Dianea sattleri

Number of Occurrences

Three periods to each month: 1-10 / 11-20 / 21-31

n=1 High Mt.

n=12 Low Mt.

n=0 Pd

n=0 CP

NC counties: 2

● = Sighting or Collection
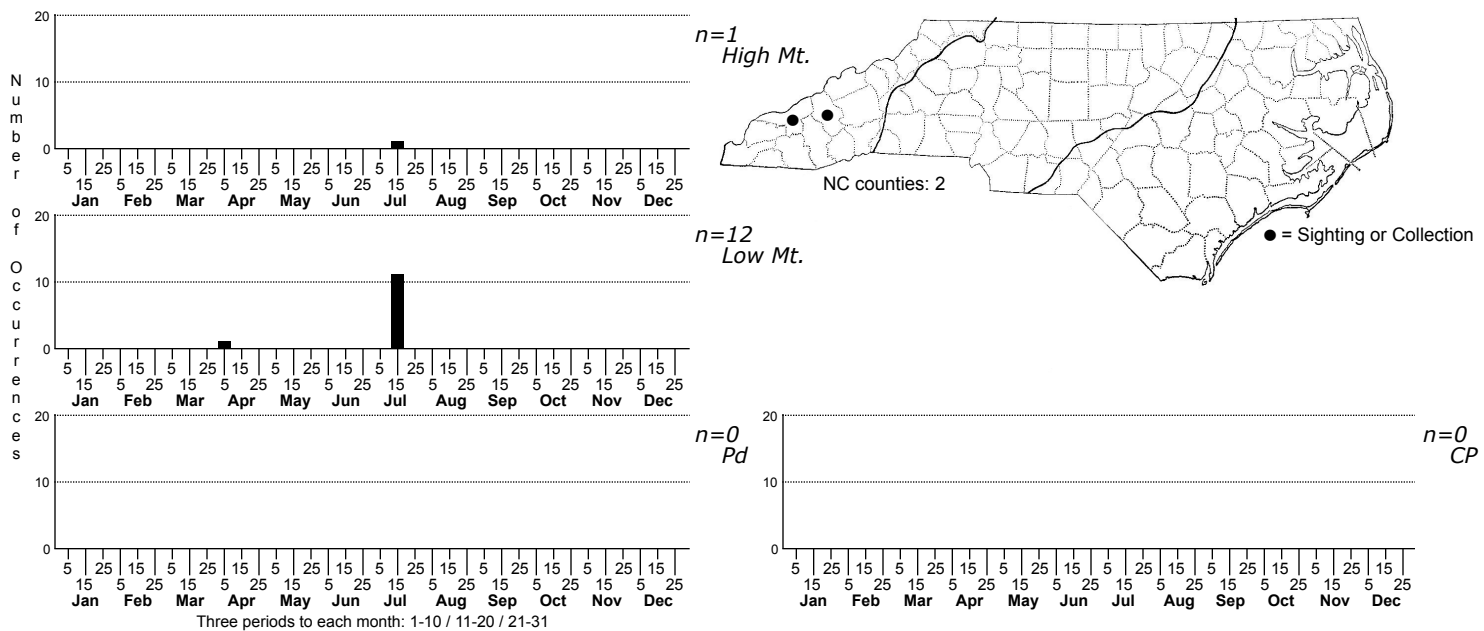
FAMILY: Isohypsibiidae

TAXONOMIC COMMENTS: Morphologically indistinguishable from species originally described in Hungary. No molecular evidence for further comparison. Transferred from Isohypsibius by Gasiorek et al. 2019.

SPECIES COMMENTS: Terrestrial. Apparently cosmopolitan distribution, reported only from AL, WV and GSMNP.

ID COMMENTS: Length up to 250 µm, usually less than 200 µm. Colorless, with eyes present. The cuticle has an obvious reticulated sculpture, with varied shape and size of mesh; it appears more prevalent on the dorsal surface and smaller on the sides. The small bands that form the sides of the mesh of the net are in general rather slender, but do not have uniform thickness and width. There are 9 principal rows of gibbosities (even they have reticulated sculpture), four of which are posterior to the third pair of legs. In the first row there are 6 gibbosities (4 in the original description); there follows 6 gibbosities in the 2nd and 3rd rows, 4 in the 4th, 6 in the 5th, 2 in the 6th, 4 in the 7th, 8th, and 9th rows. The median gibbosities are always more obvious, and have a truncated cone shape; those lateral, smaller, are conical with sharp points. On the sides of the head, anterior to the first row of gibbosities there are two small conical gibbosities, difficult to see. Some gibbosities terminate with a tuft of short and slender spines. Buccal tube short and rather wide. Pharynx oval, with apophyses and 2 macroplacoids, of which the first is profoundly constricted in the middle. Microplacoid absent. Claw well developed, not much difference in those of each leg. At the base of the claws there is a small lunule, more developed on the 4th pair. There are no other cuticular structures on the legs. Eggs smooth, deposited in the exuvium. Pilato (1973), in the redescription of this species (and in its description to which we are referring) puts forth the hypothesis that several authors, in citing Isohypsibius sattleri, have had specimens of this species. It is certain that I. sattleri was never described in sufficient detail, and certainly to it have been reported different species belonging to the “tuberculatus group”. We have considered, agreeing with Pilato, to consider I. sattleri as a nomen nudum. I. sattleri was described from some localities in Hungary. Later it was found in South America, Canada, North Africa, Sicily and adjacent islands, Apuane Alps, Rome, Carso Trieste, Istria, Lessini Verona, Switzerland and Andalusia (Spain). It is certainly one of the more common species of the “tuberculatus group”, and currently one of the better described. - Ramazzotti & Maucci 1983

Length 110-180 µm. The body is white. Eyes are present. Dorsum covered with irregularly shaped gibbosities arranged in 9 rows, 2-6 gibbosities in each row. The gibbosities are better developed and bigger in the end of the body; in its front and on the body sides they often are almost invisible. The lateral and posterior gibbosities usually with tufts at their tips consisting of 3-4 spines, very small in size. The dorsum, including the gibbosities, is covered with irregular network having rather large meshes, up to 6 µm in width. Pharynx with two macroplacoids, no microplacoid. The first macroplacoid distinctly constricted in its middle and 3 µm long; the second on 2 µm in length (in a specimen 154 µm long). Claws and accessory spines small. No cuticular bars at the inner claw bases of legs 1-3. Outer and inner claw with small lunules. The outer claws of leg 4 are 7 µm long. In exuviae 1-3 smooth eggs. Tychoalpine species, rather frequent but not numerous, and widely distributed in Poland. Polycalciphilous and euryhygric from which was found in many studied habitats. A geopolitan element. - Dastych 1988

DISTRIBUTION: Please refer to the dot map.

HABITAT: Predominantly soil/leaflitter, also stream sediments.

OBSERVATION METHODS: PC and DIC microscopy