

## Five new *Dinotrema* species from Spain, with mesoscutal pit and medially sculptured propodeum

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### Abstract

Descriptions of five new species of the genus *Dinotrema* with smooth or only medially sculptured propodeum and presence of mesoscutal pit from Spain are given: *Dinotrema belokobylskiji* sp. nov., *D. mareum* sp. nov., *D. paquitae* sp. nov., *D. pareum* sp. nov., and *D. zimmermannae* sp. nov..

**Key words:** parasitoids, Braconidae, Alysiinae, *Dinotrema*, new species, Spain.

### Introduction

About 2,000 worldwide species and more than 100 genera have been recorded in subfamily Alysiinae (Yu *et al.*, 2011). The genus *Dinotrema* Foerster, 1862 is the largest genus of this subfamily with more than 300 described species. Numerous species of this genus were recorded in the Western and Central Europe (Fischer 1972; 1993; Achterberg, 1988; Yu *et al.*, 2011) as well as from Russia and adjacent territories (Tobias 2003; 2004a; 2004b; 2006).

The current status of the genus *Dinotrema* was established by van Achterberg (1988), and this genus differs from the closely related *Aspilota* Foerster 1862 in the size of paraclypeal areas which are not connected to the inner eye margin. *Dinotrema* species are parasitoids of Diptera mainly belonging to the family Phoridae (van Achterberg, 1988) as well as Anthomyiidae and Platyppezidae (Fischer *et al.*, 2008).

On the other side, *Dinotrema* is very poorly studied in Spain and only 19 species were here known in present (Fischer *et al.*, 2008). We are realizing now a revision of the all available type material of this genus of the European fauna with aim to estimate the real composition of *Dinotrema* species in the Spanish fauna and preparation of the new key for determination of the Western European species.

In the present paper, we describe five new species of *Dinotrema* characterized by presenting a developed mesoscutal pit and medially sculptured propodeum: *D. belokobylskiji* sp. nov., *D. mareum* sp. nov., *D. paquitae* sp. nov., *D. pareum* sp. nov., and *D. zimmermannae* sp. nov..

### Materials and methods

The specimens used in this study were collected by Malaise traps in the Natural Park of Carrascal de la Font Roja (Alicante Province, Spain), Natural Park of Las Lagunas de La Mata-Torrevieja (Alicante Province, Spain) and in the Natural Park of La Tinença de Beni-

fassà (Castellon Province, Spain). The climatic and orographic descriptions of these National Parks are given by Peris-Felipo *et al.* (2011), Peris-Felipo and Jiménez-Peydró (2012).

For the terminology of the morphological features and sculpture, measurements and wing venation nomenclature, see Fischer (1973). On figure 1 is possible to see the typical measurements of the mandible length and width.

The following abbreviations, generally accepted in the taxonomy of Hymenoptera, are used in the paper: POL - postocellar line; OOL - ocular-ocellar line; OD - maximum diameter of lateral ocellus. The types of described species are deposited in the following Institutions: Entomological Collection at University of Valencia (Valencia, Spain; ENV) and in the Zoological Institute RAS (St. Petersburg, Russia; ZISP).

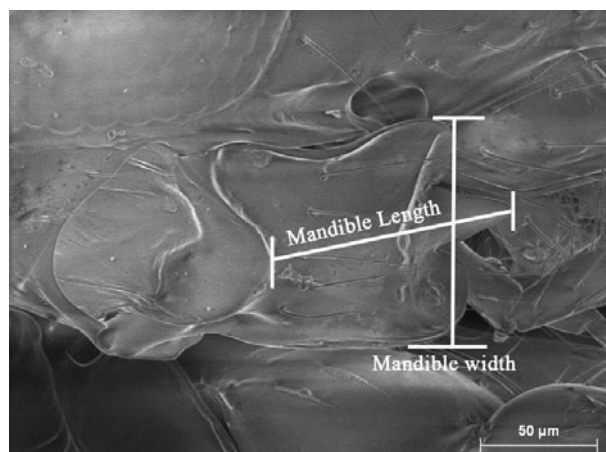
### Taxonomical part

Order: Hymenoptera L. 1758

Family: Braconidae Nees 1811

Subfamily: Alysiinae Leach 1815

Genus: *Dinotrema* Foerster 1862



**Figure 1.** Measurements of the length and width of mandible.

***Dinotrema belokobylskiji* Peris-Felipo, sp. nov.**  
(figures 2-14)

**Etymology**

Named in honour Dr. Sergey A. Belokobylskij, well-known Russian hymenopterist for his contribution into the study of the World Braconidae.

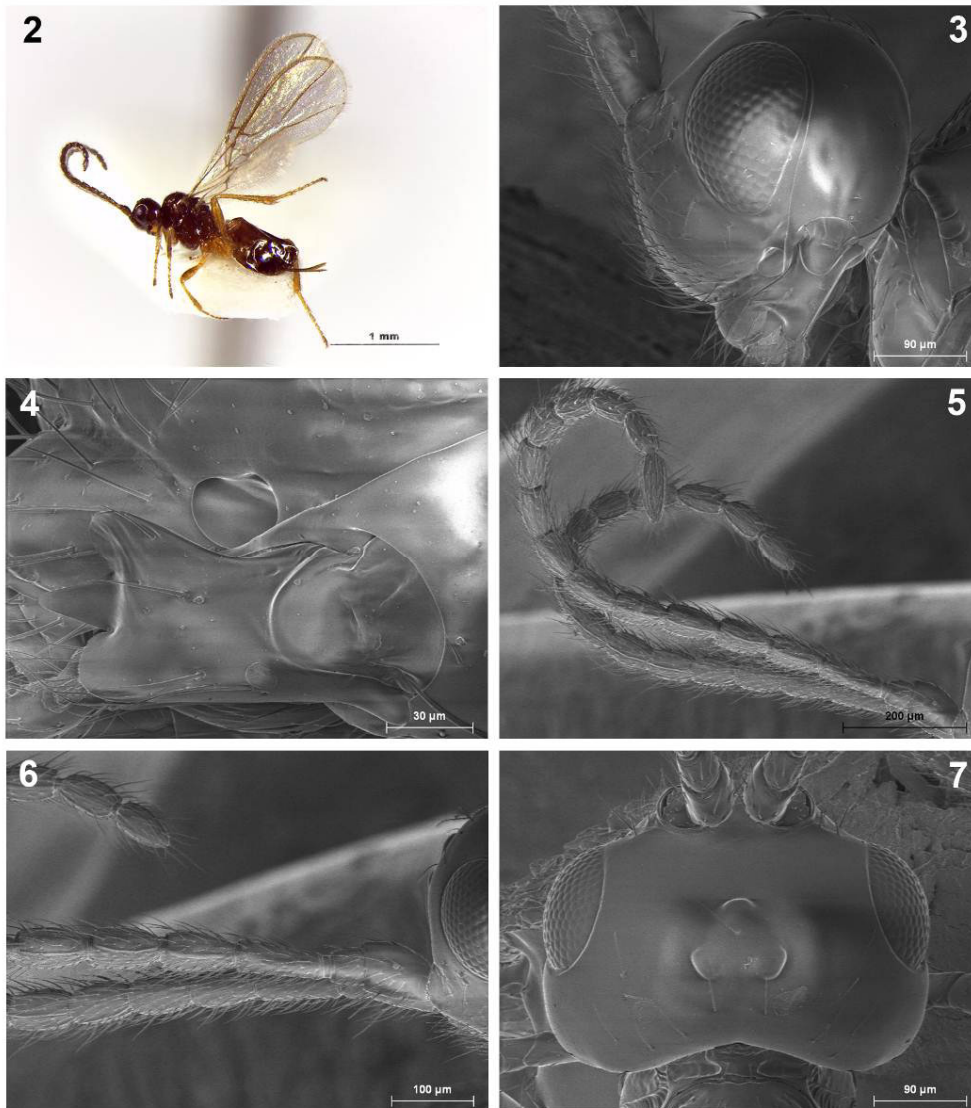
**Description**

**F e m a l e**

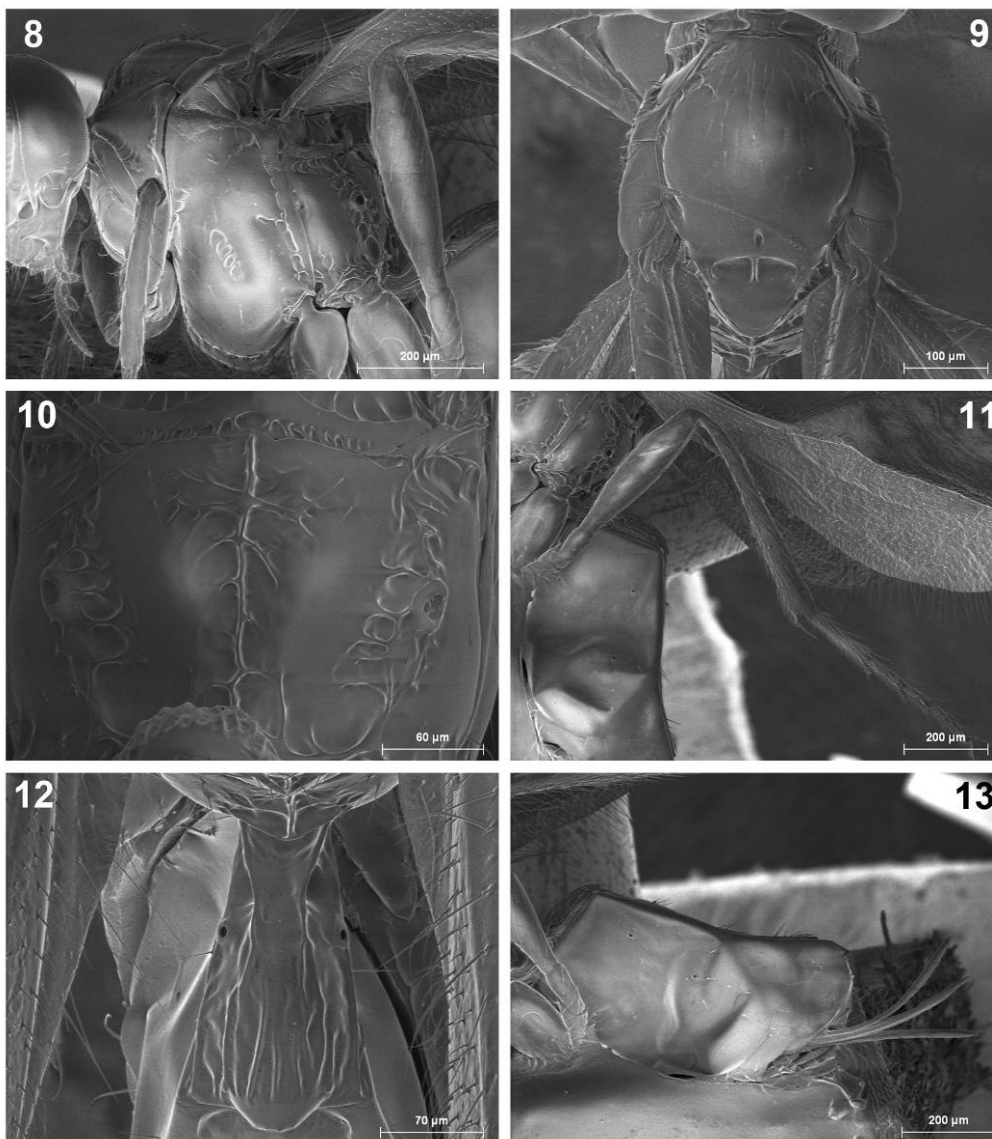
**Head** - In dorsal view, 1.55-1.60 times as wide as median length, 1.50 times as wide as mesoscutum, smooth, with rounded temples behind eye. Eye in lateral view 1.50 times as high as wide and nearly as wide as temple. POL 2.60 times OD; OOL 2.75 times OD. Face 1.40 times as wide as high; inner margins of eyes subparallel. Clypeus 2.35 times as wide as high, slightly curved ventrally. Paraclypeal fovea rounded, not reaching middle distance between clypeus and eye. Mandible widened towards apex, 1.20 times as long as its maximum width. Upper tooth wide, almost as long as middle tooth. Mid-

dle tooth the longest, wide basally and pointed apically. Lower tooth short, longer and wider than upper tooth, rounded. Antennae thick, 16-segmented. Scape 1.95-2.00 times as long as pedicel. First flagellar segment 2.75 times as long as its apical width, 1.20-1.25 times as long as second segment; second segment 1.90 times as long as its maximum width. Third to thirteenth flagellar segments 1.20-1.30 times and fourteenth segment 2.90-3.00 times as long as wide.

**Mesosoma** - In lateral view, 1.05 times as long as high. Mesoscutum 1.05-1.10 times as long as maximum width, with two rows of double setae in middle part. Notauli mainly absent. Mesoscutal pit present and rounded. Prescutellar depression smooth, without lateral carinae. Sternaulus (= precoxal suture) present, not reaching anterior and posterior parts of mesopleuron. Posterior mesopleural furrow slightly crenulate below. Propodeum with median longitudinal carina continued from its anterior to posterior margins, with short carinae emerging from median carina and far not reaching the propodeal edges. Propodeal spiracles relatively small.



**Figures 2-7.** *Dinotrema belokobylskiji* sp. nov. (female). 2. Habitus, lateral view; 3. Head, antero-lateral view; 4. Mandible; 5. Antenna; 6. Basal segments of antenna; 7. Head, dorsal view.



Figures 8-13. *Dinotrema belokobylskiji* sp. nov. (female). 8. Mesosoma; 9. Mesonotum; 10. Propodeum; 11. Hind leg; 12. First metasomal tergite; 13. Metasoma and ovipositor.

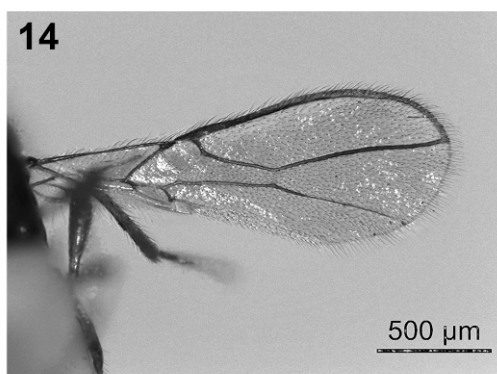


Figure 14. *Dinotrema belokobylskiji* sp. nov. (female). Fore wing.

*Legs* - Hind femur 4.30 times as long as wide. Hind tibia weakly widened to apex, 8.50 times as long as its maximum subapical width, 1.10 times as long as hind tarsus. First segment of hind tarsus 1.45-1.50 times as

long as second segment.

*Wings* - Length of fore wing 3.40-3.50 times its maximum width. Vein r1 present. Radial cell reaching to apex of wing, 4.45-4.50 times as long as its maximum width. Nervulus distinctly postfurcal. Brachial cell closed, widened apically, 3.15-3.20 times as long as its maximum width. Hind wing 4.65-4.70 times as long as its maximum width.

*Metasoma* - Distinctly compressed. First tergite weakly widened towards apex, 1.80 times as long as its apical width, with two main carinae and striation in apical half. Ovipositor 1.40 times as long as first tergite, shorter than metasoma, 1.05 times as long as hind femur.

*Colour* - Body dark brown. Mandible, first metasomal tergite and legs brown. Wings hyaline. Pterostigma brown.

*Length* - Body 1.60 mm; fore wing 1.85-1.90 mm.

*Male*  
Unknown.

### Type material

Holotype: female, Spain, Castellon Province, Poble de Benifassà, Natural Park of Tinença de Benifassà, 21.10.2006 (F.J. Peris-Felipo leg.) (ENV). Paratype: 1 female, same label as in holotype, but 30.10.2006 (ENV).

### Diagnosis

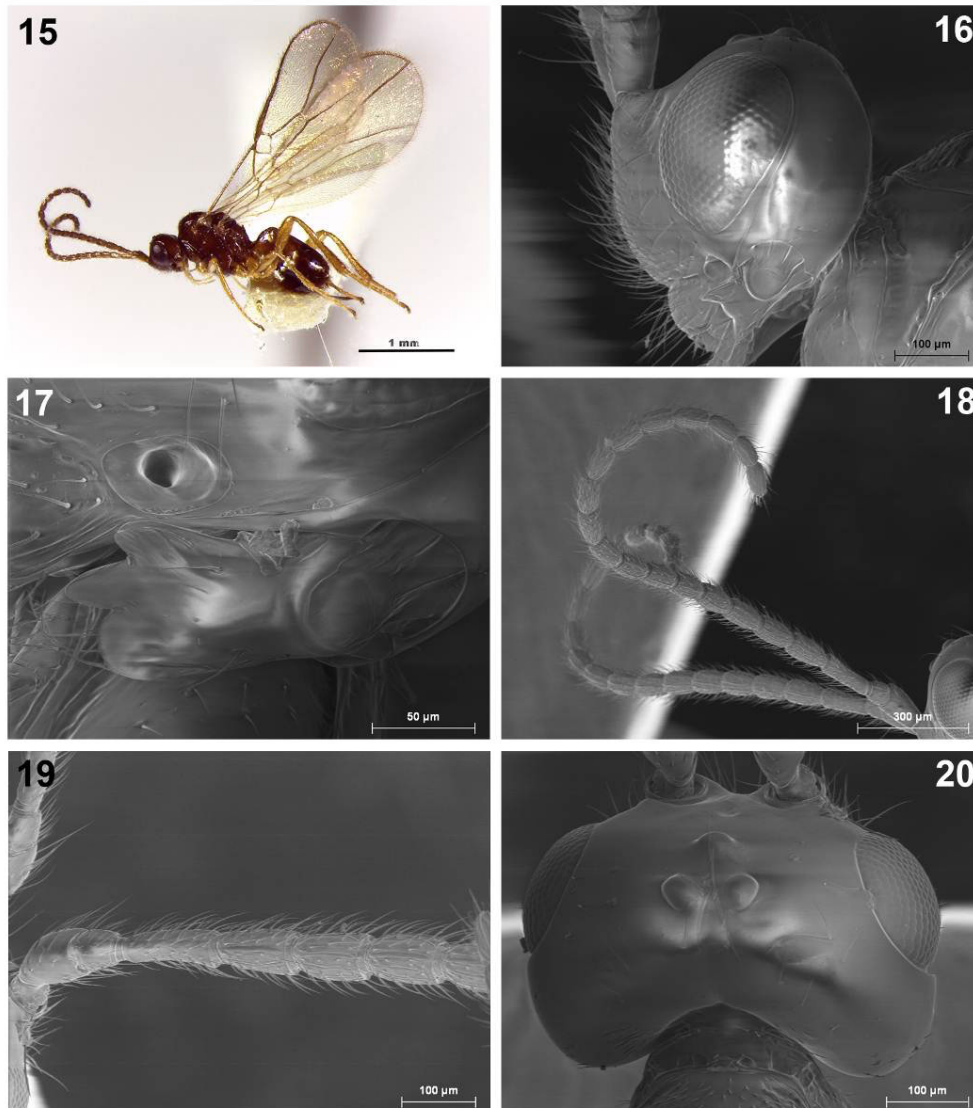
This new species resembles *D. caesum* Tobias 2006, *D. propodeale* (Tobias 1962) and *D. sessile* van Achterberg 1988. *Dinotrema belokobylskiji* sp. nov. differs from *D. caesum* in having the middle flagellar segments 1.20-1.30 times as long as wide (1.80-2.00 times in *D. caesum*), mesosoma 1.05 times as long as high (1.30 times in *D. caesum*), first metasomal tergite 1.80 times as long as its apical width (1.50 times in *D. caesum*), and ovipositor shorter than metasoma (longer in *D. caesum*). On the other hand, new species differs from *D. propodeale* in having the mandible 1.20 times as long as wide (1.70 times in *D. propodeale*), upper tooth of mandible shorter than lower tooth (as long as lower tooth in *D. propo-*

*deale*), first flagellar segment 2.75 times as long as wide (3.20 times in *D. propodeale*), middle flagellar segments 1.20-1.30 times as long as wide (1.70 times in *D. propodeale*), and mesosoma 1.05 times as long as high (1.20 times in *D. propodeale*). Finally, *D. belokobylskiji* sp. nov. differs from *D. sessile* in having the first flagellar segment 2.75 times as long as wide (3.40 times in *D. sessile*), middle flagellar segments 1.20-1.30 times as long as wide (2.00 times in *D. sessile*), mesosoma 1.05 times as long as high (1.20 times in *D. sessile*), and ovipositor shorter than metasoma (longer in *D. sessile*).

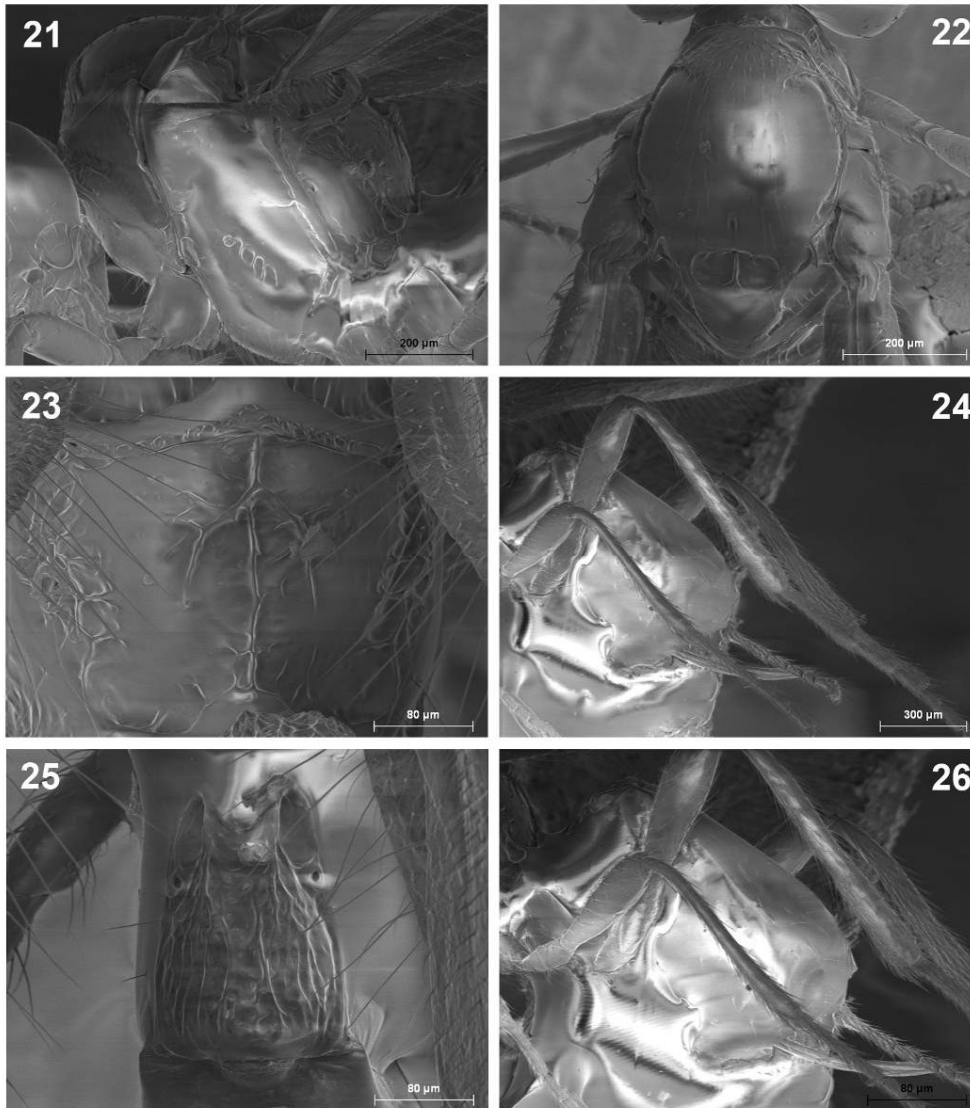
### *Dinotrema mareum* Peris-Felipo, sp. nov. (figures 15-27)

#### Etymology

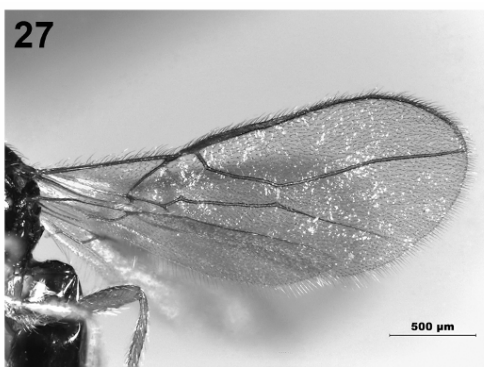
Named is derived from Catalan “mare” meaning mother because without her help I could never have done this study.



**Figures 15-20.** *Dinotrema mareum* sp. nov. (female). 15. Habitus, lateral view; 16. Head, antero-lateral view; 17. Mandible; 18. Antenna; 19. Basal segments of antenna; 20. Head, dorsal view.



**Figures 21-26.** *Dinotrema mareum* sp. nov. (female). 21. Mesosoma; 22. Mesonotum; 23. Propodeum; 24. Hind leg; 25. First metasomal tergite; 26. Metasoma and ovipositor.



**Figure 27.** *Dinotrema mareum* sp. nov. (female). Fore and hind wings.

#### Description

##### Female

*Head* - In dorsal view, 2.00 times as wide as median length, 1.50 times as wide as mesoscutum, smooth, with

rounded temples behind eye. Eye in lateral view 1.50 times as high as wide and 1.10-1.15 times as wide as temple. POL 2.70 times OD; OOL 2.90-3.00 times OD. Face 1.20 times as wide as high; inner margins of eyes subparallel. Clypeus 3.10-3.15 times as wide as high, slightly curved ventrally. Paraclypeal fovea cross middle distance between clypeus and eye, but far not reaching eye. Mandible weakly widened towards apex, 1.50 times as long as its maximum width. Upper tooth small, distinctly shorter than middle tooth. Middle tooth the longest, wide basally and pointed apically, wider than upper tooth. Lower tooth rounded, longer and wider than upper tooth. Antennae thick, 20-segmented, shorter than body. Scape 2.25 times as long as pedicel. First flagellar segment 2.30 times as long as its apical width, 1.20-1.25 times as long as second segment; second segment 1.50-1.55 times as long as its maximum width. Third to twelfth flagellar segments 1.25-1.30 times, thirteenth to seventeenth segments 1.60 times, and eighteenth segment 1.80 times as long as their maximum width correspondingly.

*Mesosoma* - In lateral view, 1.05 times as long as high. Mesoscutum about as long as maximum width, with two rows of double setae in middle part. Notauli mainly absent. Mesoscutal pit present and elongated. Prescutellar depression smooth, without lateral carinae. Sternaulus (= precoxal suture) present, not reaching anterior and posterior parts of mesopleuron. Posterior mesopleural furrow smooth. Propodeum with median longitudinal carina continued from its anterior to posterior margins, with single carina emerging from median carina not reaching the propodeal edges. Propodeal spiracles small.

*Legs* - Hind femur 4.00 times as long as wide. Hind tibia weakly widened to apex, 8.25-8.30 times as long as its maximum subapical width, 1.05-1.10 times as long as hind tarsus. First segment of hind tarsus 1.70 times as long as second segment.

*Wings* - Length of fore wing 2.45 times its maximum width. Vein r1 present. Radial cell reaching to apex of wing, 4.00 times as long as its maximum width. Nervulus distinctly postfurcal. Brachial cell, closed, widened apically, 3.25-3.30 times as long as its maximum width. Hind wing 6.10 times as long as its maximum width.

*Metasoma* - Distinctly compressed. First tergite weakly widened towards apex, 1.60 times as long as its apical width, entirely striate. Ovipositor 1.55-1.60 times as long as first tergite, shorter than metasoma, 0.85-0.90 as long as hind femur.

*Colour* - Body and legs brown to dark brown. Wings hyaline. Pterostigma and veins brown.

*Length* - Body 1.95-2.00 mm; fore wing 2.50-2.60 mm.

**M a l e**

Unknown.

#### Type material

Holotype: female, Spain, Castellon Province, Poble de Benifassà, Natural Park of Tinença de Benifassà, 15.05.2006 (F.J. Peris-Felipo leg.) (ENV). Paratype: 1 female, same label as in holotype, but 03.07.2006 (ENV).

#### Diagnosis

This new species resembles *D. erythropum* (Foerster 1862) and *D. propodeale* (Tobias). *Dinotrema mareum* sp. nov. differs from *D. erythropum* in having the mesosoma 1.05 times as long as high (1.20 times in *D. erythropum*), first metasomal tergite 1.80 times as long as its apical width (1.50 times in *D. erythropum*), ovipositor shorter than metasoma (longer in *D. erythropum*), mesoscutal pit moderately elongate (very elongated and more than length of prescutellar depression in *D. erythropum*), first metasomal tergite entirely striate (almost smooth in *D. erythropum*), and sternaulus fine (very distinct in *D. erythropum*). On the other hand, new species differs from *D. propodeale* in having the first flagellar segment 2.30 times as long as wide (3.20 times in *D. propodeale*), mesosoma 1.05 times as long as high (1.20 times in *D. propodeale*) and first metasomal tergite 1.60 times as long as its apical width (2.00 times in *D. propodeale*).

#### ***Dinotrema paquita* Peris-Felipo, sp. nov.** (figures 28-41)

#### Etymology

Named in honour Francisca Miralles "Paqui" for all her help.

#### Description

**F e m a l e**

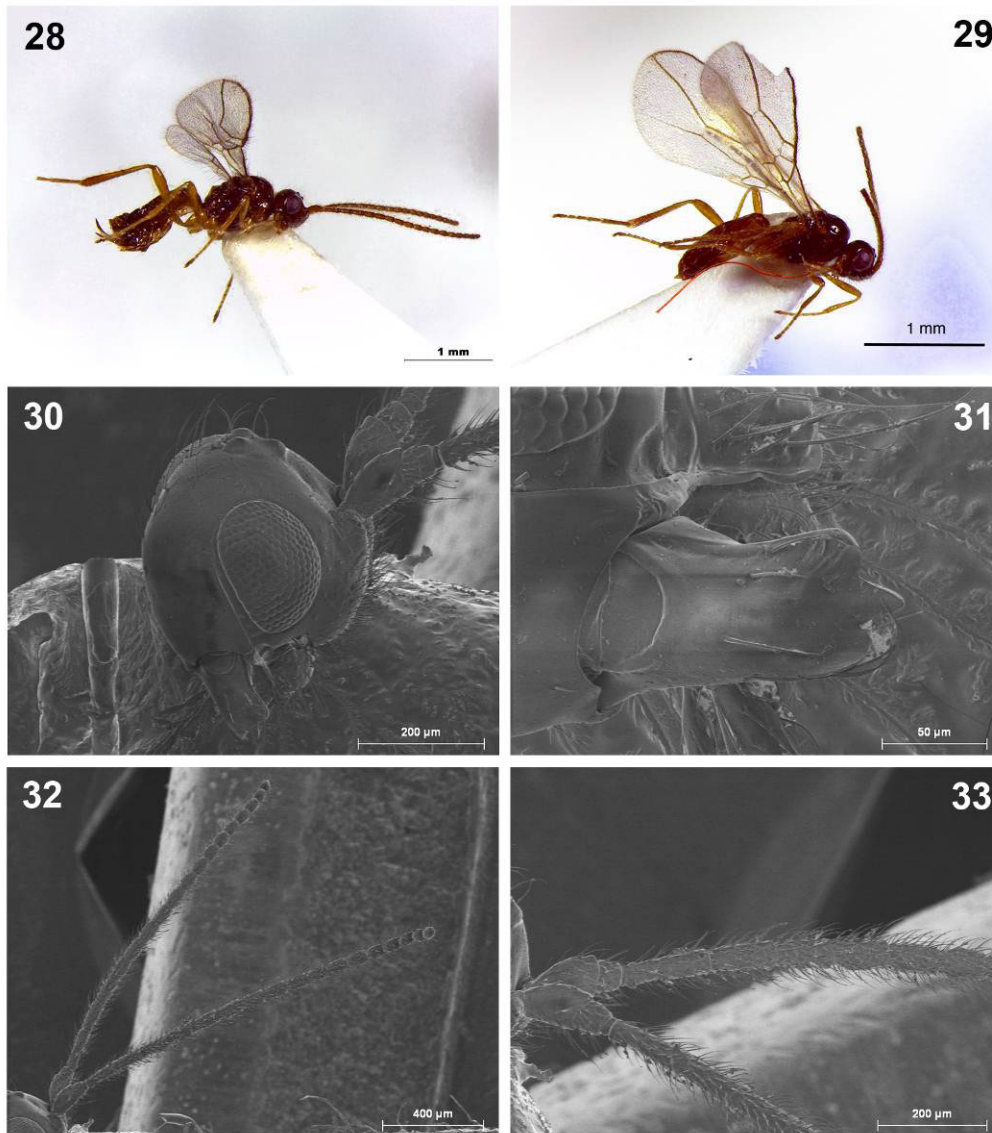
*Head* - In dorsal view, 1.50-1.60 times as wide as median length, 1.40 times as wide as mesoscutum, smooth, with rounded temples behind eye. Eye in lateral view 1.40-1.45 times as high as wide and 1.15-1.20 times as wide as temple. POL 3.00-3.05 times OD; OOL 2.75-2.80 times OD. Face 1.85-1.90 times as wide as high; inner margins of eyes subparallel. Clypeus 3.50 times as wide as high, slightly curved ventrally. Paraclypeal fovea elongate, reaching middle distance between clypeus and eye. Mandible not widened towards apex, 1.60 times as long as its maximum width. Upper tooth distinctly shorter, but as wide as base of middle tooth. Middle tooth the longest, wide basally and pointed apically. Lower tooth longer and wider than upper tooth. Antennae thick, 19-20-segmented, as long as body. Scape 4.35-4.40 times as long as pedicel. First flagellar segment 2.20-2.30 times as long as its apical width, 1.20-1.25 times as long as second segment; second segment 2.50 times as long as its maximum width. Third to eighth flagellar segments 2.00 times as long as their width, ninth to twelfth flagellar segments 1.85 times, thirteenth to fifteenth segments 1.25-1.30 times, sixteenth segment 0.90 times and seventeenth flagellar segment 1.25 times as long as wide.

*Mesosoma* - In lateral view, 1.20 times as long as high. Mesoscutum about as long as maximum width with two rows of couple setae. Notauli mainly absent. Mesoscutal pit present, rounded. Prescutellar depression smooth, without lateral carinae. Sternaulus (= precoxal suture) present very weakly, not reaching anterior and posterior parts of mesopleuron. Posterior mesopleural furrow smooth. Propodeum with median longitudinal carina continued from its anterior to posterior margins, with couple short carinae emerging from media carina not reaching the propodeal edges. Propodeal spiracles small.

*Legs* - Hind femur 4.00-4.10 times as long as wide. Hind tibia weakly widened towards apex, 8.65-8.70 times as long as its maximum subapical width, 1.50 times as long as hind tarsus. First segment of hind tarsus as long as second segment.

*Wings* - Length of fore wing 2.75-2.80 times its maximum width. Vein r1 present. Radial cell reaching to apex of wing, 4.45-4.50 times as long as its maximum width. Nervulus distinctly postfurcal. Brachial cell, closed, widened apically, 2.30-2.35 times as long as its maximum width. Hind wing 6.30-6.35 times as long as its maximum width.

*Metasoma* - Distinctly compressed. First tergite weakly widened towards apex, 1.40-1.45 times as long as its apical width, almost entirely smooth with some fine striation in apical half. Ovipositor 1.25-1.30 times as long as first tergite, shorter than metasoma, 0.75-0.80 times as long as hind femur.



**Figures 28-33.** *Dinotrema paquita* sp. nov. (28, 30-33 female; 29 male). **28-29.** Habitus, lateral view; **30.** Head, antero-lateral view; **31.** Mandible; **32.** Antenna; **33.** Basal segments of antenna.

*Colour* - Body and legs brown to dark brown. Wings hyaline. Pterostigma brown.

*Length* - Body 2.20-2.30 mm; fore wing 2.25-2.30 mm.

#### Male

Body length 2.15 mm, fore wing length 2.20 mm. First flagellar segment 3.80 times as long as its apical width, 1.10 times as long as second segment; second segment 2.90 times as long as its maximum width. Middle flagellar segments about 2.20 times as long as wide.

#### Type material

Holotype: female, Spain, Castellon Province, Poble de Benifassà, Natural Park of Tinença de Benifassà, 17.07.2006 (F.J. Peris-Felipo leg.) (ENV). Paratypes: 1 female, same label as in holotype, but 07.10.2004; 1

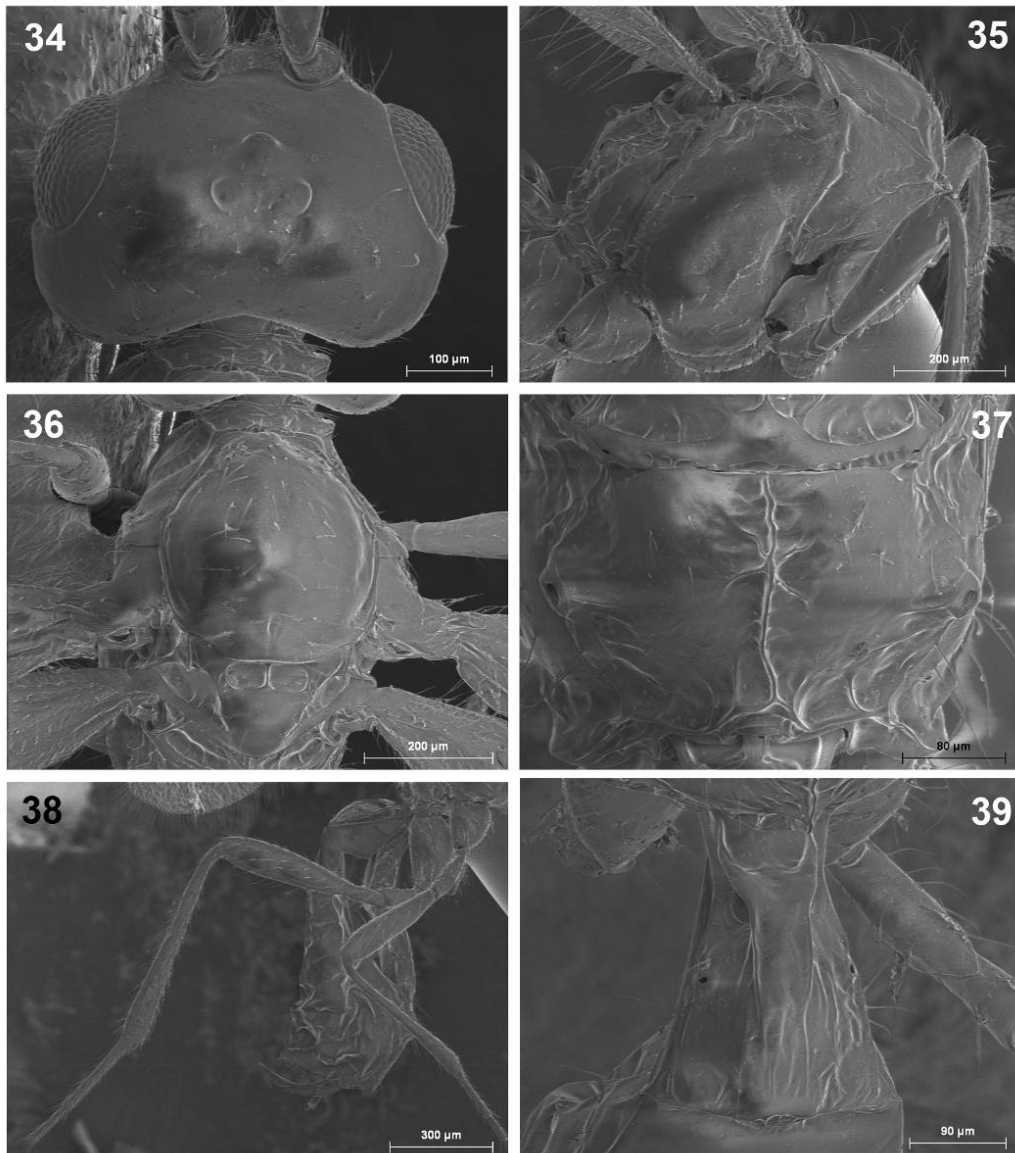
male, same label as in holotype, but 29.05.2006; 1 female, same label as in holotype, but 15.10.2007 (ENV).

#### Non-type material

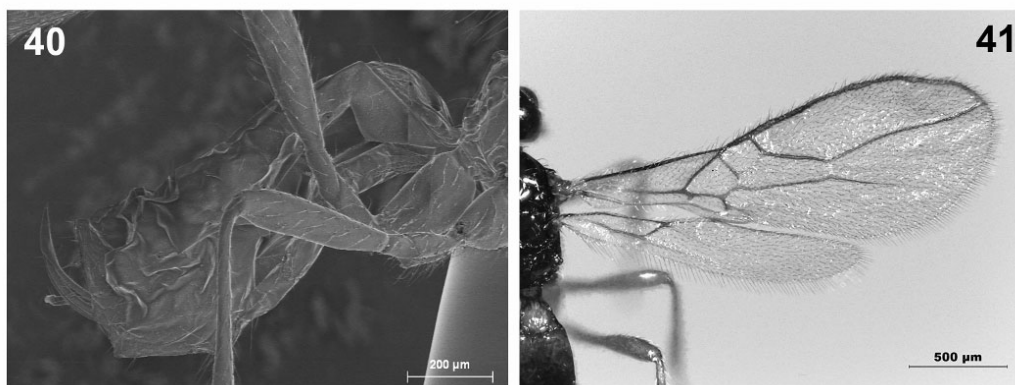
1 male, Spain, Alicante Province, Torrevieja, Natural Park of Las Lagunas de La Mata-Torrevieja, 30.11.2004 (F.J. Peris-Felipo leg.) (ENV).

#### Diagnosis

This new species resembles *D. divisum* (Stelfox et Graham 1950) but differs in having the first metasomal tergite 1.40-1.45 times as long as its apical width (1.60-1.65 in *D. divisum*), ovipositor shorter than metasoma (longer than metasoma in *D. divisum*), and prescutellar depression without lateral carinae (with lateral carinae in *D. divisum*).



**Figures 34-39.** *Dinotrema paquita* sp. nov. (female). **34.** Head, dorsal view; **35.** Mesosoma; **36.** Mesonotum; **37.** Propodeum; **38.** Hind leg; **39.** First metasomal tergite.



**Figures 40-41.** *Dinotrema paquita* sp. nov. (female). **40.** Metasoma and ovipositor; **41.** Fore and hind wings.



***Dinotrema pareum* Peris-Felipo, sp. nov.**  
(figures 42-54)

**Etymology**

Named is derived from Catalan “pare” meaning father because without his help I never could realized this study.

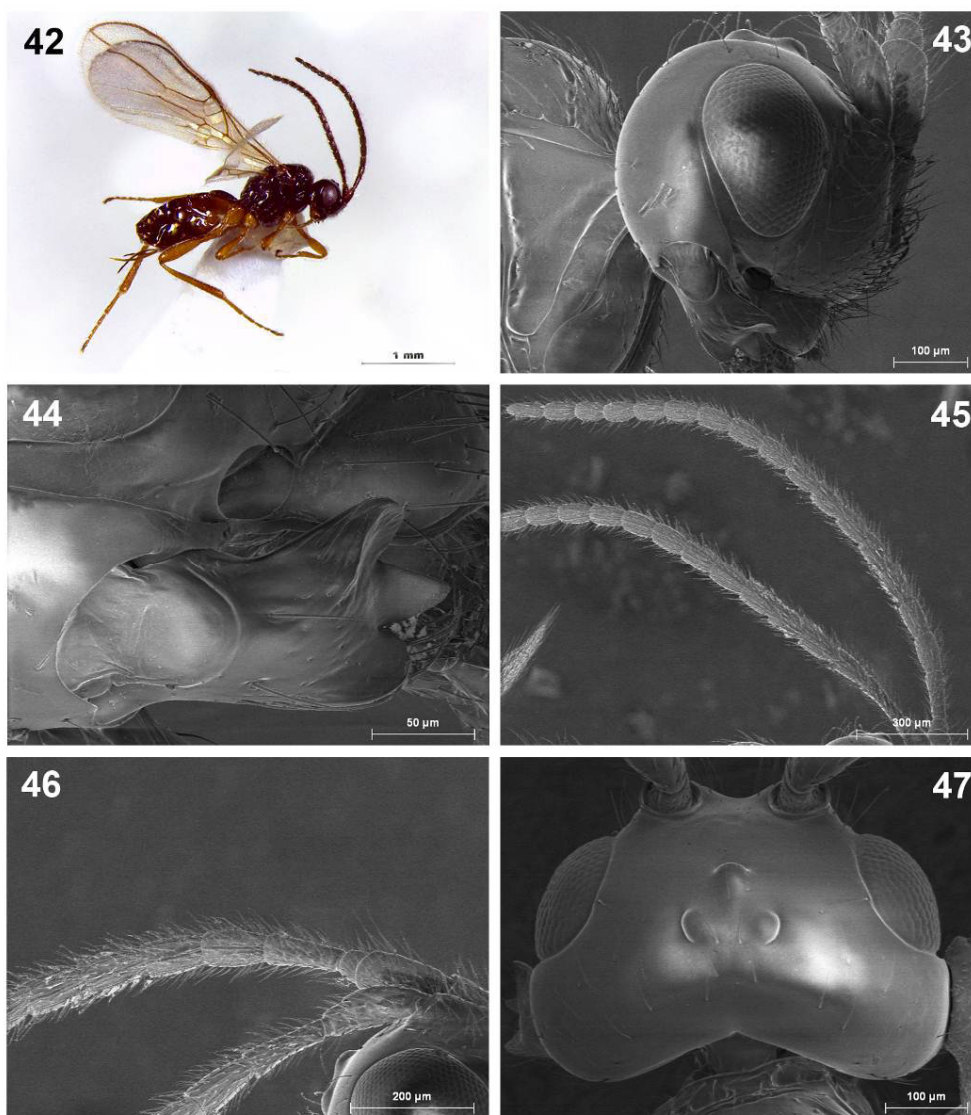
**Description**

**F e m a l e**

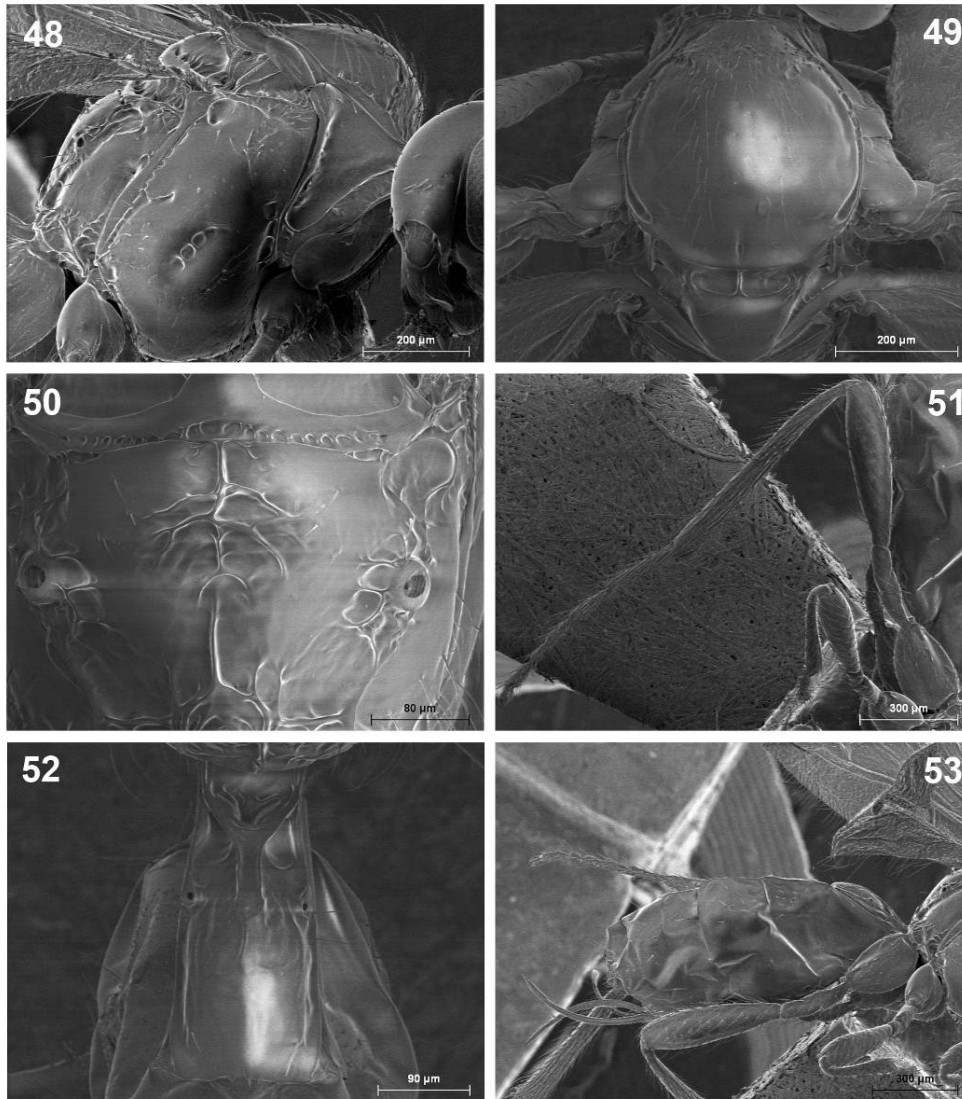
*Head* - In dorsal view, 1.80 times as wide as median length, 1.30-1.35 times as wide as mesoscutum, smooth, with rounded temples behind eye. Eye in lateral view 1.45-1.50 times as high as wide and 1.10-1.15 times as wide as temple. POL 3.15-3.20 times OD; OOL 3.00-3.05 times OD. Face 2.00 times as wide as high; inner margins of eyes subparallel. Clypeus 2.20 times as wide as high, slightly curved ventrally. Paraclypeal fovea elongate, reaching middle of distance between clypeus and eye. Mandible widened towards apex, 1.00-1.05 times as long as its maximum width. Upper tooth almost

as long as and about as wide as base of middle tooth. Middle tooth the longest, wide basally and pointed apically. Lower tooth rounded and longer and wider than upper tooth. Antennae thick, 19-segmented, shorter than body. Scape 2.80-2.85 times as long as pedicel. First flagellar segment 3.00 times as long as its apical width, 1.30 times as long as second segment; second segment 1.70 times as long as its maximum width. Third to sixteenth flagellar segments 1.40-1.50 times and seventeenth flagellar segments 2.30-2.35 times as long as their width correspondingly.

*Mesosoma* - In lateral view, 1.15-1.20 times as long as high. Mesoscutum as long as maximum width with two rows of couple setae. Notauli mainly absent. Mesoscutal pit present, thin and elongated. Prescutellar depression smooth, without lateral carinae. Sternaulus (= precoxal suture) present, not reaching anterior and posterior parts of mesopleuron. Posterior mesopleural furrow smooth. Propodeum with median longitudinal carina continued from its anterior to posterior margins, with small carinae



**Figures 42-47.** *Dinotrema pareum* sp. nov. (female). **42.** Habitus, lateral view; **43.** Head, antero-lateral view; **44.** Mandible; **45.** Antenna; **46.** Basal segments of antenna; **47.** Head, dorsal view.



**Figures 48-53.** *Dinotrema pareum* sp. nov. (female). **48.** Mesosoma; **49.** Mesonotum; **50.** Propodeum; **51.** Hind leg; **52.** First metasomal tergite; **53.** Metasoma and ovipositor.



**Figure 54.** *Dinotrema pareum* sp. nov. (female). Fore and hind wing.

emerging from median carina in the half anterior part not reaching the propodeal edges. Propodeal spiracles small.

*Legs* - Hind femur 3.75-3.80 times as long as wide. Hind tibia weakly widened towards apex, 10.30-10.40

times as long as its maximum subapical width, 1.00-1.05 times as long as hind tarsus. First segment of hind tarsus 1.60-1.70 times as long as second segment.

*Wings* - Length of fore wing 2.50-2.60 times its maximum width. Vein r1 present. Radial cell reaching to apex of wing, 4.50-4.55 times as long as its maximum width. Nervulus distinctly postfurcal. Brachial cell closed, widened apically, 2.50-2.55 times as long as its maximum width. Hind wing 4.80-4.90 times as long as its maximum width.

*Metasoma* - Distinctly compressed. First tergite weakly widened towards apex, 2.00 times as long as its apical width, entirely smooth. Ovipositor 1.60-1.65 times as long as first tergite, shorter than metasoma, as long as hind femur.

*Colour* - Body and legs brown to dark brown. Wings hyaline. Pterostigma brown.

*Length* - Body 2.20-2.30 mm; fore wing 2.50 mm.

**M a l e**

Unknown.

### Type material

Holotype: female, Spain, Castellon Province, Poble de Benifassà, Natural Park of Tinença de Benifassà, 17.04.2006 (F.J. Peris-Felipo leg.) (ENV). Paratypes: 1 female, same label as in holotype, but 31.10.2005; 1 female, same label as in holotype, but 26.02.2007; 1 female, same label as in holotype, but 19.03.2007; 1 female, same label as in holotype, but 16.04.2007; 1 female, same label as in holotype, but 23.04.2007 (F.J. Peris-Felipo leg.) (ZISP).

### Diagnosis

This new species resembles *D. vituperatum* (Fischer 1974) but differs in having the first flagellar segment 3.00 times as long as wide (3.60 times in *D. vituperatum*), middle flagellar segments 1.40-1.50 times as long as its width (2.50 times in *D. vituperatum*), mesosoma 1.15-1.20 times as long as high (1.40 times in *D. vituperatum*), and prescutellar depression without lateral carinae (with lateral carinae in *D. vituperatum*).

### *Dinotrema zimmermannae* Peris-Felipo, sp. nov. (figures 55-68)

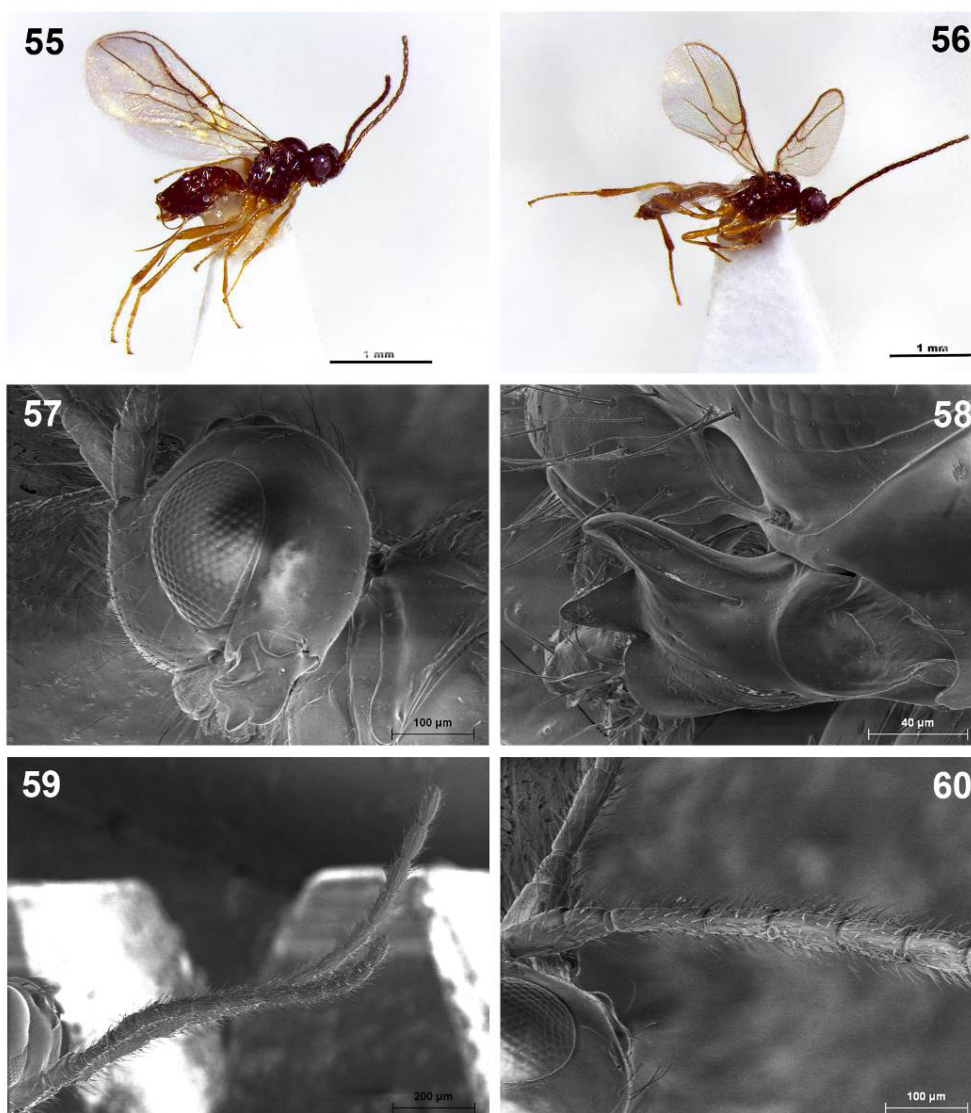
#### Etymology

Named in honour Ms. Dominique Zimmermann, curator of Hymenoptera collection in Naturhistorisches Museum (Wien, Austria) for her great help during our study of Alysiniinae.

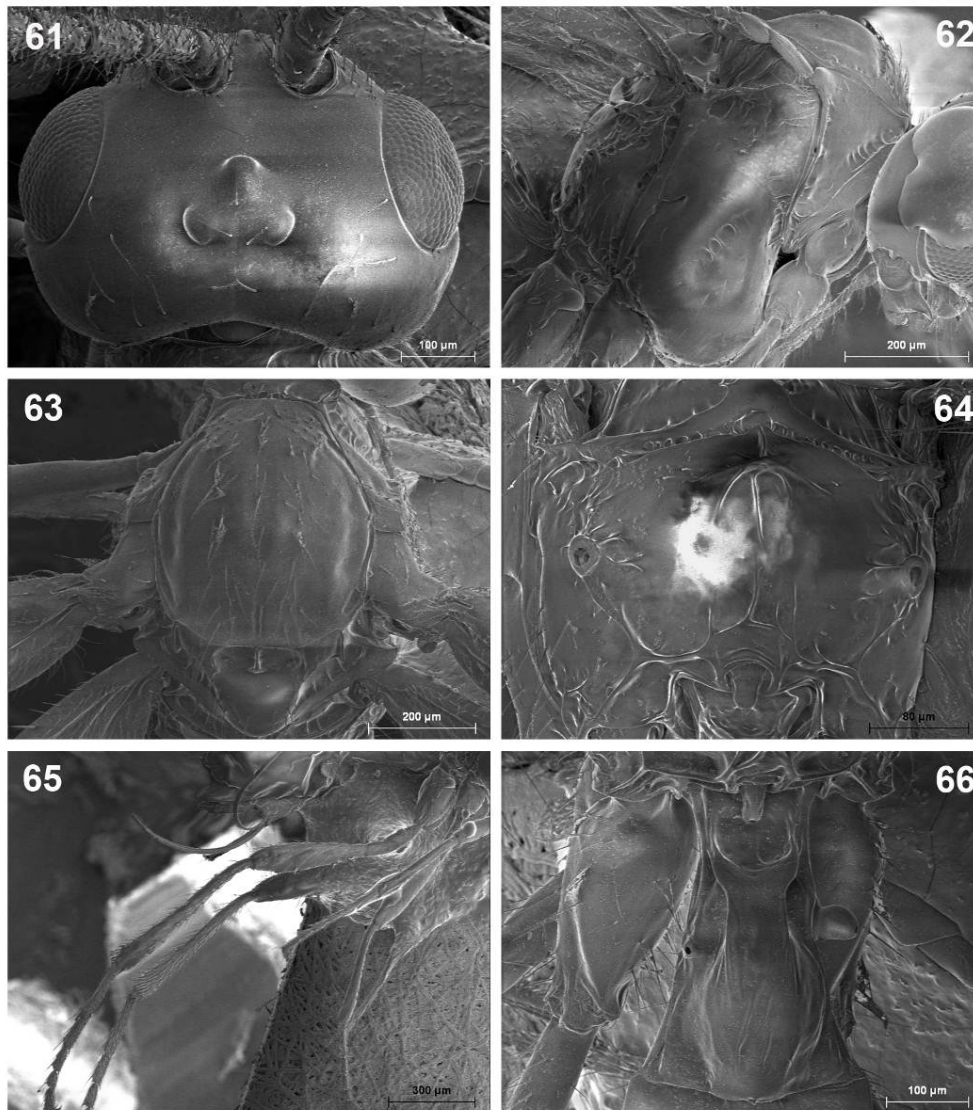
#### Description

##### Female

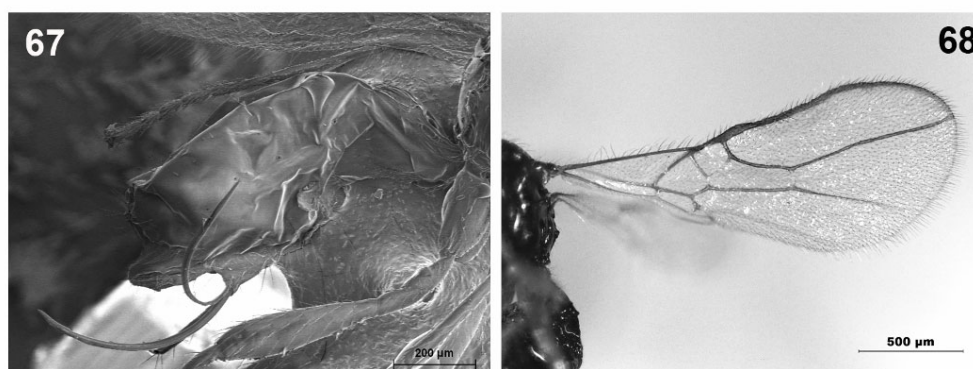
*Head* - In dorsal view, 1.70 times as wide as median length, 1.30 times as wide as mesoscutum, smooth, with rounded temples behind eye. Eye in lateral view 1.60-1.65 times as high as wide and 0.90 times as wide as temple. POL 2.80-2.85 times OD; OOL 2.45-2.50 times OD. Face 1.90 times as wide as high; inner margins of eyes subparallel. Clypeus 2.50 times as wide as high, slightly curved ventrally. Paraclypeal fovea elongate, reaching middle distance between clypeus and eye.



**Figures 55-60.** *Dinotrema zimmermannae* sp. nov. (55, 57-60 female; 56, male). **55-56.** Habitus, lateral view; **57.** Head, antero-lateral view; **58.** Mandible; **59.** Antenna; **60.** Basal segments of antenna.



**Figures 61-66.** *Dinotrema zimmermannae* sp. nov. (female). **61.** Head, dorsal view; **62.** Mesosoma; **63.** Mesonotum; **64.** Propodeum; **65.** Hind leg; **66.** First metasomal tergite.



**Figures 67-68.** *Dinotrema zimmermannae* sp. nov. (female). **67.** Metasoma and ovipositor; **68.** Fore wing.

Mandible widened towards apex, 1.00-1.05 times as long as its maximum width. Upper tooth almost as long as and as wide as base of middle tooth. Middle tooth the longest, wide basally and pointed apically. Lower tooth

rounded and shorter and wider than upper tooth. Antennae thick, 14-segmented, shorter than body. Scape 1.65-1.70 times as long as pedicel. First flagellar segment 3.80-4.00 times as long as its apical width, 1.40-1.50

times as long as second segment; second segment 2.50 times as long as its maximum width. Third to eleventh flagellar segments about 2.00 times and twelfth flagellar segment 2.40-2.50 as long as their maximum width correspondingly.

*Mesosoma* - In lateral view, 1.05-1.10 times as long as high. Mesoscutum 1.10-1.15 times as long as maximum width with three rows of couple setae. Notauli mainly absent. Mesoscutal pit present and elongate. Prescutellar depression smooth, without lateral carinae. Sternaulus (= precoxal suture) present, not reaching anterior and posterior parts of mesopleuron. Posterior mesopleural furrow smooth. Propodeum with incomplete median longitudinal carina with carinae emerging from medial carina not reaching with the propodeal edges. Propodeal spiracles relatively small.

*Legs* - Hind femur 4.00 times as long as wide. Hind tibia weakly widened towards apex, 8.50-8.60 times as long as its maximum subapical width, 1.05-1.10 times as long as hind tarsus. First segment of hind tarsus 1.15-1.20 times as long as second segment.

*Wings* - Length of fore wing 2.50-2.60 times its maximum width. Vein r1 present. Radial vein arising from the anterior part of pterostigma. Radial cell reaching to apex of wing, 4.30-4.40 times as long as its maximum width. Nervulus distinctly postfurcal. Brachial cell closed, widened apically, 3.10-3.15 times as long as its maximum width. Hind wing 7.10-7.20 times as long as its maximum width.

*Metasoma* - Distinctly compressed. First tergite weakly widened towards apex, 1.50 times as long as its apical width, almost smooth with fine striation. Ovipositor 2.00 times as long as first tergite, shorter than metasoma, 1.35-1.40 as long as hind femur.

*Colour* - Body and legs brown to dark brown. Wings hyaline. Pterostigma brown.

*Length* - Body 1.90-2.00 mm; fore wing 2.00-2.10 mm.

#### Male

Body length 2.20 mm, fore wing length 2.20 mm. Middle flagellar segments 2.10-2.20 times as long their maximum width.

#### Type material

Holotype: female, Spain, Alicante Province, Alcoi, Natural Park of Carrascal de La Font Roja, 18.06.2007 (F.J. Peris-Felipo leg.) (ENV). Paratypes: 1 female, Spain, Castellon Province, Pobla de Benifassà, Natural Park of Tinença de Benifassà, 17.07.2006 (ENV); 1 male, same label, but 06.11.2006 (ENV); 1 female, same label, but 16.04.2007 (ZISP); 1 male, same label, but 23.07.2007 (F.J. Peris-Felipo leg.) (ENV).

#### Diagnosis

This new species resembles *D. sylvestre* Tobias 2003 but differs in having the prescutellar pit present and elongate (prescutellar pit absent in *D. sylvestre*), first flagellar segment 3.80-4.00 times as long as wide (3.50 times in *D. sylvestre*), and the first flagellar segment 1.40-1.50 times as long as second segment (first segment as long as second in *D. sylvestre*).

#### Acknowledgements

We wish to thank the staff of Natural Park of Carrascal de La Font Roja, Natural Park of Las Lagunas de La Mata-Torreveija and Natural park of La Tinença de Benifassà for their help during this study. Also, we would like to thank all of those who have offered their support, time and advice. This work was funded by the research project CGL-2004-02711 and co-funded by the Ministry of Science and Technology and the European Union (European Regional Development Fund).

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Received October 3, 2012. Accepted February 11, 2013.