

A new species of *Coriarachne* from Spain (Araneae, Thomisidae)

by R. JOCQUÉ

Summary

A new species of *Coriarachne* THORELL 1870 is described from the region of the Coto Doña National Park in southwestern Spain. *C. fienae* n. sp. differs from *C. depressa*, the only other European representative of the genus by somatic characters (leg formula, flat carapace) and characters of the secondary genitalia.

Key words: Araneae, Thomisidae, *Coriarachne fienae* n. sp., bark.

Resumen

Se describe una nueva especie del género *Coriarachne* THORELL, 1870, de la comarca del Parque Nacional del Coto Doña en el sudoeste de España. *C. fienae* n. sp. se diferencia de *C. depressa*, la sola otra especie del género en Europa, por características somáticas (la fórmula de las patas, el prosoma muy plano) y por características de los órganos copulatorios. **Palabras clave:** Araneae, Thomisidae, *Coriarachne fienae* n. sp., corteza.

Introduction

Representatives of the genus *Coriarachne* THORELL, 1870, are typical crab spiders (Thomisidae) closely related to *Xysticus* C. L. KOCH, 1835, and *Bassaniana* STRAND, 1928. Together with these two and several other genera they belong in the underfamily Thomisinae. They are particularly well characterized by their flat habitus which is an obvious adaptation to their life under bark. The genus has a holarctic distribution. According to ONO (1988), six species have been described in the genus from which only one, *Coriarachne depressa* (C. L. KOCH, 1837), occurs in Europe. A second species, *C. versicolor* KEYSERLING, 1880, now in *Bassaniana* (ONO, 1985) was recorded once in France (SIMON, 1932) but never found back since then.

During field work in southwestern Spain (see ALBERWEIRELDT & JOCQUÉ, 1991) in the neighbourhood of the Coto Doña National Park, west of Sevilla, I found an unknown species of *Coriarachne* living under bark of *Pinus pinea*.

All the type material is deposited in the Koninklijk Belgisch Instituut voor Natuurwetenschappen in Brussels (KBIN).

The format of the description and the abbreviations used in it, follow JOCQUÉ (1991). All measurements are in mm.

Coriarachne fienae new species
(fig. 1-3)

Type material

Male holotype: Spain, Andalucia, Almonte, 5 km SW, direction El Rocio, *Pinus pinea* woodland, 12.IV.1990, R. & J. JOCQUÉ (KBIN).

Paratypes: 1 ♀, 2 immatures: together with holotype; 1 ♂, 9 immatures: 8.IV.1991, further as holotype; 1 ♂: Spain, Andalucia, Coto Doña National Park, control Road, 3.7 km south of main gate, 6.IV.1991, R. JOCQUÉ.

Diagnosis

C. fienae is easily recognized by the secondary genitalia: the male palpal tibia has a large ventrolateral apophysis of which the ventral part curved forward and inward provided with a basoventral pointed boss; the tutaculum of the cymbium is small and situated near the base; the embolus makes an entire loop and is smoothly tapering towards the tip. The female epigyne has an indented lip near the anterior margin.

Remarks

The only other European representative of the genus *Coriarachne*, *C. depressa* (C. L. KOCH, 1837) is quite different from the species that is here described. It is less flat, and the sexual dimorphism is much less pronounced than in *C. fienae*. In that species the female is much larger than the male and the sexes have a quite different spination and coloration. *C. depressa* has a leg formula 2134, whereas it is 1234 in the new species. The number of teeth on the superior tarsal claws is lower in *C. fienae* (♂: 3321 ♀: 4433) than in *C. depressa* (♂: ♀: 5544). The most reliable differences are in the secondary genitalia: In *C. depressa* (figs. 4-6) the ventral tibial apophysis lacks the

basoventral boss as well as the lateral ridge; the tutaculum of the cymbium is much larger and situated near the distal margin whereas the embolus is widened just in front of the sinuous tip. The epigyne of *C. depressa* lacks the indented frontal lip which is typical for the female of *C. fienae*.

It is clear from Ono's papers (1978, 1988) that the taxonomy of the genera around *Xysticus* is still problematic. The author (Ono, 1978: 285) proposes a splitting of *Xysticus* into four genera but does not use them in the paper itself and keeps the new taxa in the main genus although they serve as examples for the new divisions. In a later paper (Ono 1988: 78) the names are regarded as synonyms of *Xysticus*. As the present paper is not meant to take decisions in this matter I prefer to put the new taxon in *Coriarachne* rather than in *Xysticus* which does not contain extremely flattened species so far.

Etymology

The species is named after my daughter Jozefien who attracted my attention to the presence of this thomisid while I was in search for soil dwelling spiders.

Description

Male (measurements of paratype males in brackets): Total length 3.31, carapace 1.64 long, 1.69 wide. Colour: carapace, chelicerae and femora dark brown, almost black in living spider, mottled with white; sternum dark brown; patellae and tibiae dark brown, metatarsi medium brown, all with some white spots, tarsi uniform paler brown; dorsum of abdomen black, densely mottled with white; venter dark grey; sparsely mottled with white. Carapace extremely flat (0.36, against ± 0.62 for σ *C. depressa* of similar length), with some short stiff setae; eyes small; AME 0.08, ALE 0.16, PME 0.05; PLE 0.10; AME-AME 0.18; AME-ALE 0.16; PME-PME 0.23; PME-PLE 0.28; PLE-ALE 0.15; MOQ: anterior width 0.35, posterior width 0.35, length 0.26.

Legs. Formula 1234.

Measurements

	F	P	T	Mt	t	Tot
I	1.77	0.72	1.26	1.17	0.60	5.52
II	1.69	0.72	1.24	1.09	0.56	5.30
III	1.19	0.45	0.82	0.64	0.39	3.49
IV	1.03	0.43	0.82	0.68	0.43	3.39

Spination

	F	P	T	Mt
I	pl3d3*	—	v2-2-2	v2-2-2-2r11
II	d3*	—	v2-2-2	v2-2-2r11
III	d2*	—	d1r1lv2	v2
IV	d2*	—	d1r11	—

Number of teeth on superior tarsal claws rather low: 4, 3, 3, 2. Male palp (figs. 1 - 2): tibia with two apophyses; ventrolateral one large with inferior part curved down and inwards and provided with a well developed pointed ventral boss; superior part a large longitudinal lamellar ridge; dorsolateral one triangular as seen from the side, pointed and curved forwards in ventral view. Cymbium with small tutaculum (sensu ONO 1988, 14) near base. Embolus describing an entire loop, gradually tapering towards tip. Centre of tegulum with sclerotized knob.

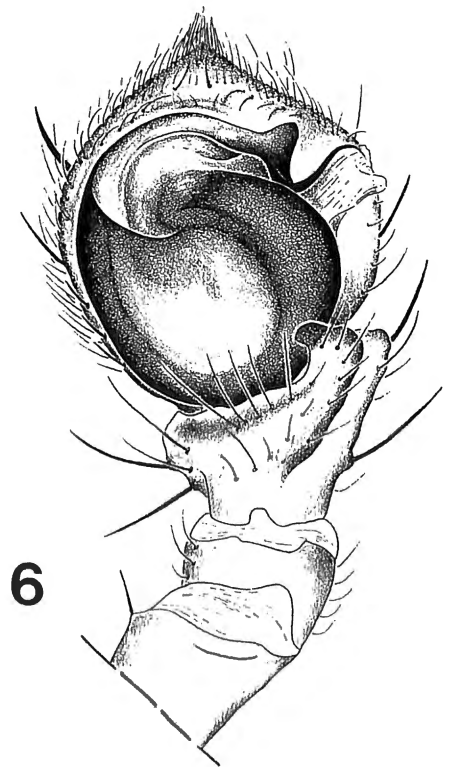
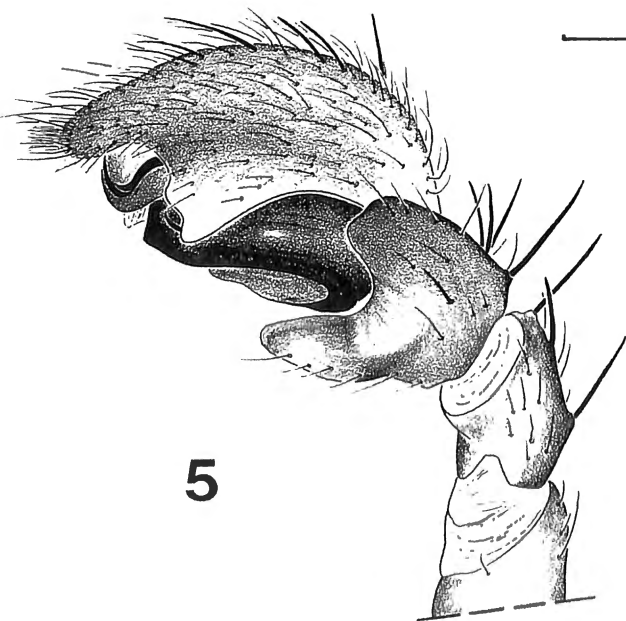
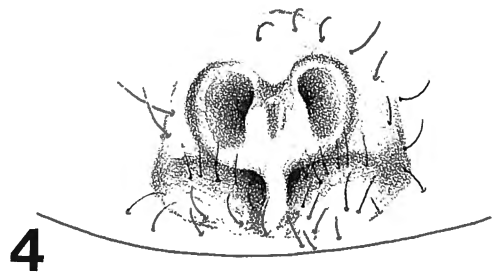
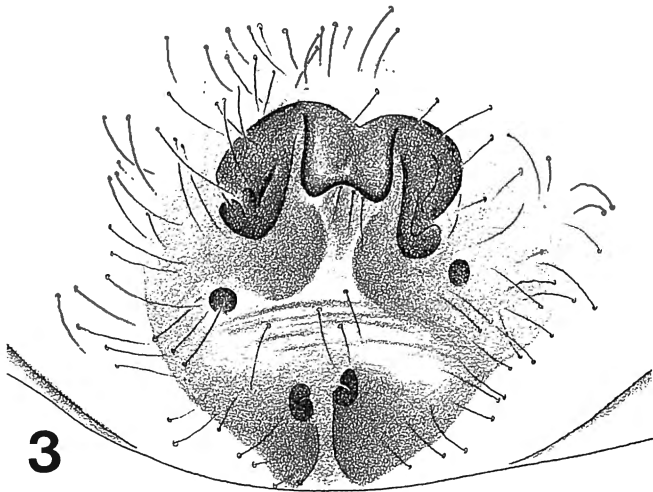
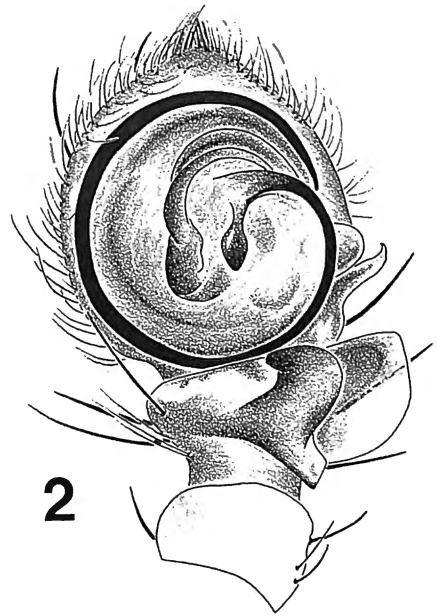
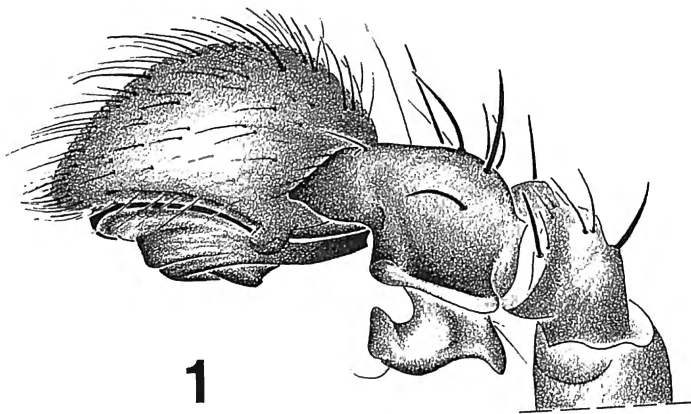
Female:

Total length 6.39; carapace 2.77 long, 2.98 wide. Colour: colour pattern basically as in male but paler all over; an important difference is the presence of a white rim on the carapace.

Carapace flat (0.45) with some short stiff setae; eyes small; AME 0.11, ALE 0.19, PME 0.08; PLE 0.14; AME-AME 0.32; AME-ALE 0.21; PME-PME 0.38; PME-PLE 0.34; PLE-ALE 0.25; MOQ: anterior width 0.53, posterior width 0.55, length 0.34.

Legs. Formula 1234.

Figs 1-3 — *Coriarachne fienae* n. sp. 1. male palp, lateral view. 2. male palp, ventral view. 3. epigyne, ventral view. Figs. 4-6. *Coriarachne depressa* THORELL (specimen from Belgium, Bree) 4. epigyne, ventral view. 5. male palp, lateral view. 6. male palp, ventral view. (scale: 0.5 mm)



Measurements

	F	P	T	Mt	t	Tot
I	2.81	1.32	1.79	1.62	0.85	8.39
II	2.81	1.23	1.83	1.53	0.77	8.17
III	1.92	0.85	1.23	0.98	0.55	5.53
IV	1.74	0.50	1.32	1.02	0.64	5.22

Spination

	F	P	T	Mt
I	pl4*	—	v2-2-2-2	pl2*v2-2-2-2r13
II	d1	—	v2-2-2-2	pl2*v2-2-2-2r13
III	d1	—	v2-2	v2-2r11
IV	d1	—	—	v2

Superior tarsal claws with few teeth: 4, 4, 3, 3.

Epigyne (fig. 3): a membranous central area surrounded by sclerotized parts; in front with an indented lip.

Natural History

The species appears to be extremely common in the vicinity of the type locality. It is widespread and present on virtually all the trunks of *Pinus pinea* trees that have been investigated. The spider hides under the bark. Very often its presence is shown by a few loose silken threads in the vicinity of its retreat if this term may be used for a thomisid. So far all the specimens were caught during early April which explains why only very few adults were collected. It is indeed supposed that the final moult usually occurs in May but more phenological data will be needed to reconstruct the life-cycle.

Distribution

The species is so far only known from the region near the Coto-Doña in south-western Spain near Sevilla. It is common in the National park itself. It has also been found near Huelva in *Pinus* woodland west of the Rio Tinto. Very few adult specimens have so far been found as all the collecting has been done in early spring and they are supposed to reach adulthood in May on average.

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