dis); ASPÖCK *et al.*, 1980: 8, 12, 117, 198, 271 (bio, dis, mf, tx), 62 (key); ŞENONCA, 1980: 70 (dis, mf); ŞENONCA, 1981: 129 (bio, dis, mf); HÖLZEL, 1984: 62, 66 (dis); SANTAS, 1984: 170 (dis); SÉMÉRIA, 1984: 170 (dis); BROOKS & BARNARD, 1990: 235 (mf), 275 (list); KIYAK & ÖZDIKmen, 1993 (dis); ARI & KIYAK, 2000: 12 (bio, dis); ASPÖCK *et al.*, 2001: 119 (dis, mf, tx), 314 (rf); CANBULAT & KIYAK, 2005: 28 (dis, list); CANBULAT, 2007: 40; KOVANCI & KOVANCI, 2007: 98 (bio, dis); MONSERRAT & DÍAZ-ARANDA, 2012: 119 (rf); ARI, 2014: 66 (list); BOZDOĞAN & TOROĞLU, 2016: 94 (dis).

*Eurochrysa raddai* (Hölzel); HÖLZEL, 1970: 51 (list); ASPÖCK *et al.*, 1980: 271 (list).

**Distribution.** — *Rexxa raddai* was first known from northern Greece (Greek Macedonia) and north-western Turkey. It is rather common in Turkey: ŞENONCA (1980, 1981); KOVANCI & KOVANCI (2007), and in southern, central and western Anatolia (KIYAK & ÖZDIKmen, 1993; ARI & KIYAK, 2000; CANBULAT & KIYAK, 2005; ARI, 2014; BOZDOĞAN & TOROĞLU, 2016). It was also collected in mainland Greece and Peloponnesus (SANTAS, 1984), in western Crete in olive orchards in McPhail traps baited with diammonium phosphate (CANARD *et al.*, 1979).

#### *Nothochrysa polemia* Navás, 1917, nomen dubium

*Nothochrysa polemia* Navás, 1917: 6. Original description from Lesbos Island, Greece, type missing. NAVÁS, 1917: 6 (d); NAVÁS, 1920b: 37 (dis, mf); ASPÖCK *et al.*, 1980: 410 (list); ASPÖCK *et al.*, 2001: 314 (list).

*Chrysopa polemia* (Navás); NAVÁS, 1920b: 37 (rf).

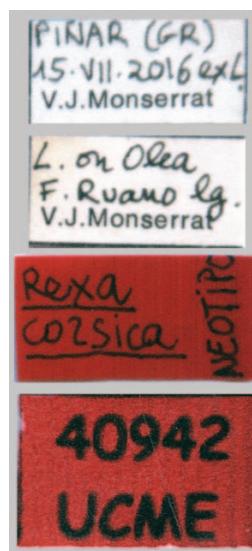
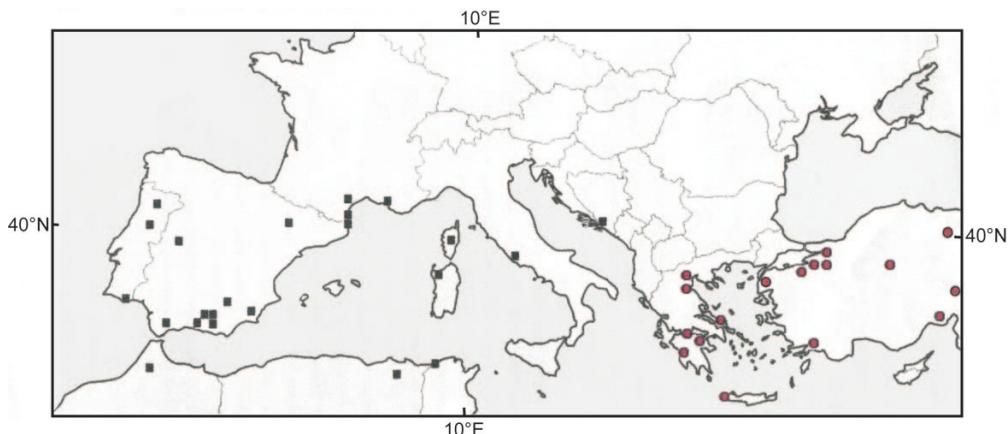


Fig. 14. — *Rexxa corsica* (Hagen), neotype labels.



**Fig. 15.** – Distribution map of *Rexa corsica* (Hagen) (black squares) and *R. raddai* (Hölzel) (red circles).

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