# A NEW SPECIES OF PEUCETIA FROM COLOMBIA (ARANEAE, OXYOPIDAE)

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#### Resumen

Se describe e ilustra *Peucetia cauca* (Araneae, Oxyopidae) de Colombia. Se trata de la cuarta especie del género descrita para Colombia y la primera araña completamente fluorescente que se describe.

#### Abstract

Peucetia cauca (Araneae, Oxypidae) from Colombia is described and illustrated. This is the fourth species of the genus described from Colombia and the first fully fluorescent externally spider to be described.

Since the creation of the genus Peucetia by Thorrell, based on Pasithea viridis Blackwall, 1858 from Algeria, many new species have been described but no major revision has dealt with this group. With the exception of Peucetia viridans, the biology of which has been treated in several papers (see references in Fink, 1987), the others species remain poorly known. Most of the neotropical species are known only from their original descriptions. Peucetia viridans (Hentz) and Peucetia longipalpis F.O.P. -Cambridge were, however, treated in more detail by Brady (1964).

Three specis have been described from Colombia: Peucetia rubrolineata Keyserling, 1877 from Bogotá, Peucetia duplovittata Mello-Leitao, 1941 also from Bogotá and Peucetia smaragdina Mello-Leitao, 1941 from Espinal.

Brady (1964) showed a very widespread distribution for *P.viridans* from the United States to Panamá; no specimens has been reported from Colombia to date.

Peucetia cauca, n. sp. Figs. 1-4

TYPE: Female holotype from Loboguerrero, 60 Km NW of Cali, Dept. of Valle del Cauca, Colombia, collected on February 1988 by W.R. Lourenço. Deposited in the "Museo de Historia Natural" Instituto de Ciencias Naturales U.N.C. Bogotá, Colombia.

ETYMOLOGY: The specific name is a noun in apposition after the Cauca River.

DIAGNOSIS: Peucetia cauca is similar in appearence to Peucetia longipalpis F.O.P. Cambridge. Specimens of P. longipalpis are smaller however, and the two species are readily separated by differences in the epyginum of females. (Figs. 4-5)

**DESCRIPTION:** As noted by Brady (1964) the vivid green pigment of *Peucetia* species washed out in a very short period when fixed in alcohol, so the description is based on a living specimen.

Color in life. Entire cephalothorax an abdomen vivid translucent green. Young spiders vivid yellow. Eyes with darker bands extending toward center of hexagon. Some pale yellow bands extending over toward dorsal aspect of abdomen. Ocular region covered with appressed white hair. Legs in living specimens yellow-orange, banded with bright red; many black spots at base of spines, mostly on femora and tibiae. Labium, endites and sternum green. In alcohol color fades so that abdomen and legs are nearly uniform pale yellow and carapace and sternum greenish yellow.

Female morphology. Body stocky. Legs with conspicuos set of spines on femora, metatarsi and tibiae. Femora with more than 20 me-



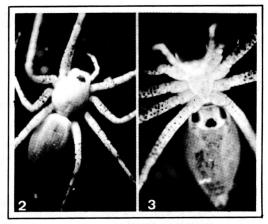
Figure 1. Peucetia cauca, female holotype (in life)

dian spines in ventral view, seven to 10 large spines in dorsal view. Tibiae with average of 9 large spines, metatarsi with average of six large spines.

Lenghts in mm of female holotype. Carapace: 7.5; sternum: 3.7; labium: 1.6; abdomen: 11.7; palp: 8.1; leg I: 31.5; leg II: 27.3; leg III: 22.9; leg IV: 25.1; carapace width: 5.6.

## **Ecological Notes**

The new species of *Peucetia* was collected at night by the author while on a scorpion collecting mission in south western Colombia at 60 km NW of Cali in the Loboguerrero region of the department of Valle del Cauca. The spider was detected with the help of an ultraviolet portable lamp used for scorpion collecting. The body of the spider fluoresced a bright light yellow, and this called the attention of the author. All the aspects of the

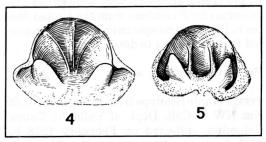


Figures 2 and 3. Female holotype photographed under UV light

fluorescence of this spider are treated in a recent paper by Lourenço et. al. (1988).

The spider was collected at 9 p.m.; the whole work in the field was done in the area from 6 p.m. to 11 p.m. During these five hours a single specimen of *Peucetia cauca* was detected, compared to 45 scorpions of the species *Centruroides gracilis*.

The area of Loboguerrero, also called "el cañon xerofítico del Dagua" corresponds to an area of endemism inside the department of Valle del Cauca, which is caracterized by a tropical dry forest where the view is dominated by column Cactaceae: Caphalocereus colombianus (Cardon) and Melocatus sp. (round cactus), very common in rocky soil, covered by a grassy vegetation, where associations of Croton sp. and of Turnera ulmilifolia are observed. Also are observed species



Figures 4 and 5. Epygena. 4. Peucetia cauca (female holotype). 5. Peucetia longipalpis (female from Taxco, Mexico; M.C.Z.)

of Fourcraea and spined shubtrees. The "Borrajón" shrubtree (Wigandia caracasana) is abundant in the rocky walls, along with some species of Bromeliaceae. The spider was found on the shrubtrees about 150 cm from the ground.

The very dry climate of this area distinguishes it from all the surroundings areas of the departament. The average annual rainfall in Loboguerrero is 740 mm which contrasts starkly with neighboring areas such as rain forest of Anchicayá, where the average annual rainfall is 5148 mm (Espinal, 1968).

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### Literature Cited

- BRADY, A.R. 1964. The lynx spiders of North America, north of Mexico (Araneae: Oxyopidae). Bull. Mus. Comp. Zool. 131: 431-518.
- ESPINAL, L.S. 1968. Visión ecológica del Departamento del Valle del Cauca. Univ. del Valle, Cali, Colombia.
- FINK, L.S. 1987. Green lynx spider egg sacs: sources of mortality and the function of female guarding (Araneae, Oxyopidae). J. Arachnol. 15: 231-239.
- LOURENÇO, W.R., J. KOVOOR and A. MUÑOZ-CUEVAS. 1988. Observations on spiders in ultraviolet light. TUB-Dokum. - Kongr. Tag., Berlin 38: 342-349.