NOTES ON IBERIAN DYSDERIDAE. THREE NEW SPECIES BELONGING TO THE GENUS *DYSDERA*, LATREILLE 1804 (ARANEAE)

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Three new species of the genus *Dysdera* Latreille 1804, belonging to the Iberian fauna, are described. *Dysdera gamarrae* from the centre and south of the Peninsula, *D. fisterrana* from the Galician region and *D. presai* from the Spanish Mediterranean coast. The copulatory organs from both males and females are illustrated and comments are made on their possible affinities.

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INTRODUCTION

Following the same line of research that we have been carring out during the last few years on the Iberian Dysderidae, three new species belonging to the genus *Dysdera* are described in this work. This genus is showing a high diversity whithin the Iberian Peninsula and a lot of research remains to be done since not only the new species have to be described but also their distribution studied.

In FERRÁNDEZ (in press) there is a detailed analysis of the actual knowledge of the Iberian *Dysderidae*.

Most of the specimens, have bean captured under stones, whenever the material has been catched by another method this is detailed behind its locality.

At the last part of this work there is an appendix with a list of the UTM coordenates of the sample localities.

The studied material remains stored in the Enthomology Department of the Universidad Complutense de Madrid, with reference numbers given in brackets.

Table 1. Measurements (in mm) of *Dysdera gamarrae* n. sp.

	Pros. length	Pros. width	Opist. length	Total length
Holotype	3.00	2.32	3.52	6.52
Paratype 1	3.04	2.64	4.60	7.64
Paratype 2	3.04	2.56	3.80	6.84
Paratype 3	2.16	1.92	3.12	5.28
Paratype 4	2.28	1,80	3.48	5.76
Paratype 5	3.00	2.36	3.56	6.56
Paratype 6	3.00	2.28	3.40	6.40
Paratype 7	2.80	2.28	3.60	6.20
Paratype 8	2.85	2.24	4.00	6.85

DESCRIPTION OF THE SPECIES

Dysdera gamarrae n. sp

Material studied.

Holotype: 1♂, El Paular (Madrid), 3-12-1980, P. Gamarra Leg (Berlese extraction from descomposing elm-tree trunk sample) (nº 1310 D).

Paratypes: 1♀, El Paular (Madrid), 16-1-1980, P. Gamarra Leg (Berlese extraction from descomposing elm-tree trunk sample) (nº 1311 D); 1♂, Alpedrete (Madrid), 7-12-1973, S. Perez-Minocci Leg (nº 1034 D); 1♂, "El Encin" Farm. Meco (Madrid), 13-6-1980, P. Castañeda Leg (Pitfall in wheatfield) (nº 1312 D); 1♂, "El Encin" Farm. Meco (Madrid), 28-3-1980, P. Castañeda Leg

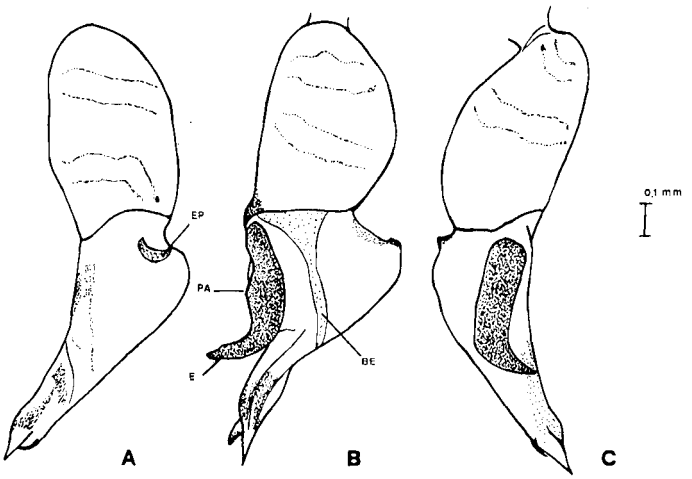

Fig. 1. Right Bulb from *Dysdera gamarrae* n. sp (Holotype) X 120: A. External view; B. Ventral view; C. Inner view.

(Pitfall in wheatfield) (nº 1313 D); 1♂, Conil (Cadiz), M. A. Ferrández Leg (nº 1309 D); 1♂, Miraflores (Madrid), 20-5-1981, R. Outerelo Leg (Forest of *Querpus pyrenaica*) (nº 1330 D); 1♂, Valdemanco (Madrid), 8-7-1981, M. A. Ferrandez Leg (nº 1335 D); 1♂, Ocaña (Toledo), ?-4-1980, J. Gomez Elvira Leg (nº 1235 D).

Description.

Prosoma: Coloration dark reddish. Sternum and ocular disposition typical of the genus. Maxillae typical and white-tinged at the apex. Chelicerae granulated in the dorsal side and provided with 4 teeth, the lowest being keel-shaped (Table 1).

Table 2. Spination of *Dysdera gamarrae*.

IV Femur	Right	Left
Holotype	2	2
Paratype 1	2	2
Paratype 2	1-1	1
Paratype 3	2	1
Paratype 4	2	1
Paratype 5	1	0
Paratype 6	1-1	1
Paratype 7	1-1	1
Paratype 8	1	2

Spination: As *Dysdera crocata* C. L. Koch 1839 there is a couple of parallel spines in a superodorsal position, in the femur IV. The other three are spineless. There is, as in *D. crocata*, great variability in this feature: sometimes there are two spines, one after the other, instead of being parallel as is the case of paratypes 2,6 and 7 (Table 2).

Bulb: What is most characteristic in *D. gamarrae* bulb is that the anterior sclerotized plate (PA) shows a strong spur (E), clearly visible both from an inner and a ventral view (Fig. 1 B and C) but hidden in external view so that the individual may be confused with *D. crocata*. Another important feature is the existance of a thin chitinized band (BE), joining the basal capsule with the apical portion, well seen from a ventral view. Lastly, the posterior sclerite is little, as usual in this genus.

Vulva: Characterised by the shape of the valves (fig. 2 A and B). Posterodorsal valve yoke-shaped, remarkably wider in its middle portion. Anteroventral valve polygon-shaped and provided with a widening close to its insertion with anterior receptaculum which is short and thick. All of these characters help separate clearly this new species from *D. crocata* for which it could be taken as a result of its external apperance.

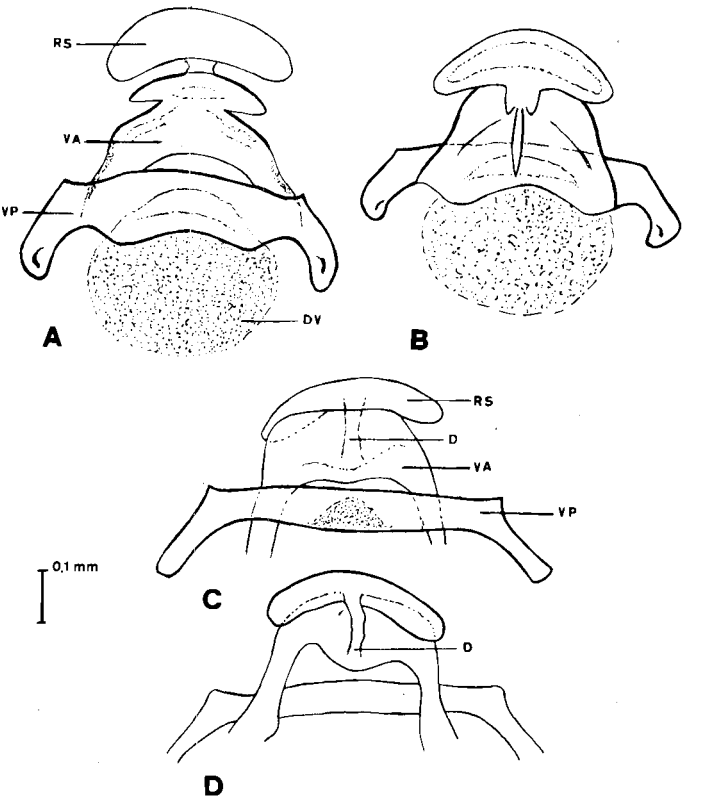

Fig. 2. Vulvas from *Dysdera gamarrae* and *Dysdera fisterrana* n. spp X 120: A. Vulva from *D. gamarrae* n. sp ventral view (Paratype nº 1); B. Vulva from *D. gamarrae* dorsal view; C. Vulva from *D. fisterrana* ventral view (Paratiype nº 2); D. Vulva from *D. fisterrana* dorsal view.

Name origin.
I dedicate the present species to my Departament companion Purificación Gamarra, so as to show her my thakfulness not so much for the plentiful material supplied but for her friendship.

Affinities.
This species looks very much the some as *Dysdera seclusa* Denis 1961 for showing in its anterior sclerotized plate, a spur more hooked than that of *D. gamarrae* as well as a sclerotized strip joining the basal capsule with the apex. This sclerotized strip in *D. gamarrae* becomes thicker in the portion corresponding to the basal capsule, unlike *D. seclusa.* This species can be easily distinghished at first sight from *D. seclusa*, because of the shape of the posterior sclerite (EP) being different (fig. 2 A), the existance of a flagellun in its apex, and the presence of the spur, whose origin is in the anterior sclerotized plate (PA).

Habitat.
The distribution of this species seems to be very widespread in the province of Madrid and it is found in very different vegetation: woodlands of *Querqus pyrenaica*, places of *Cystus ladaniferus* (Valdemanco), ripicolous places with vegetation of elm-trees and even disturb places for the human action, for example wheatfields (Meco) and suburbs (Conil).

Dysdera fisterrana n. sp

Material studied.
Holotype: 1♂, Estorde Beach (La Coruña),

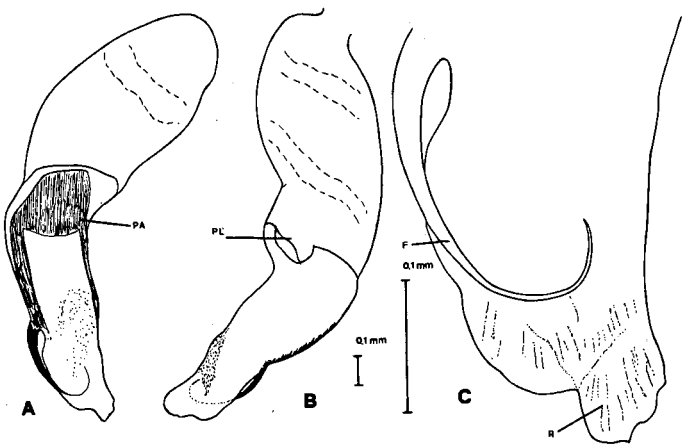

Fig. 3. Right Bulb from *Dysdera fisterrana* n. sp (Holotype) X 120; A. External view; B. Ventral view; C. Inner view.

5-4-1977, M.A. Ferrández Leg (Forest of *Pinus pinaster)* (nº 1039 D).
Paratypes: 1♂, Cabo Vilano Lighthouse (La Coruña), 27-8-1980, M.A. Ferrández Leg (nº 1234 D); 1♀, Lires Beach (La Coruña), 23-8-1980, M.A. Ferrández Leg (nº 1197 D); 1♀, Estorde Beach (La Coruña), 23-8-1980, M.A. Ferrández Leg (Forest of *Pinus pinaster*) (nº 1198 D); 1♀, Punta de Sardiñeiro, Sardiñeiro (La Coruña), 27-8-1980, M.A. Ferrández Leg (Forest of *Pinus pinaster*) (nº 1203 D); 1♀, Cabo Vilano Lighthouse (La Coruña), 27-8-1980, M.A. Ferrández Leg (nº 1204 D); 1♀, Rostro Beach. Finisterre (La Coruña), 23-8-1980, M.A. Ferrández Leg (nº 1205 D).

Description.
Prosoma: Coloration reddish. Maxillae typical. Chelicerae with granulation on their dorsal side and pilosity on the inner portion, furnished with 4 teeth the lowest of which is keel-shaped. Both ocular disposition and shape of sternum are typical (Table 3).
Spination: Only the 4th pair of femora showing spines: a couple of parallel spines on the superodorsal side. The spination is equivalent to that found in *D. crocata* and *D. gamarrae* and, like them, displays great variability (Table 4).
Bulb: Bulb remerkably elongated (fig. 3), the basal portion being shorter than the distal one. The apex of the latter is mostly membranose and, greatly magnified, shows a number of radia (R) more or less distinct (fig. 3 C). The apex also shows a long stylum (F), straight in the base and later on looping at the middle of its length The anterior sclerotized plate (PA) reduced to the upper side in the vicinity of the basal capsule, and

Table 3. Measurements (in mm) of *Dysdera fisterrana* n. sp.

	Pros. length	Pros. width	Opist. length	Total length
Holotype	3.32	2.88	3.86	7.18
Paratype 1	3.36	2.76	3.33	6.89
Paratype 2	4.60	3.75	–	–
Paratype 3	4.85	3.95	–	–
Paratype 4	4.05	3.25	–	–
Paratype 5	3.75	3.25	4.85	8.60
Paratype 6	3.85	3.10	–	–

Table 4. Spination of *Dysdera fisterrana.*

IV Femur	Right	Left
Holotype	2-1	2
Paratype 1	1	2
Paratype 2	1	1
Paratype 3	1	2
Paratype 4	1	1
Paratype 5	2	2
Paratype 6	2-1	2

out of it two thin lateral branches depart. The bulb of *D. fisterrana* lacks a posterior sclerite. The basal capsule shows little plate-shaped projection (PL) on the inner side.

Vulva: The vulva of *D. fisterrana* (fig. 2 C and D) resembles gratly that of *D. crocata*, and differs from it in that it shows a great length of the duct (D) joining the anteroventral valve (VA) with the seminal receptacle (RS) and besides, the mentioned conduct starts in the ventral side of the anterior valve; in *D. crocata*, on the contrary, the duct is short and does not start in the ventral side but is only a lengthening of the anterior valve. As to the posterodorsal valve (VP), it is a single transversal bar with a posterior prolongation at each and of it. This posterodorsal valve is very similar to that of *D. crocata* and can be told from it because the above mentioned valve is longer compared with the anteroventral valve.

Opistosoma: Shows both coloration and pilosity typical of the genus.

Name origin.

The specific name refers to Fisterra, Galician name for the areas where the specimens were collected from, tantamount to Latin Finisterrae and Spanish Finisterre.

Affinities.

It is our opinion that *D. finisterrana* n. sp. is related to *D. flagellifera* Caporiacco 1948 and *D. flagellata* Grasshoff 1954 for showing flagellum or stylum in the apex of the bulb. There is a great need of thorough studies concerning the genus *Dysdera*, so as to find affinities among its species, and carry out critical analyses of the structures of male and female genitalia. It becomes really hard to make a decision on their relationship. A pioneering work on this subject, is by ALICATA (1964a, 1964b). It is interesting to point out that, mainly due to the "Haplogynae" character of this genus, in former works no attention was paid to the female vulva: that is the case of works of SIMON (1882, 1911). For that reason, it becomes impossible to determine sparse females. In works of recent author, such as GRASSHOFF (1959) and ALICATA (1964a, 1965, 1966), comments and figures on the valve are repeatedly included as indispensable when describing new species.

Habitat.

All the specimens of this species have been collected in the coast of Spanish Finisterre, where the vegetation is formed by *Pinus pinaster* or (like the case of Cabo Vilano and Lires Beach) by *Ulex europea.* In some places, *D. fisterrana* has been found together with *D. crocata*, the cosmopolitan species of this genus.

Dysdera presai n. sp

Material studied.

Holotype: 1♂, Isla Grosa. La Manga (Murcia), 3-1-1980, J. J. Presa Leg. Berlese extraction from a sample from *Whitania frutescens* (nº 1037 D).

Description.

Prosoma: Coloration, maxillae and esternum typical. Chelicerae moderately long, with a fine granulation, more or less uniform, along their dorsal side, furnished with thin teeth and showing abundant pilosity both on their dorsal side and the inner region of the ventral side. Prosoma length 3.6 mm, Prosoma widt 2.9 mm, Opistosoma length 4,3 mm and Total length 7.9 mm.

Spination: Contrary to what is usual in this genus, the present species shows spines on the dorsal faces of the femora in all of the leg pairs. Femora I and II, only one superodorsal spine, in the femur III, 3 spines in a row can be seen following the axis of the leg and, lastly femur IV show a couple of parallel superobasal spines and another superomedial one (spination was identical in both, right and left legs of the studied individual).

Bulb: The bulb is extremely simple as usual

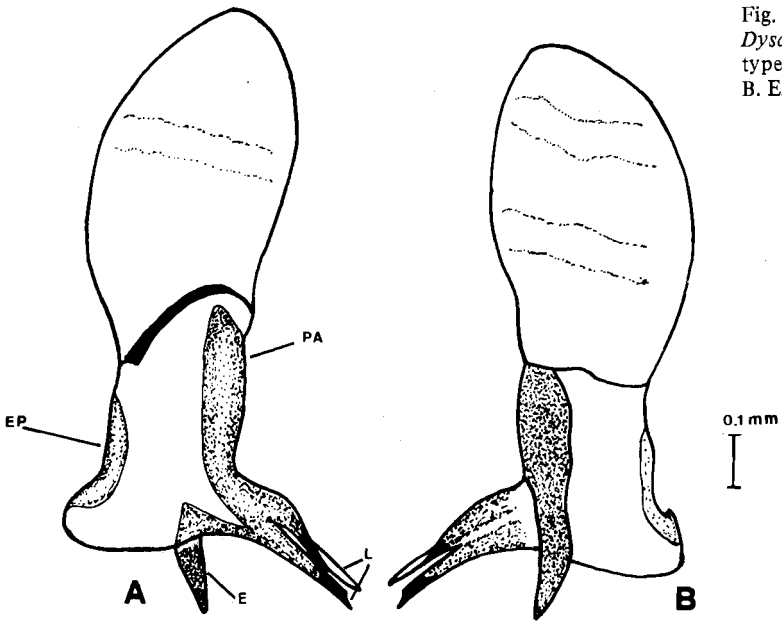

Fig. 4. Rigth Bulb from *Dysdera presai* n. sp (Holotype) X 120: A. Inner view; B. External view.

in the genus (fig. 4) elongated showing in the apex a couple of laminae (L) resembling a bird's beak: the lower one straight, and the upper one bent half a round on itself.

It must be noticed a strong spur-shaped appendix (E), in a ventral position, which is a projection of the anterior sclerotized plate (PA) along the inner side of the bulb. Finally, the bulb also shows as well developed posterior sclerite (EP) which, in its inferior side, tapers into a hook.

Opistosoma: Whitish coloured short and uniform pilosity.

Name origin.

I dedicate this new species to my companion J.J. Presa, for his kindliness in providing me with material from the province or Murcia.

Affinities.

According to the mentioned features, the bulb differs remarkably from the rest of the known species of the genus. Its spination is also different, since only few *Dysdera* species show spines in all the femora and, out of these few species (only mostly from North Africa), none shows neither identical spination nor similar bulb. For the moment it is impossible to associate *D. presai* n. sp with any other *Dysdera* species. Table 5 from DENIS (1961) and ALICATA (1966) shows the spination of known *Dysdera* species in all femora, the four femora and none coincide with *D. presai.*

Table 5. Spination of the species related to *Dysdera presai* n. sp.

Femora	I	II	III	IV
D.snassenica Simon 1911	1 or 2	1	1 or 2	1 or 2
D.praepostega Denis 1961	2	2	2	1-4
D.atlantea Denis 1954	2	1	1-2	2-5
D.ravida Simon 1909	1	1	1-1-1	1-4
D.atlantica Simon 1909	2 or 3	1 or 2	1-1-1	1-4
D.andreinnii Alicata 1964	1-2	0-2	0-1	1-2
D.anpeninica ssp aprutiana Alicata 1964	0-(1)	0-(1)	(1)	1-4

Habitat.

The only know specimen comes from a soil sample with vegetation of *Whitania frutescens.* It is surprising that it has only been found on one small island loss that one Km^2 and very near to the coast of Murcia.

APPENDIX (UTM Coordenates of the sample localities)

Province of Cádiz:
- Conil. 29SQA1962

Province of La Coruña:
- Cabo Vilano Lighthouse. 29TMH7883
- Estorde Beach. 29TMH5482
- Lires Beach. 29TMH6079
- Punta de Sardiñeiro. 29TMH5381
- Rostro Beach. 29TMH5377

Province of Madrid:
- Alpedrete. 30TVL0014
- "El Encin" Farm. Meco. 30TVK8675
- El Paular. 30TVL2625
- Miraflores. 30TVL1835
- Valdemanco. 30TVL2544

Province of Murcia:
- Isla Grosa. 30SYG7802

Province of Toledo:
- Ocaña. 30SVK2458

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RESUMEN

Notas sobre Disdéridos ibéricos. Tres nuevas especies del género Dysdera, *Latreille 1804 (Araneae).* En este trabajo se describen tres nuevas especies del género *Dysdera* Latreille 1804, pertenecientes a la fauna Ibérica. *D. gamarrae* del centro y sur de la Península Ibérica, *D. fisterrana* de la región gallega y *D. presai* de la costa mediterránea de España. Los órganos copuladores de machos y hembras están ilustrados y se comentan sus posibles afinidades.

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