

## First description of the female of *Xerophaeus espoir* Platnick, 1981 (Aranei: Gnaphosidae)

## Первописание самки *Xerophaeus espoir* Platnick, 1981 (Aranei: Gnaphosidae)

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КЛЮЧЕВЫЕ СЛОВА: Aranei, пауки, Gnaphosidae, первописание, переписание.

**ABSTRACT.** Female of *Xerophaeus espoir* Platnick, 1981 from Seychelles Islands is described for the first time and male is redescribed. The species was found on Marianne and North islands for the first time.

**РЕЗЮМЕ.** Впервые описана самка *Xerophaeus espoir* Platnick, 1981 с Сейшельских о-вов, переписан самец. Вид впервые отмечен на островах Marianne и North.

### Introduction

A gnaphosid spider *Xerophaeus espoir* was described from the male holotype from Mahe Island, Seychelles. It is still known by the single taxonomic entry (cf. Platnick, 2008), although it was twice reported by M.I. Saaristo from Cousine and Cousin [Saaristo, 1999; Saaristo & Hill, 2002].

Study of new and older material revealed on one hand more localities for this species: Marianne and North, and on the other hand the record from Cousin was found to be based on a misidentification.

New material also contained the previously unknown female of *X. espoir*. One subadult female with developed epigyne was found on North, and a mature female with a kind of mating plug was collected on Marianne Island. The main goal of this paper is the illustration and description of the female, redescription of the male and brief discussion of the position of *X. espoir*.

Specimens were photographed using an Olympus SZX12 stereomicroscope and Olympus Camedia C-5050 camera. The images have been mounted using "CombineZM" image stacking software. Photographs were taken in dishes of different size with paraffin in the bottom. Different sized holes were made in the bottom to keep the specimens in the correct position. All measurements are given in millimeters.

### *Xerophaeus espoir* Platnick, 1981

*X.e.* Platnick, 1981: 454, f. 5–6 (D♂).

*X.e.*: Saaristo & Hill, 2002: 224.

**MATERIAL EXAMINED.** SEYCHELLES: *Cousine*, 1 ♂, Jan. 1998, O. Bourquin leg. (MZT AA 0.398); *Marianne*, 1 ♀, 23.03.2002, J. Gerlach leg. (MZT AA 2.278); *Mahé*, Bon Espoir, 300 m., holotype ♂, 21.06. 1972, P.L.G. Benoit and J.J. Van Mol leg. (MRAC 143.231); *North*, 1 ♀, 30.07.2000, J. Gerlach leg., (MZT AA 1.321).

**DESCRIPTION.** The male has been well described by Platnick [1981]. Habitus, eye pattern and male palp are shown on Figs 2, 4–7.

**Female.** Total length: 7.2. Carapace: 3.6 long, 2.45 wide. AME largest, 0.21. Chelicera as in male with 3 outer teeth, and one inner denticle. Legs spination different from male, and variable within one specimen. Femur I besides 3 dorsal spines, may have 2 prolateral spines, or 2 prolateral and one retrolateral spines. Habitus and eye pattern of female are shown on Figs 1 and 3. Epigyne as in Figs 8–10, with two apical pockets, not joined, posterior edge of pocket extended into long ridge.

**DISTRIBUTION.** This endemic species has been collected from Cousin [Saaristo & Hill, 2002]; Cousine [Saaristo, 1999], Marianne (new record), Mahe [Platnick, 1981] and North (new record).

**COMMENTS.** When the species was described it was difficult to place it precisely because of the lack of a revision of Afrotropical Gnaphosidae. A newly published survey of the Gnaphosidae genera of the world [Murphy, 2007] contains excellent figures of the genotype of *Xerophaeus capensis* Purcell, 1907. Comparison of our specimens and figures provided by Murphy [2007: 386–387] revealed similarities in chelicera indentation, shape and size of retrolateral tibial apophysis and presence of dorsal abdominal scutum in male. Eyes, epigyne and bulbus are quite different in *X.*



Figs 1–4. Habitus and ocular area of *Xerophaeus espoir*. 1–2 — female and male, dorsal; 3–4 — ocular area of female and male, dorsal. Scale 1–2 = 1 mm, 3–4 = 0.1 mm.

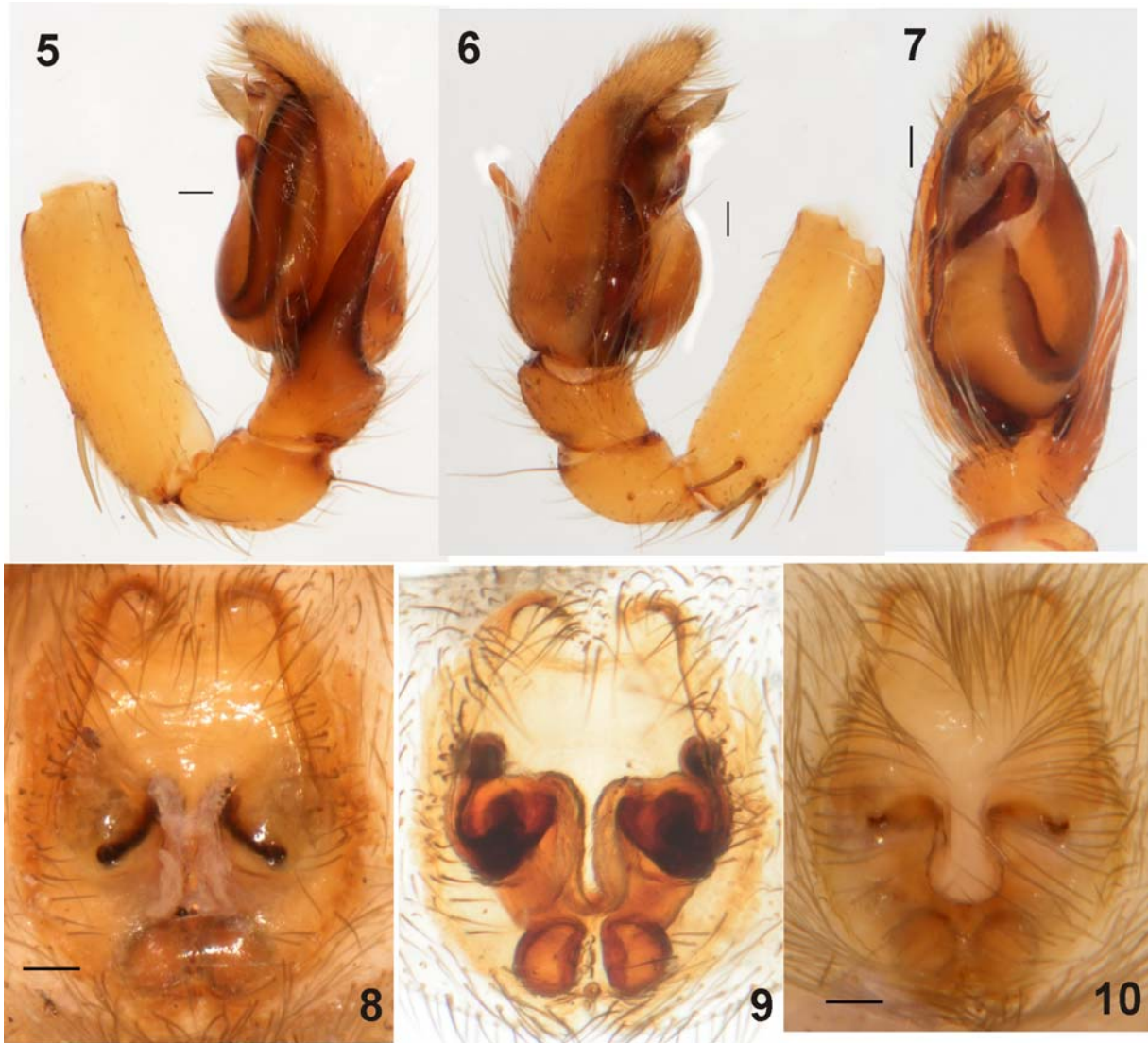
Рис. 1–4. Габитус и глазное поле *Xerophaeus espoir*. 1–2 — самка и самец, сверху; 3–4 — глазное поле самки и самца, сверху. Масштаб: 1–2 = 1 мм, 3–4 = 0,1 мм.

*espoir* and *X. capensis*. The generotype has subequal eye sizes, while in Seychellian species anterior median eyes are larger than others. Epigyne in generotype has only one apical pocket and large kidney-shaped receptacula, while in *X. espoir* there are two unfused pockets, long lateral ridges, small round receptacula, long insemination duct with large accessory glands. It is very likely that *X. espoir* is not congeneric with *X. capensis* and should be placed in another genus. But judgments about *X. espoir* position can be made only after revision of African Gnaphosidae.

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Figs 5–10. Copulatory organs of *Xerophaeus espoir*. 5–7 — male palp, retrolateral, prolateral and ventral, respectively; 8, 10 — epigyne, ventral; 9 — epigyne, dorsal. 10 — subadult female with developed epigyne. Scale = 0.1 mm.

Рис. 5–10. Копулятивные органы *Xerophaeus espoir*. 5–7 — пальпа самца, ретролатерально, пролатерально и вентрально, соответственно; 8, 10 — эпигина, вентрально; 9 — эпигина, дорсально; 10 — субadultная самка. Масштаб = 0,1 мм.