

***Modisimus signatus* Banks, 1914**

Banks, N. 1914. New West Indian spiders. Bull. Amer. Mus. Nat. Hist. 33: 639-643.

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***Mecolæsthus signatus* n. sp.**

Cephalothorax pale, with black median mark, wider at head; sternum reddish or yellowish. Abdomen pale, with a black median stripe, narrowed near middle, not reaching anterior end where there is an oblique stripe, and a basal spot each side, also an apical spot each side, and the basal pleura show an oblique dark stripe. These marks are made up of small spots, more or less connected. The venter shows a narrow, median black stripe followed by a round spot, some distance before the spinnerets. Femora reddish, blackish near tip, and a white band at extreme tip; tibiae dark, with a broad, white band near tip; rest of legs paler. Eyes in two groups, three each side (subequal in size) on a distinct elevation; A. M. E. minute, close together, and as high as upper edge of A. S. E. Abdomen elongate, cylindrical, spinnerets apical; legs very long; vulval area corneous, yellow, concave behind, but little swollen. Length; ceph. 1 mm.; abdomen 2.5 mm.; femur I, 12 mm.; femur IV, 10 mm.

From Naguabo, Porto Rico, March. No. 21669, Dept. Inv. Zoölogy.

Pl. XLIII

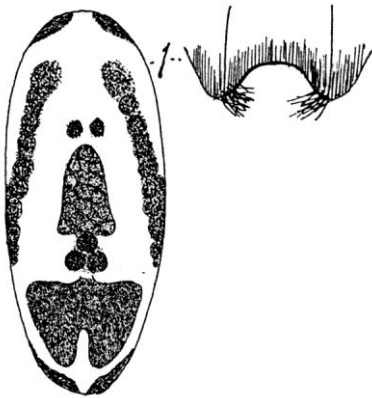


Fig. 1. *Mecolæsthus signatus*, abdomen and vulva.

Petrunkevitch, A. 1929. The spiders of Porto Rico. Trans. Connect. Acad. Arts Sci. 30: 1-158.

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Modisimus signatus (Banks) (Figures 105 to 112).

This is a common and fairly large species living in woods along the coast. It likes rather dense growth and makes a dome-

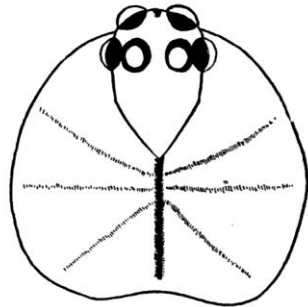


FIGURE 105. *Modisimus signatus* (Banks). Type. Carapace of male viewed from above.

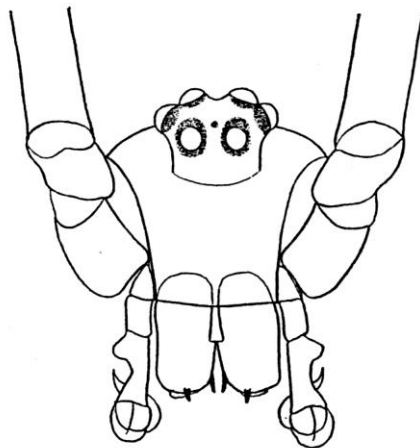


FIGURE 106. *Modisimus signatus* (Banks). Type. Frontview of male.

shaped web on the underside of which it hangs. When disturbed it either runs very swiftly or else shakes the web violently and with such rapidity that it is difficult to see the spider. Banks was the first to describe the species under the genus *Mecolaesthus* in 1914, in the Bull. Am. Mus. Nat. Hist. As the type speci-

mens are in the collection of the Museum I have the privilege of reexamining them and redescrining them here in detail. The generic affiliation of the species had to be changed because the

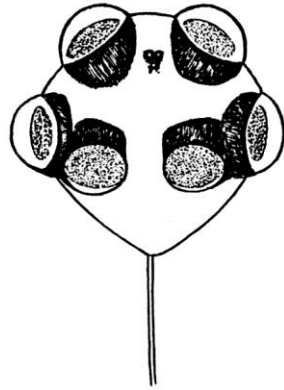


FIGURE 107. *Modisimus signatus* (Banks). Type. Eyegroup of male viewed from above.

characters of *Mecolaesthus* as given by Simon, who established the genus, are quite different from those found in *M. signatus*, whereas it is impossible to separate it generically from other spe-

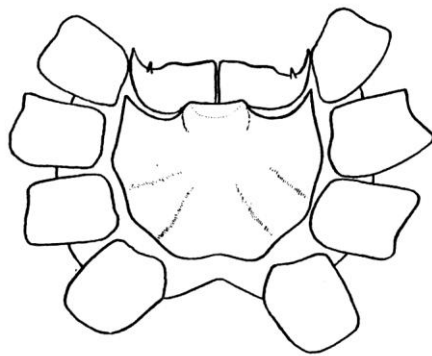


FIGURE 108. *Modisimus signatus* (Banks). Type. Sternum, maxillae and coxae of male.

cies of *Modisimus*. Banks has also had the misfortune of giving a drawing of the female epigynum from the genital fold of the male abdomen, so that his figure must be from now on considered to be spurious. Besides the type specimens from Naguabo, cap-

tured in March, 1914, and a single female from Mayaguez in the collection of the Am. Mus. Nat. Hist., I have in my own collection numerous females and males from Bayamon, Kilometer 21, limestone hills, December 7, 1925; Aguas Buenas, Sept. 19, on plant at entrance to cave; Martin Pena, November 7; La Gloria in the



FIGURE 109. *Modisimus signatus* (Banks). Type. Retrolateral view of left palp of male.



FIGURE 110. *Modisimus signatus* (Banks). Type. Epigynum with pigment spots in front and behind.

Luquillo Mountains, January 30, 1926. And I have seen numerous specimens in many other localities.

a) *Male*. Total length with chelicerae 4.0 mm. Carapace 1.44 mm. long, 1.44 mm. wide, circular (Figure 104). Eyes 8, on a cylindrical turret (Figure 106). Viewed from above both rows

are slightly procurved (Figure 107). Viewed from in front both rows are curved downward. Ratio of eyes AME:ALE:PME:PLE = 0.8:7:7:6. ALE separated from each other by their radius, from PLE by $\frac{5}{7}$ of their diameter. PME are separated



FIGURE 111. *Modisimus signatus* (Banks). Type. Ventral view of the abdomen of the female. The dark portions are bluish grey, the hexagonal spot behind midventral line is brown, the unshaded portions are yellow.

from each other by $\frac{4}{7}$ of their diameter, and are contiguous with PLE. Thoracic groove deep, longitudinal, extending from base of turret to posterior margin of carapace. Clypeus equal to $\frac{31}{7}$ of the diameter of ALE. *Chelicerae* parallel, without boss,



FIGURE 112. *Modisimus signatus* (Banks). Type. Sideview of the same abdomen as in the preceding figure.

shorter than clypeus, soldered to each other in proximal half. Promargin with a sharp tooth at its juncture with the retromargin, a scanty scopula and a powerful tooth close to the base of the fang. Retromargin smooth. *Lip* immobile, fused with sternum, wider than long. *Maxillae* inclined over lip and meeting in front

of it in median line. Scopula wanting, but serrula well developed, composed of a row of teeth. *Sternum* wider than long (Figure 108). First coxae wide apart, fourth coxae separated by little more than their width. *Legs* 1(2)43, second leg missing.

	Femur	Pat. + Tib.	Metatarsus	Tarsus	Total
I	13.3	12.9	22.0	2.1	50.3
II
III	7.2	6.7	10.0	1.4	24.3
IV	9.5	7.5	12.3	1.4	30.7

Width of first patella at the "knee" 0.2475 mm. Tibial Index 2.

Width of fourth patella at the "knee" 0.2475 mm. Tibial Index 3.

There are no spines on legs. The legs are clothed with spinose hair. There are also numerous short hairs on femora and tibiae, arranged in rows on small pedestals. These are probably of tactile function. Curved hairs, such as in other species described below, are wanting in *M. signatus*. The tarsi are composed of a long basal segment followed by about 17 short segments, and are quite flexible. Claws 3, situated on an onychium. Upper claws with a row of about 11 teeth. Third claw bent almost as a hairpin, with a single long tooth. The claws are accompanied by serrated bristles. *Abdomen* elongated, 2.78 mm. long, 1.00 mm. wide. It has the same shape and pattern as in the female. The genital fold is not far from petiolus. Between the genital fold and the spinnerets there is a little sclerotized shield situated immediately behind the central, longitudinal dark band. The genital fold is strongly recurved. Anterior pair of spinnerets stout, cone-shaped, sub-contiguous. Median pair small, contiguous. Posterior pair separated by their diameter. Colulus reduced to a minute elevation. Palp shown in Figure 109. Femur with two ventral apophyses, one of which is near base, the other at end. Tibia has two trichobothria.

b) For purposes of comparison measurements are given here of the two front legs of a *male* cotype.

	Femur	Pat. + Tib.	Metatarsus	Tarsus	Total
I	13.1	12.0	22.8	2.3	50.2
II	9.6	8.1	13.3	1.7	32.7

c) *Female*. Type. Small specimen. Total length with chelicerae 4.3 mm. Carapace 1.214 mm. long, 1.214 mm. wide. *Legs* 1243.

	Femur	Pat. + Tib.	Metatarsus	Tarsus	Total
I	9.6	9.3	17.1	1.6	37.6
II	7.1	6.1	9.4	1.4	23.0
III	5.7	4.6	7.1	1.3	18.7
IV	6.9	5.6	8.9	1.4	22.8

Width of first patella at the "knee" 0.2025 mm. Tibial Index 2.

Width of fourth patella at the "knee" 0.1912 mm. Tibial Index 3.

All other characters as in male. Epigynum shown in Figure 110. It is in the shape of a transverse, convex swelling with chitinized border. *Color in alcohol*: Legs and cephalothorax rufous. Abdomen with a dark, broad mid-ventral longitudinal band (Figure 111) which is followed by an almost hexagonal, brown, slightly scleritized area. Sideview of abdomen shown in Figure 112. The dark pattern in both figures is of a bluish green color, the rest pale yellow. In life bluish green predominates and the spider, at first sight, looks as if it were entirely of that color.