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REDESCRIPTION OF **ARCHAEODICTYNA**
ANGUINICEPS (Simon) 1899
 A REMARKABLE DESERTICOLOUS SPIDER
 (Araneida, Dictynidae)*

by J. MERTENS and R. JOCQUÉ**

Résumé

Redescription d'*Archaeodictyna anguinceps* (Simon) 1899, une araignée déserticole remarquable (Araneida, Dictynidae).

Les auteurs redécrivent une espèce remarquable du Sahara, notamment *Archaeodictyna anguinceps* (SIMON). Les stations mentionnées élargissent considérablement l'aire de répartition de l'espèce mais confirment qu'il s'agit d'une araignée strictement liée à l'environnement Saharien.

Introduction

During a journey through the Sahara-Desert on behalf of the project « Limnology of the Sahara » (FKFO 2.0009/75) one of us (J. Mertens) had the opportunity to collect perilacustric fauna.

Sweepnet samples from Beni-Abbès and Arak, both in the arid part of Algeria, contained specimens of a remarkable spider: *Archaeodictyna anguinceps* superficially described by SIMON (1899) and illustrated by Berland (1932). Both localities are in the typical dry Sahara environment with as principal climatic characteristics: little and erratic precipitation, very low humidity and severe winds (Grenot 1974).

Beni-Abbès (30°11'N, 2°14'W) is situated in the Saoura valley, at the intersection of the Guir Hamada and the Great occidental

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Erg. The Saoura is a wadi (dry stream bed except after sudden and violent rainfall) with permanent underflow, having as its source the snow covering the summits of the High Atlas chain in Morocco. The subsurface water reserves maintain a ribbon of discontinuous but persistent low vegetation. Characteristic plants in this hydrophilic vegetation are *Tamarix amplexicaulis* Ehrenb., *Juncus maritimus* L., *Ruppia maritima* L. and *Senecio massaicus* Maire.

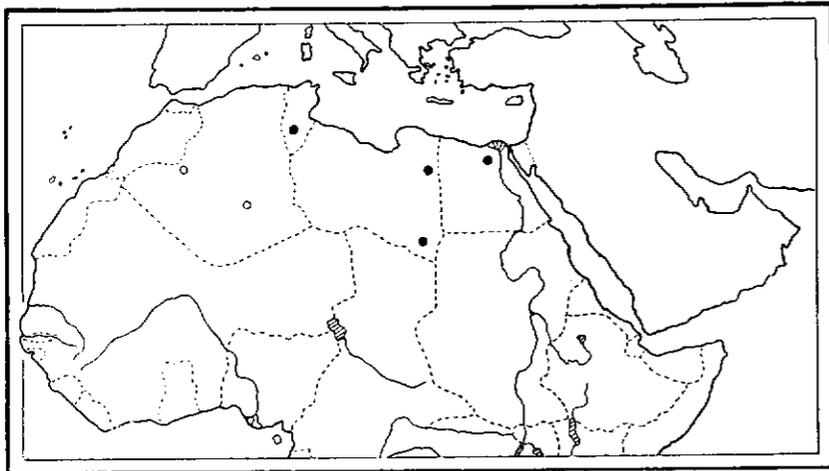


FIG. 1. — Distribution of *Archaeodictyna anguinceps*; full circles: known localities, open circles: data presented in this paper.

Arak (25° 19'N, 3° 46'E) is situated on the western slope of the Mouydir Ranae. The vestigial remainder of a once vast hydrographic network extends westwards to the Tidikelt and belongs to the fossil hydrographic system of the southern part of the Saoura.

Arak benefits from percolation underneath the porous rock formations and from irregular surface water of the wadi, collected in more or less permanent pools. The surrounding vegetation is of the same type as the one of Beni-Abbès characterized by *Tamarix amplexicaulis*.

Spiders were caught by pitfall traps and by sweeping. The samples from Arak and Beni-Abbès contained few specimens distributed over the families Thomisidae (resp. 17 and 13), Salticidae (10 and

6) Linyphiidae (4 and 11) Lycosidae (3 and 1), Theridiidae (0 and 1), Clubionidae (1 and 0) and Araneidae (1 and 0).

Among these 5 specimens of *Archaeodictyna anguinceps* were caught as follows:

Algeria, Arak, 6.V.1979: 1 ♂, 1 ♀; Beni-Abbès, 11.V.1979: 2 ♀♀; 15.V.1980: 1 ♀.

The material is deposited at the Koninklijk Museum voor Midden-Afrika, Tervuren.

A. anguinceps was described from Egypt by Simon (1899, 1903) and was later found in Tunisia (Simon, 1911), Cyrenaica and Southern Libya (Caporiacco, 1928, 1933, 1936). The stations presented in this paper extend the range of the species considerably. It appears to be one of the few spiders which is limited within the boundaries of the Sahara as defined by Dubief (1971), fig. 1.

Archaeodictyna anguinceps (SIMON) 1899

Dictyna anguinceps, Simon 1899 Bull. Soc. ent. Fr. 68 p. 244; *Dictyna anguinceps*, Simon 1903 Hist. nat. araignées 2 p. 977; *Dictyna anguinceps*, Simon 1911 Ann. Soc. ent. Fr. 79 p. 283; *Archaeodictyna anguinceps*, Caporiacco 1928 Ann. Mus. Civ. Stor. nat. Genova 53 p. 81; *Dictyna anguinceps*, Berland 1932 Encyclopédie entomologique, Paris p. 101; *Archaeodictyna anguinceps*, Caporiacco 1933 Ann. Mus. Civ. Stor. nat. Genova 56 p. 313; *Archaeodictyna anguinceps*, Caporiacco 1936 Mem. Soc. ent. ital 15 p. 94, 99; *Archaeodictyna anguinceps*, Lehtinen 1967 Ann. Zool. Fenn. 4, p. 215 (nec *Dictyna cyrenaica* Capor. 1933, sp. rev.).

Description: (all measurements in mm).

MALE

Measurements: Total length: 1.62; cephalothorax 1.10 long and 0.82 wide; cephalic area 0.30 wide; sternum 0.44 long, 0.42 wide; chelicerae 0.80 long; clypeus 0.06 high.

Colour: Cephalothorax rusty brown, with a lighter cephalic region covered with long silky hairs. Cervical groove and radiating striae blackish. Sternum yellowish with a median broken stripe and dark border. Legs pale; metatarsi and ventral side of tibiae, patellae and femorae darkened distally. Abdomen uniform cream, sparsely covered with silky white and some dark hairs. There are two pairs of rather large black spots on the posterior half and a third smaller pair nearer the spinnerets. On the anterior half two pairs of blackish impressed little dots, close to each other. A patch of dark hairs in front of it.

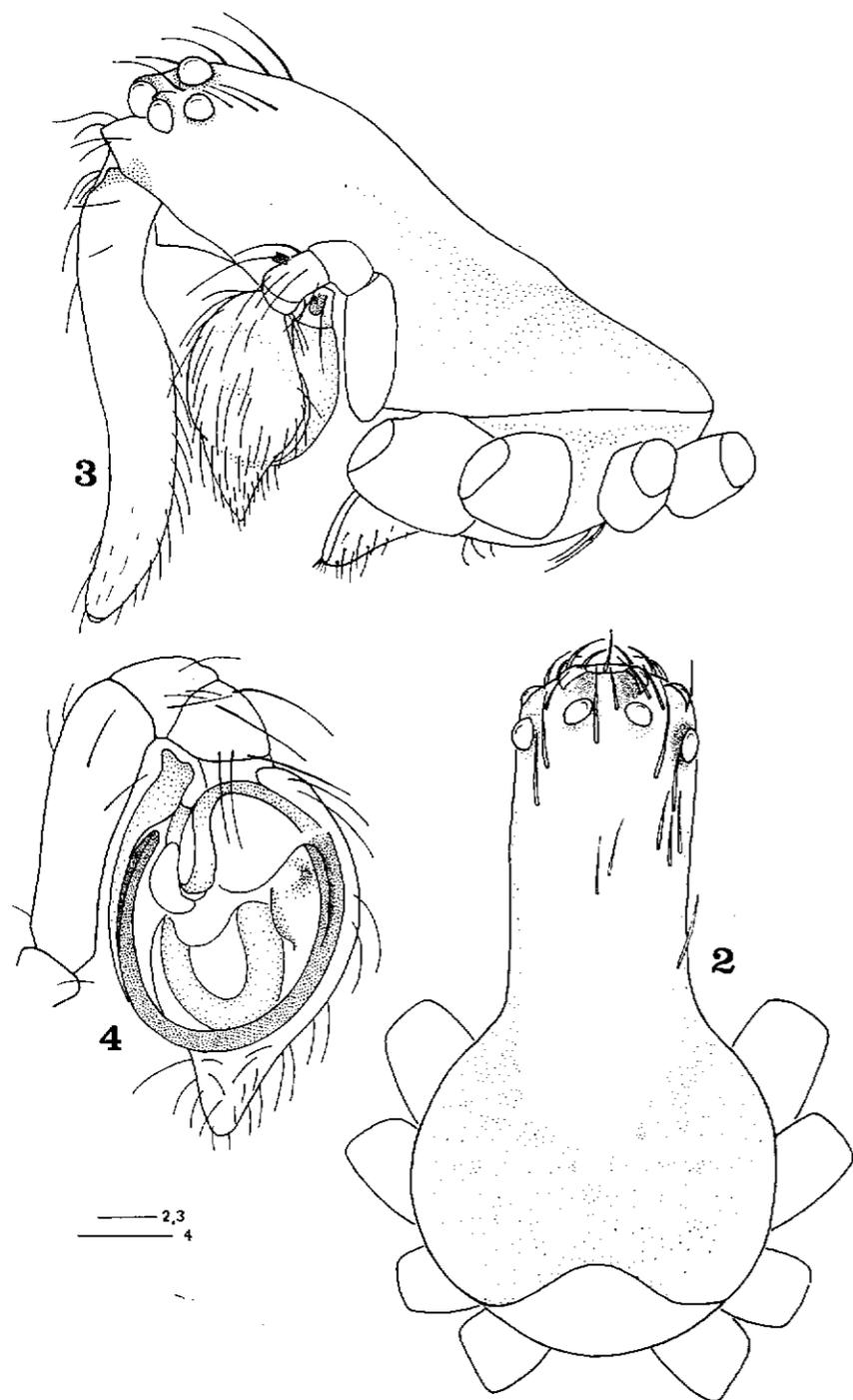


FIG. 2 - 4. — *Archaeodictyna anguiniceps*, male ; 2. Carapace, dorsal view ; 3. Carapace, lateral view ; 4. Male palp, ventral view.

Carapace (fig. 2-3) : Cephalic region narrow, greatly elongated and markedly elevated in front. Rows of light hairs run forward converging in front of the AM eyes. Clypeus convex and protruding, 1.2 times the diameter of the ALE. Thoracic region in dorsal view broad and evenly rounded, its width 2.7 times that of the cephalic region.

Eyes : All of the same diameter (0.05). Both rows slight recurved. Anterior row the shortest. Eyes in each row equidistant, anteriors 0.4 and posteriors 0.8 diameter from each other. Lateral eyes almost touching, AL 0.2 mm from PL. median ocular quadrangle 1.33 times as wide as long. AM margined with black.

Chelicerae (fig. 3 and 6) : Extraordinarily long, (0.80) almost 3/4 the length of the cephalothorax. Excavated along their inner margins and provided with distinct ridges. In lateral view S-shaped with an anterior concavity corresponding to a posterior convexity. Clothed with some silky hairs at both ends, the densest at the distal one. A row of longer hairs is present on the distal half of the retrolateral side.

Sternum : (fig. 5) : Heart-shaped with some silky hairs especially near the border.

Cribellum : undivided.

Legs : As in other genera of the Dictynidae, the legs lack trichobothria.

Measurements :

	Fe	Pt	Ti	Mt	Ta	Total
I	0.86	0.26	0.72	0.56	0.38	2.78
II	0.78	0.22	0.50	0.48	0.32	2.30
III	0.54	0.20	0.30	0.36	0.22	1.62
IV	0.62	0.20	0.40	0.42	0.23	1.87
palp	0.28	0.12	0.10		0.38	0.88

Male palp (fig. 4) : Palpal tibia with a small prolateral apophysis. A short process at the base of the palpal tarsus points towards the ventral side of the tibia. Palpal organs simple. The seminal duct describes a complete loop.

FEMALE

Measurements : Total length 2.04 ; cephalothorax 0.90 long, 0.68 wide, cephalic 0.34 wide ; sternum 0.52 long, 0.48 wide ; chelicerae 0.44 long ; clypeus 0.04 high.

Colour : as in the male, except for the spots on the abdomen. There are two longitudinal rows of black spots, variable in number, usually three to five pairs. The second and last pair are not always developed.

Carapace : Cephalic region not as narrow and elongated as in the male and not elevated in front.

Eyes : All of the same diameter (0.06). Both rows slightly recurved, with the anterior row the shortest. AM separated from each other by 0.7 their diameter and about as far from the laterals. Posteriors almost equidistant. PM separated by $0.8 \times$ their diameter and 0.7 from PL. Lateral eyes touching. Median ocular quadrangle much wider than long ($2.5 \times$).

Chelicerae : not as extraordinarily long as in the male. Excavated along their inner margins.

Sternum : as in the male.

Cribellum : undivided.

Legs :

Measurements :

	Fe	Pt	Ti	Mt	Ta	Total
I	0.90	0.30	0.68	0.56	0.40	2.84
II	0.76	0.28	0.46	0.42	0.34	2.26
III	0.62	0.22	0.36	0.32	0.28	1.80
IV	0.70	0.24	0.50	0.46	0.28	2.18
palp	0.28	0.12	0.14		0.36	0.90

Epigyne (fig. 7) : Flat and simple. Hardly chitinized ; only two pairs of small hardly visible arcs under the epigastric fold, the inner ones corresponding with the entrances of the bursa copulatrix. The two brownish spots under these arcs are the spermathecae shining through. The epigyne is covered with some silky hairs.

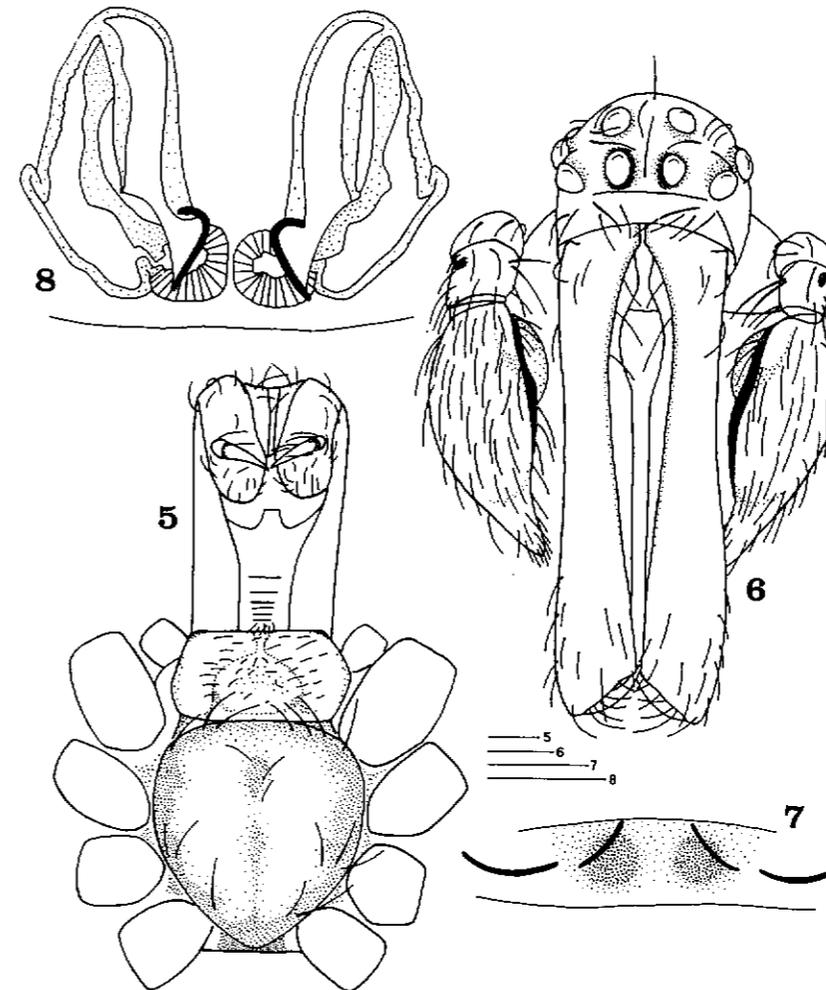


FIG. 5 - 8. — *Archaeodictyna anguiniceps*. 5. Male cephalothorax, ventral view ; 6. Frontal view ; 7. Epigyne ; 8. Vulva.

Vulva (fig. 8) : The entrances of the bursa copulatrix connected with the spermathecae by relatively short, upwards-downwards oriented semi-circular spermducts.

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A NOTE ON EMPIDIDAE (Diptera), UNCOMMON OR NEW FOR THE BELGIAN FAUNA*

by Patrick CROOTAERT**

The family Empididae is well represented in Belgium. The catalogue of M. Goetghebuer (1931) covering the whole Belgian fauna listed 126 species. In comparison to the well known British fauna (Collin, 1961) the species number is estimated to be near 350. Actually 290 species were positively identified in our country.

Recently only the genus *Platypalpus*, represented by 70 species, and a few smaller genera have been studied in some detail (Grootaert, 1981). The large genera *Hilara*, *Rhamphomyia* and *Empis* still need a thorough revision.

The present note deals with some uncommon Empididae, 14 being new for our fauna (marked with asterisk) and a checklist is given for the treated genera. The study is based on the collections of the « Institut royal des Sciences naturelles de Belgique » (IRSNB) including the collections of J. CH. Jacobs, M. Goetghebuer and M. Bequaert. Synonyms are given for Belgian literature.

Atelestus WALKER, 1837

* 1. *Atelestus dissonans* COLLIN, 1961

Luxembourg : Ethe (Centre d'Ethe-Buzenol), 14.VII-28.VIII. 1981 1 ♂ (leg. P. Grootaert). Namur : Houyet, 6.VII.1928 1 ♂ (coll. M. Goetghebuer, det. Oldenberg as *A. pulicarius* FALLÉN).

This species has only recently been described by Collin (1961).

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