

# The ground spider genus *Setaphis* in the Maghreb countries (Araneae Gnaphosidae)

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## Abstract

The authors redescribe or present new faunistical and ecological data of 7 *Setaphis* species occurring in the Maghreb countries : *Setaphis algerica* (DALMAS, 1922), *Setaphis carmeli* (O.P.-CAMBRIDGE, 1872), *S. fuscipes* (SIMON, 1885), *S. mollis* (O.P.-CAMBRIDGE, 1874), *Setaphis parvula* (LUCAS, 1846), *Setaphis simplex* (SIMON, 1885) and *S. spiribulbis* (DENIS, 1952). *Echemus pharetratus* KARSCH, 1884 is a junior synonym of *Setaphis mollis* (O.P.-CAMBRIDGE, 1874) and *Zelotes stylus* DI FRANCO, 1994 a junior synonym of *Setaphis simplex* (SIMON, 1885).

**Keywords :** Gnaphosidae, *Setaphis*, systematics, distribution.

## Introduction

The genus *Setaphis* was for a long time one of those insufficiently known zelotine genera where species were placed of uncertain origin. Recently, PLATNICK & MURPHY (1996) revised the genus, and it appeared that many species, mainly south african, were misplaced in it, and that many species described in the genera *Camillina*, *Echemus* and *Liodrassus* actually belonged to *Setaphis*. At present, the genus contains 16 species occurring in the mediterranean region, tropical Africa, the Cape Verde and Canary Islands and the near East to Pakistan, India and Thailand.

Seven species occur in the Maghreb countries (Morocco, Algeria, Tunisia and Libya). Six of them are present in our material, and they are discussed below.

Abbreviations : HDO : Hope Department of Entomology, Oxford; MNHN : Muséum national d'Histoire naturelle de Paris; MNZHB : Museum für Naturkunde, Zentralinstitut der Humboldt-Universität zu Berlin; MZSF : Museo zoologico de la Specola, Firenze.

### *Setaphis* SIMON

#### Diagnosis :

Zelotine gnaphosids, in having the typical metatarsal preening comb; males are further distinguished by the typical, coiled embolus and females by the similarly coiled epigynal ducts.

### *Setaphis algerica* (DALMAS, 1922) (Figs 1-4)

*Camillina algerica* DALMAS, 1922 : 83 (descr. male, female).

*Camillina vivesi* MARINARO, 1967 : 699 (descr. male).

*Setaphis algerica*; PLATNICK & MURPHY, 1996 : 7 (descr. male, female).

#### Type material :

One male and 10 female syntypes from Algeria, Oran (MNHN); examined by PLATNICK & MURPHY (1996).

#### Diagnosis :

Males can be recognised by the broad, angular terminal apophysis (Fig. 1), females by the large v-shaped epigynal midpiece (Fig. 3).

#### Description :

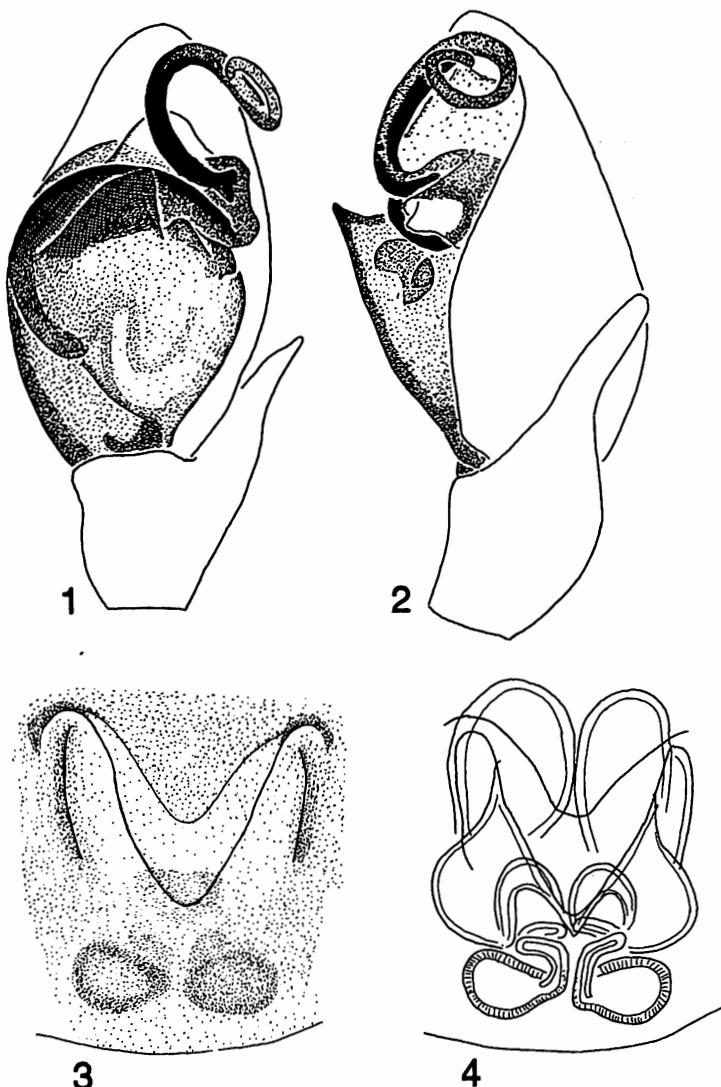
See PLATNICK & MURPHY (1996), and figures 1-4.

#### Material examined and citations :

##### ALGERIA :

*Aïn Defla* : Djebel Zaccar, S. Aïn n' Sour, 900m, 1 male in litter in *Quercus ilex*, forest, 18.V.1988, R. BOSMANS leg. (CRB).

*Batna* : Massif de l'Aures, Monts de Belezma, Col Telmet, 1800m, 2 males in pitfalls in cedar forest, 6.XI-8.VI.1988, R. BOSMANS leg. (CRB).



Figs 1-4. *Setaphis algerica* (LUCAS). 1 : Male palp, ventral view; 2 : Idem, lateral view; 3 : Epigyne, ventral view; 4 : Vulva, ventral view.

*Blida* : Atlas Blidéen, Meftah, Djebel Zerouela, 480m, 1 male in pitfalls in *Quercus suber* forest, 23.VI.1987, R. BOSMANS leg. (CRB); idem, Meurdja, 900m, 1 female in pitfall in planted cedar forest, 15.VI.1982, R. BOSMANS leg. (CRB); Oued Djer, forêt des Soumatas, 220m, 2 males in pitfalls in *Pistacia lentisca* maquis, 18.VI.1989, R. BOSMANS leg. (CRB).

*Bouira* : Maillot (MARINARO, 1967, sub *Camillina vivesi*).

*Ech Chleff* : La Marsa, 1 female in pitfall in *Pistacia lentisca* maquis, 25.V.1990, R. BOSMANS leg. (CRB); Tacheta, 850m, 1 male 2 females in pitfalls in *Quercus faginea* forest, 11.IV.1989-25.V.1990, R. BOSMANS leg. (CRB).

*Guelma* : near la Mahouna (DALMAS, 1922, sub *Camillina algerica*).

*Medea* : Col de Beni Chicao, 1230m, 4 males in pitfalls in *Quercus ilex* forest, 3.XI.1989, R. BOSMANS leg. (CRB).

*Oran* : forêt de M'sila, 2 males in *Quercus suber* litter, 25.IV.1984, R. BOSMANS leg. (CRB); La Marsa, 1 female in maquis in dunes, 25.V.1990, R. BOSMANS

leg. (CRB); Oran (DALMAS, 1922, sub *Camillina algerica*)

*Tipasa* : Douadou, Oued Mazafran, 50m, 3 males 1 female in pitfalls in riverine *Populus alba* forest, 26.VI.1987, R. BOSMANS leg. (CRB); Sidi Fredj, 25m, 3 males in pitfalls in *Pinus halepensis* forest, 25.V.1987, R. BOSMANS leg. (CRB).

*Tlemcen* : Honaine, 50m, 1 male, stones along oued, 24.V.1990, R. BOSMANS leg. (CRB); Col d'Hafir S., Oued Tafna, 1 male, stones along Oued Tafna, 5.IV.1984, R. BOSMANS leg. (CRB); Col de Zarifete, 1 male in pitfalls in *Quercus ilex* forest, 6.V.1984, R. BOSMANS leg. (CRB).

#### SPAIN :

*Málaga* : Maro (PLATNICK & MURPHY, 1996).

#### Distribution :

Only known from the north of Algeria and Spain.

#### Ecology :

Males were collected from November to June,

females from May to June. In Algeria, the species occurs in the humid and sub-humid regions in all kinds of forest habitats, from coastal *Pinus halepensis* and riverine *Populus alba* forest to montane *Cedrus atlantica* forest.

***Setaphis carmeli* (O.P.-CAMBRIDGE, 1872)**

*Melanophora carmeli* O.P-CAMBRIDGE, 1872 : 248 (descr. male); SIMON, 1885 : 35; SIMON, 1911 : 418.

*Prosthesima latipes*; PAVESI, 1880 : 359; PAVESI, 1884 : 452.

*Zelotes carmeli*; CAPORIACCO, 1928 : 87; DENIS, 1952 : 123; MARINARO, 1967 : 691; KARSCH, 1977 : 324.

*Setaphis carmeli*; PLATNICK & MURPHY, 1996 : 6 (descr. male, female).

**Type material :**

Male syntype from Israel, Mount Carmel (HDO); examined by PLATNICK & MURPHY (1996).

**Diagnosis :**

Males are easily distinguished by the enlarged, black patellae and tibiae I with brushlike scopula and the relatively small embolus, females by the contrasting black colour of the same tibia I, and the m-shaped anterior and median epigynal ridges.

**Description :**

See PLATNICK & MURPHY (1996).

**Material examined and citations :**

**ALGERIA :**

*Alger* : El Harrach, 1 male in pitfalls in garden, 11.IV.1983, and 1 male 16.VI.1985, R. BOSMANS leg. (CRB; PLATNICK & MURPHY 1996); Eucalyptus, 11 males 1 female in pitfalls in garden, 17.IV.1989-6.IV.1990, R. BOSMANS leg. (CRB).

*Bejaia* : Bordj Mira, 150m, 1 female, stones in grassland, 15.VI.1987, R. BOSMANS leg. (CRB); S. Tichi, Oued Djemaa, 50m, 1 female, 20.V.1988, R. BOSMANS leg. (CRB).

*Blida*; Atlas Blidéen, Meftah, Djebel Zerouela, 480m, 2 males in pitfalls in *Quercus suber* maquis, 23.V.1985, R. BOSMANS leg. (CRB); Meurdja, 950m, 1 female in pitfalls in *Quercus ilex* forest, 9.VI.1983, R. BOSMANS leg. (CRB).

*Boumerdes* : Réghaia (MARINARO, 1967); Réghaia, 5 m, 1 male in pitfall in coastal marsh with tamarisk, 13.VI.1988, R. BOSMANS leg. (CRB); idem, 45m, 1 male in pitfall in *Q. suber* forest, 13.VI.1988, R. BOSMANS leg. (CRB).

*Mascara* : Bou Hanifa region (MARINARO, 1967).

*M'sila* : Aïn-el-Hadjet, Réserve de Mergueb, 540m, 2 males 1 female in pitfalls in steppe, 22.VI.1990, R. BOSMANS leg. (CRB).

*Oran* : Aïn Fezza (SIMON, 1911).

*Saida* : Saida, maison forestière de Merdja, 1 female, stones in *Pinus halepensis* forest, 17.VI.1986, R. BOSMANS leg. (CRB; PLATNICK & MURPHY, 1996).

*Tebessa* : Tebessa, Forêt de Bekkaria, 1100m, 1 male, pitfalls in *Pinus halepensis* forest, 15.VI.1989, R. BOSMANS leg. (CRB).

*Tiaret* : Frenda, 1075m, 1 male, stones in grassland, 26.IV.1984, R. BOSMANS leg. (CRB; PLATNICK & MURPHY, 1996).

*Tissem silt* : N. Derrag, 950m, 1 male, stones in grassland, 23.IV.1989, R. BOSMANS leg. (CRB).

*Tizi Ouzou* : N. Boghni, along Oued Boghni, 180m, 1 male, stones in grassland, 27.IV.1989, R. BOSMANS leg. (CRB).

*Tlemcen* : Sebou; Monts de Traras, Beni Saf (MARINARO, 1967).

**LIBYA :**

Porto Bardia (CAPORIACCO, 1928).

**MOROCCO :**

Aïn-Sebâa; Taza region (DENIS, 1952).

Ifrane, Azrou, 1 male, stones in grassland, 11.V.1984, R. BOSMANS leg. (CRB; PLATNICK & MURPHY, 1996); Ifrane (JOCQUÉ, 1977).

Oued Zem, 1 female, stones in *Pinus halepensis* plantation, 12.V.1984, R. BOSMANS leg. (CRB; PLATNICK & MURPHY, 1996).

**TUNISIA :**

Gafsa (SIMON, 1885); Kairouna, rive del Megerdah (PAVESI, 1880); Tunis (PAVESI, 1884; SIMON, 1885).

**Distribution :**

Circum-Mediterranean.

**Ecology :**

Occurring in all kinds of habitats in the sub-humid and semi-arid regions.

***Setaphis fuscipes* (SIMON, 1885)**

(Figs 5-8)

*Echemus fuscipes* SIMON, 1885 : 36 (descr. male); SIMON, 1899 : 83; SIMON, 1911 : 416.

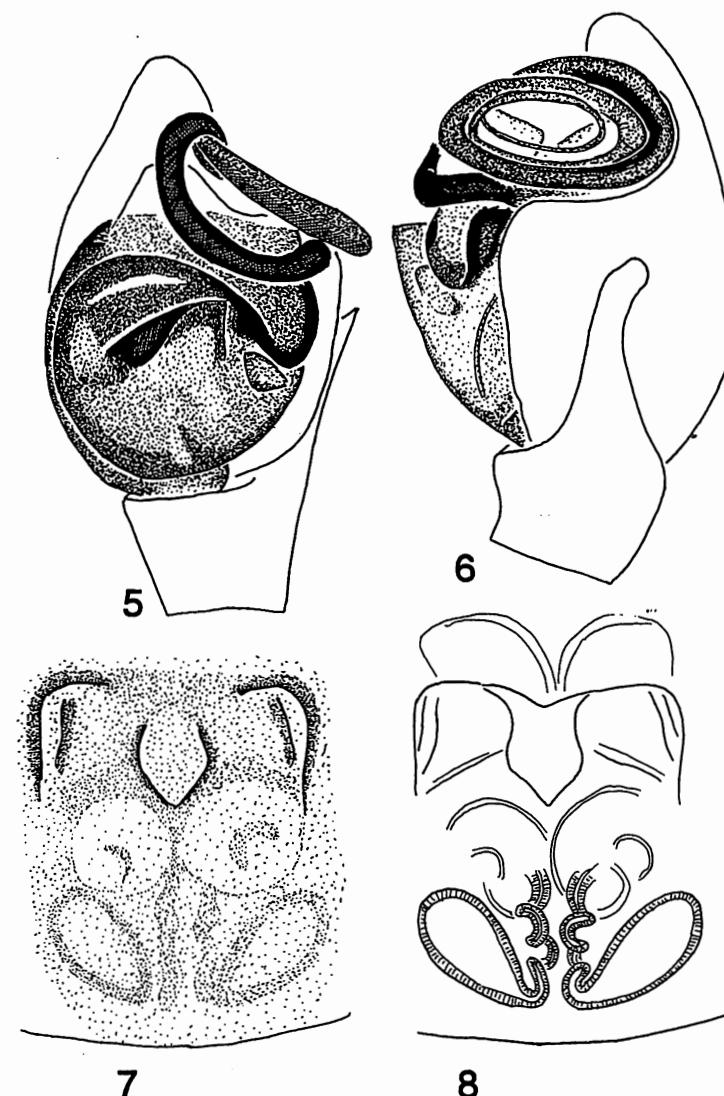
*Zelotes longestylus* CAPORIACCO, 1936 : 73 (descr. male, female).

*Zelotes capporiaccoi* ROEWER, 1951 : 443.

*Setaphis fuscipes*; PLATNICK & MURPHY, 1996 : 8 (descr. male, female); LEVY 1998 : 99.

**Type material :**

Two male and three females syntypes of *Echemus fuscipes* from Tunisia, Djerba (MNHN);



Figs 5-8. *Setaphis fuscipes* (SIMON). 5 : Male palp, ventral view; 6 : Idem, lateral view; 7 : Epigyne, ventral view; 8 : Vulva, ventral view.

examined by PLATNICK & MURPHY (1996); one male and two females syntypes of *Zelotes longestylus* from Libya, Ghat, Fezzan (MZSF); not examined.

#### Diagnosis :

Males can be recognised by the large embolus, and the very wide base of the terminal apophysis (Fig. 5), females by the small almost diamond-shaped epigynal midpiece (Fig. 7).

#### Remarks :

There has been confusion in the past about the identity of the species *Zelotes longestylus* CAPORIACCO, 1936. The discussion has been going on since ROEWER (1951) gave it the replacement name *Zelotes caporiaccoi*, *Z. longestylus* being preoccupied. DI FRANCO (1994) redescribed the species and gave *Z. longestylus* a second (superfluous) replacement name, *Zelotes stylus*. In their excellent revision of the genus *Setaphis*, PLATNICK & MURPHY (1996) considered *Z.*

*longestylus* and *Z. stylus* as synonyms of *Setaphis simplex*. After examination of the type series, LEVY (1998) proved that *Z. longestylus* is not a synonym of *Setaphis simplex* but of *Setaphis fuscipes*. Independently, I came to the same conclusion. LEVY (op. cit.) also claims that *Setaphis stylus* is a synonym of *S. fuscipes*, but here we agree with PLATNICK & MURPHY (1996) who considered it a synonym of *S. simplex*. DI FRANCO's figure of the male palp of *S. stylus* shows a male palp with a narrowly coiled embolus, as in *S. simplex*, while *S. fuscipes* has a widely coiled embolus. Equally, the epigyne of *S. stylus* has a wide, posteriorly rounded epigynal midpiece, as in *S. simplex*, while it is diamond-shaped in *S. fuscipes*. Accordingly, *Setaphis stylus* is a junior synonym of *S. simplex*.

All this coincides with the habitat preferences of both species : the localities where *S. fuscipes* and *S. longestylus* were discovered are mostly in sand desert, whereas those of *S. stylus* and *S. simplex* are situated in less arid and more stony regions.

**Description :**

See PLATNICK & MURPHY (1996), and figs 5-8.

**Material examined and citations :****ALGERIA :**

*Adrar* : Beni Abbes, 460m, 1 female, stones along Oued Saoura, 2.IV.1989, R. BOSMANS leg. (CRB); Timimoun, 3 males in palm orchard, 1.IV.1989, R. BOSMANS leg. (CRB).

*Bechar* : Colomb-Bechar (PLATNICK & MURPHY, 1996).

*Djanet* : Tassili, Abu el Man, Aguelman Tamadjert, 1 male, 18.IV.1989, J. MERTENS leg. (CRB).

*Djelfa* : El Mesrane, 900m, 1 female, 2.XI.1989 and 1 male 1 female, 23.V.1990, in pitfalls in dunes, R. BOSMANS leg. (CRB).

*El Golea* : El Golea (PLATNICK & MURPHY, 1996).

*El Oued* : El Oued, 1 female in oasis yard, 11.IV.1990, R. BOSMANS leg. (CRB).

*Laghout* : 20 km S. Laghouat, 740m, 4 males 1 female in pitfalls in *Zizyphus* bushes in a daya, 3.XI.1989, R. BOSMANS leg. (CRB).

*Ghardaia* : N. Berriane, Bouzbaier, 600m, 1 male, in *Zizyphus* bushes, 21.V.1990, R. BOSMANS leg. (CRB).

*M'sila* : Aïn-el-Hadjel, réserve de Mergueb, 540m, 5 males 6 females in pitfalls in steppe, 21.III-11.V.1988, R. BOSMANS leg. (CRB); Baniou, Chott el Hodna (SIMON, 1885, sub *Echemus fuscipes*); S. Baniou, Chott el Hodna, 400m, 4 females in tussocks in dunes, 13.V.1988, and 2 males 1.VII.1988, R. BOSMANS leg. (CRB); Bou Saada, 560m, 1 female in garden of hotel, 12.V.1988, R. BOSMANS leg. (CRB); El Melez, N.E. M'sila, 800m, 1 male 1 female in pitfalls along creek in a chott, 1.VII.1988, R. BOSMANS leg. (CRB); Hammam Delaa, 10 km S., 800m, 1 female along permanent Oued, 13.V.1988, R. BOSMANS leg. (CRB); Oued Temsa S.E., 600m, 1 female, stones in dry river bed, 12.V.1988, R. BOSMANS leg. (CRB).

*Touggourt* : Touggourt, Merdjeda, 65m, 1 female in *Salicornia* tussocks, 5.V.1990, R. BOSMANS leg. (CRB).

Tilrempt (SIMON, 1899, sub *E. fuscipes*).

**LIBYA :**

Murzuk; El Gorda; Ghat; El Iseien (CAPORIACCO 1936, sub *Z. longestylus*).

**MOROCCO :**

*Er Rachidia* : Tinerhir, 20 km E., 2 males in palm yard, 27.I.1995, R. BOSMANS leg. (CRB).

Oued Cefrou (SIMON, 1911, sub *E. fuscipes*).

**TUNISIA :**

*El Kef*: El Kef (SIMON, 1885, sub *E. fuscipes*).

*Gabes* : Gabes (SIMON, 1885, sub *E. fuscipes*).

*Djerba* : Djerba (PLATNICK & MURPHY, 1996); La Seguia, 1 female in coastal dunes, 28.V.1990, K. DE SMET leg. (CRB).

*Mahdia* : El Djem (SIMON, 1885, sub *E. fuscipes*).

*Tozeur* : Nefta, 5 males 1 female in litter in palm yard, 27.I.1995, R. BOSMANS leg. (CRB); Tozeur, 1 female in litter in palm yard, 26.I.1995, R. BOSMANS leg. (CRB).

*Tunis* : La Goulette (SIMON, 1885, sub *E. fuscipes*). Cherchera (PLATNICK & MURPHY, 1996).

**Distribution :**

A typical species occurring in the oases in the Sahara, actually known from Morocco, Algeria and Tunisia; cited also from Turkey by KAROL (1966), but this needs confirmation.

**Ecology :**

A common species in all kinds of eremic habitats in the arid and saharian regions.

***Setaphis mollis* (O.P.-CAMBRIDGE, 1874)**  
(Figs 9-12)

*Prosthesima mollis* O.P.-CAMBRIDGE, 1874 : 381  
(descr. female); O.P.-CAMBRIDGE, 1876 : 553.

*Echemus pharetratus* KARSCH, 1881 : 11 (descr. female) syn. n.

*Setaphis mollis*; PLATNICK & MURPHY, 1996 : 12  
(descr. male, female).

**Type material :**

Female holotype from Egypt, Alexandria (HDO); examined by PLATNICK & MURPHY (1996). Four females syntypes of *Echemus pharetratus* from Libya, Djebel Tarrhunda, Bir Mirha (MNB); examined.

**Diagnosis :**

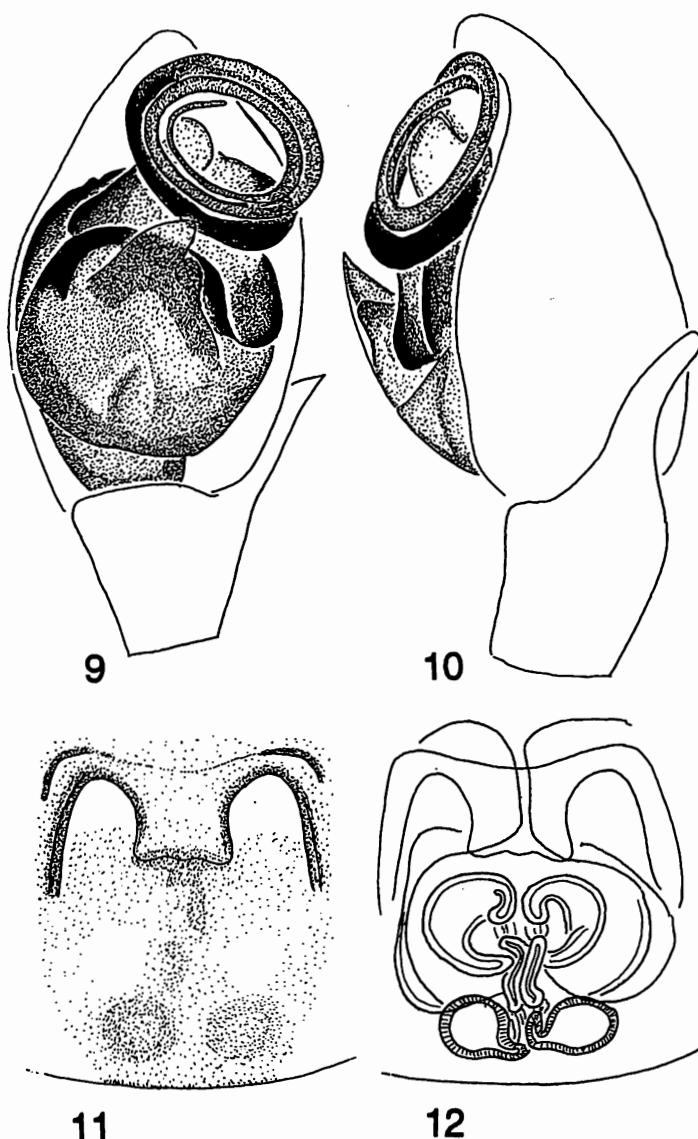
Males of this species can be recognised by the elongated, in lateral view pointed terminal apophysis (Fig. 10), females by the rectangular epigynal midpiece (Fig. 11).

**Remarks :**

Examination of the syntypes of *Echemus pharetratus* KARSCH, 1881 reveals its synonymy with *Echemus mollis* O.P.-CAMBRIDGE, 1875. The latter becomes the valid name. KARSCH's figure 8 of the epigyne shows a rectangular epigynal midpiece, which is the most important diagnostic character of *mollis*.

**Description :**

See PLATNICK & MURPHY (1996) and figs 9-12.



Figs 9-12. *Setaphis mollis* (O.P.-CAMBRIDGE). 9 : Male palp, ventral view; 10 : Idem, lateral view; 11 : Epigyne, ventral view; 12 : Vulva, ventral view.

#### Material examined and citations :

##### ALGERIA :

*Biskra* : Biskra (PLATNICK & MURPHY, 1996).  
*Djelfa* : Hassi Babbah, 900m, 1 female in pitfalls in fixed dunes, 28.III.1989, R. BOSMANS leg. (CRB).  
*M'sila* : Aïn-el-Hadjel, réserve de Mergueb, 540m, 1 male 2 females in pitfalls in steppe, 21.III-11.V.1988, R. BOSMANS leg. (CRB); Aïn Oussera, 680m, 1 male 3 females in pitfalls in abandoned fields, 28.III-21.IV.1989, R. BOSMANS leg. (CRB).  
*Tebessa* : Tebessa, 5 km S., 1000m, 1 female, stones along an oued, 6.II.1988, R. BOSMANS leg. (CRB); forêt de Bekkaria, 1300m, 1 female in pitfall in *Pinus halepensis* forest, 1.V.1989, R. BOSMANS leg. (CRB).

*EGYPT :*  
 Alexandria (O.P.-CAMBRIDGE, 1876).

*LIBYA :*  
 Without specific locality (PLATNICK & MURPHY, 1996).  
*Djebel Tarrhunda, Bir Mirha* (KARSCH, 1881, sub *Echemus pharetratus*).

##### TUNISIA :

Without specific locality (PLATNICK & MURPHY, 1996).

##### Distribution :

Algeria, Tunisia, Libya and Egypt.

##### Ecology :

In Algeria, the species was mainly found in open steppes in the semi-arid region.

#### *Setaphis parvula* (LUCAS, 1846)

*Drassus parvulus* LUCAS, 1846 : 219 (descr. male).

*Prosthesima suavis* SIMON, 1878 : 76.

*Prosthesima parvula*; PAVESI, 1884 : 467.

*Setaphis suavis*; DENIS, 1937 : 3037.

*Setaphis parvula*; PLATNICK & MURPHY, 1996 : 5 (descr. male, female).

##### Type material :

Male subadult holotype from Algeria,

'Philippeville' (=Skikda); probably lost.

#### Diagnosis :

Closely related to *Setaphis carmeli*, in having the anterior patellae and tibiae enlarged but differing by the smaller size.

#### Description :

See PLATNICK & MURPHY (1996).

#### Material examined and citations :

##### ALGERIA :

*Blida* : Chrea, 1500m, 1 male, stones in *Cedrus atlanticus* forest, 23.IV.1982, R. BOSMANS leg. (CRB; PLATNICK & MURPHY, 1996); Meftah, Djebel Zerouela, 450m, 1 male, stones in mixed *Q. suber* and *P. halepensis* forest, 11.IV.1985, R. BOSMANS leg. (CRB; PLATNICK & MURPHY, 1996).

*Constantine* : Constantine (SIMON, 1878).

*Djelfa* : Djebel Senalba, 1 male 1 female in pitfalls in *Pinus halepensis* forest, IV.1990, R. BOSMANS leg. (CRB).

*Mila* : Djebel Daia (DENIS, 1937).

*Skikda* : Skikda (as 'Philippeville', LUCAS, 1846).

##### TUNISIA :

Tunis (PAVESI, 1884).

#### Distribution :

A rarely collected species in Portugal, Spain, Algeria and Tunisia.

### *Setaphis simplex* (SIMON, 1885)

(Figs 13-16)

*Echemus simplex* SIMON, 1885 : 36 (descr. female).

*Zelotes stylus* DI FRANCO, 1994 : 214 (descr. male, female). Non : synonym of *Setaphis fuscipes*, contra LEVY, 1998.

*Setaphis simplex*; PLATNICK & MURPHY, 1996 : 13 (descr. male, female).

#### Type material :

Twelve female syntypes of *Echemus simplex* from Algeria, Medjez, Bokhari and 'Orleansville' (=Chleff) (MNHN); examined by PLATNICK & MURPHY.

#### Diagnosis :

Males of *S. simplex* are distinguished by the sharply pointed tegular apophysis, and the relatively small embolus (Fig. 13), females by the wide, posteriorly rounded epigynal midpiece (Fig. 15).

#### Remarks :

As explained under *Setaphis fuscipes* we consider *S. stylus* as a synonym of *S. simplex*, as PLATNICK & MURPHY (1996) did, and not of *S. fuscipes*, as LEVY (1998) did.

#### Description :

See PLATNICK & MURPHY (1996), as *Setaphis simplex* and figures 13-16.

#### Material examined and citations :

##### ALGERIA :

*Batna* : Timgad (DI FRANCO, 1994, sub *Z. stylus*).

*Bordj Bou Areridj* : Medjez (SIMON, 1885, sub *E. simplex*).

*Chleff* : Chleff (as 'Orléansville', SIMON, 1885, sub *E. simplex*).

*Djelfa* : Hassi Babbah, 900m, 1 male in pitfall in fixed dunes, 28.III.1989, R. BOSMANS leg. (CRB); Djebel Senalba, 1350m, 3 males 1 female in pitfalls in *Pinus halepensis* forest, III.1989-IV.1990, R. BOSMANS leg (CRB).

*Medea* : Ksar-el-Boukhari (SIMON, 1885, sub *E. simplex*); Medea (DI FRANCO, 1994, sub *Z. stylus*).

*M'sila* : Bou Saada (SIMON, 1885 sub *E. simplex*); Oultem (DI FRANCO, 1994, sub *Z. stylus*).

*Tebessa* : Bekkaria, 1 female in pitfall in *Pinus halepensis* forest, 2.III.1989, R. BOSMANS leg (CRB).

*Tissemsilt* : Massif de l'Ouarsenis, Theniet-el-Had, Djebel Meddad, 1450m, 2 females, stones in cedar forest, 18.V.1988, R. BOSMANS leg (CRB).

*Tlemcen* : Forêt d'Hafir, 1350m, 1 female in pitfall in *Quercus suber* forest, 23.V.1990, R. BOSMANS leg. (CRB); Monts de Traras, between Bordj Arima and Remchi, 400m, 1 female, stones along cultivated fields, 19.I.1990, R. BOSMANS leg (CRB).

##### LIBYA :

No specific locality (PLATNICK & MURPHY, 1996).

##### SPANISH MOROCCO :

Melilla (PLATNICK & MURPHY, 1996, sub *Z. simplex*).

##### MOROCCO :

*Taza* : Djebel Tazeka (DI FRANCO, 1994, sub *Z. stylus*).

##### TUNISIA :

*El Kef* : El Kef (DI FRANCO, 1994, sub *Z. stylus*).

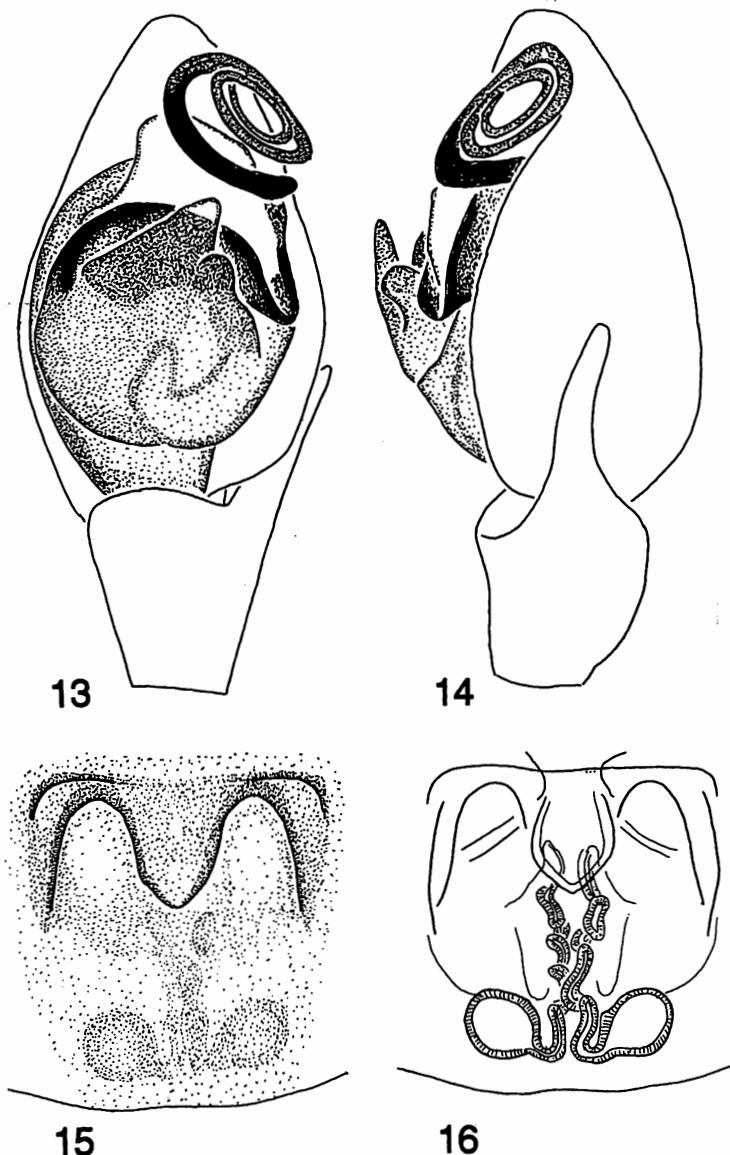
*Tunis* : Tunis (SIMON, 1885, sub *E. simplex*).

#### Distribution :

Morocco, Algeria, Tunisia and Libya.

#### Ecology :

This species was mainly collected in dry forests on mountains in the sub-humid and semi-arid regions.



Figs 13-16. *Setaphis simplex* (SIMON). 13 : Male palp, ventral view; 14 : Idem, lateral view; 15 : Epigyne, ventral view; 16 : Vulva, ventral view.

#### *Setaphis spiribulbis* (DENIS, 1952)

*Zelotes spiribulbis* DENIS, 1952 : 125 (descr. male).

*Setaphis spiribulbis*; PLATNICK & MURPHY, 1996 : 9.

#### Type material :

Male holotype from Morocco, Oued Mellah (MNHN); examined by PLATNICK & MURPHY (1996).

#### Diagnosis :

Closely related to *Setaphis fuscipes*, differing by the much broader base of the embolus, and the smaller tegular apophysis. The female is unknown.

#### Description :

See PLATNICK & MURPHY (1996).

#### Distribution :

Only known from the type locality in Morocco.

#### Acknowledgments

The authors thank Jason DUNLOP (MNZHB) for the loan of the type material of *Echemus pharetratus*.

#### References

CAMBRIDGE O.P., 1872. - General list of the spiders of Palestine and Syria, with descriptions of numerous new species, and characters of two new genera. *Proceedings of the zoological Society of London*, 1872 : 212-354.

CAMBRIDGE O.P., 1874. - On some new species of *Drassus*. *Proceedings of the zoological Society of London*, 1874 : 370-419.

CAMBRIDGE O.P., 1876. - Catalogue of a collection of spiders made in Egypt. *Proceedings of the zoological*

- Society of London*, 1876 : 541-630.
- CAPORIACCO L. DI., 1928. - Aracnidi di Giarabub e di Porto Bardia (Tripolis). *Annali del Museo civico di Storia naturale di Genova*, 53 : 77-107.
- CAPORIACCO L. DI., 1936. - Aracnidi Fezzanesi. *Atti Societa Entomologica italiana*, 75 : 67-93.
- DALMAS R. DE, 1922. - Catalogue des araignées récoltées par le Marquis G. DORIA dans l'île Giglio (Archipel Toscan). *Annali del Museo civico Storia naturale di Genova*, 50 : 79-96.
- DENIS J., 1937. - On a collection of spiders from Algeria. *Proceedings of the zoological Society of London*, 1937 : 1027-1060.
- DENIS J., 1952. - Notes d'aranéologie marocaine. Les *Zelotes* du Maroc. *Revue française d'Entomologie*, 19 : 113-126.
- DI FRANCO F., 1994. - Nuovi dati sulle specie de *Zelotes* del Maghreb (Araneae, Gnaphosidae) : considerazioni morfoligiche e descrizione di *Zelotes lagrecai* n. sp. *Animalia*, 19 : 213-225.
- JOCQUÉ R., 1977. - Sur une collection estivale d'araignées du Maroc. *Annales de la Société entomologique de Belgique*, 113 : 321-337.
- KAROL S., 1966. - Spiders of Ankara and environs with a description of the new species *Xysticus turcicus*. *Communications de la Faculté des Sciences de l'Université d'Ankara*, 11 : 15-32.
- KARSCH F., 1881. - Verzeichniss der während der Röhlfschen africanischen Expedition erbeuteten Myriopoden und Arachniden. *Archiv für Naturgeschichte*, 47 : 1-14.
- LEVY G. 1998. - The ground spider genera *Setaphis*, *Trachyzelotes*, *Zelotes* and *Drassyllus* (Araneae : Gnaphosidae) in Israel. *Israel Journal of Zoology*, 44 : 93-158.
- LUCAS H., 1846. - Histoire naturelle des animaux articulés. In : Exploration scientifique de l'Algérie pendant les années 1840, 1841, 1842, publiée par ordre du Gouvernement et avec le concours d'une commission académique. Sciences physiques, Zoologie. Paris, 1 : 89-271.
- MARINARO J.Y., 1967. - Les araignées d'Afrique du Nord. I. Sur une collection de Drassidae à peigne métatarsal d'Algérie. *Bulletin de la Société zoologique de France*, 92 : 687-704.
- PAVESI P., 1880. - Studi sugli Aracnidi Africani I. Aracnidi di Tunisia. *Annali del Museo civico di Storia naturale Genova*, 15 : 283-388.
- PAVESI P., 1884. - Materiali per lo studio di fauna Tunisia. *Annali del Museo civico di Storia naturale Genova*, 20 : 446-486.
- PLATNICK N. I. & MURPHY, J., 1996. - A review of the Zelotine ground spider genus *Setaphis* (Araneae, Gnaphosidae). *American Museum Novitates*, 3162 : 1-23.
- ROEWER C.F., 1951. - Neue Namen einiger Araneearten. *Abhandlungen vom naturwissenschaftlichen Verein zu Bremen*, 32 : 437-456.
- SIMON E., 1878. - *Les Arachnides de France*. Roret, Paris, 4 : 1-334.
- SIMON E., 1885. - Etudes sur les Araignées recueillies en Tunisie en 1883 en 1884 par MM. A. LETOURNEUX, M. SÉDILLOT et V. MAYET, membres de la Mission de l'Exploration scientifique de la Tunisie. In : *Exploration scientifique de la Tunisie*, Paris, 1-55.
- SIMON E., 1899. - Liste des Arachnides recueillis en Algérie par LESNE. *Bulletin du Muséum d'Histoire naturelle de Paris*, 5 : 82-87.
- SIMON E., 1911. - Récoltes entomologiques dans les Beni Snassen II. Araneae. *Annales de la Société entomologique de France*, 80 : 414-419.