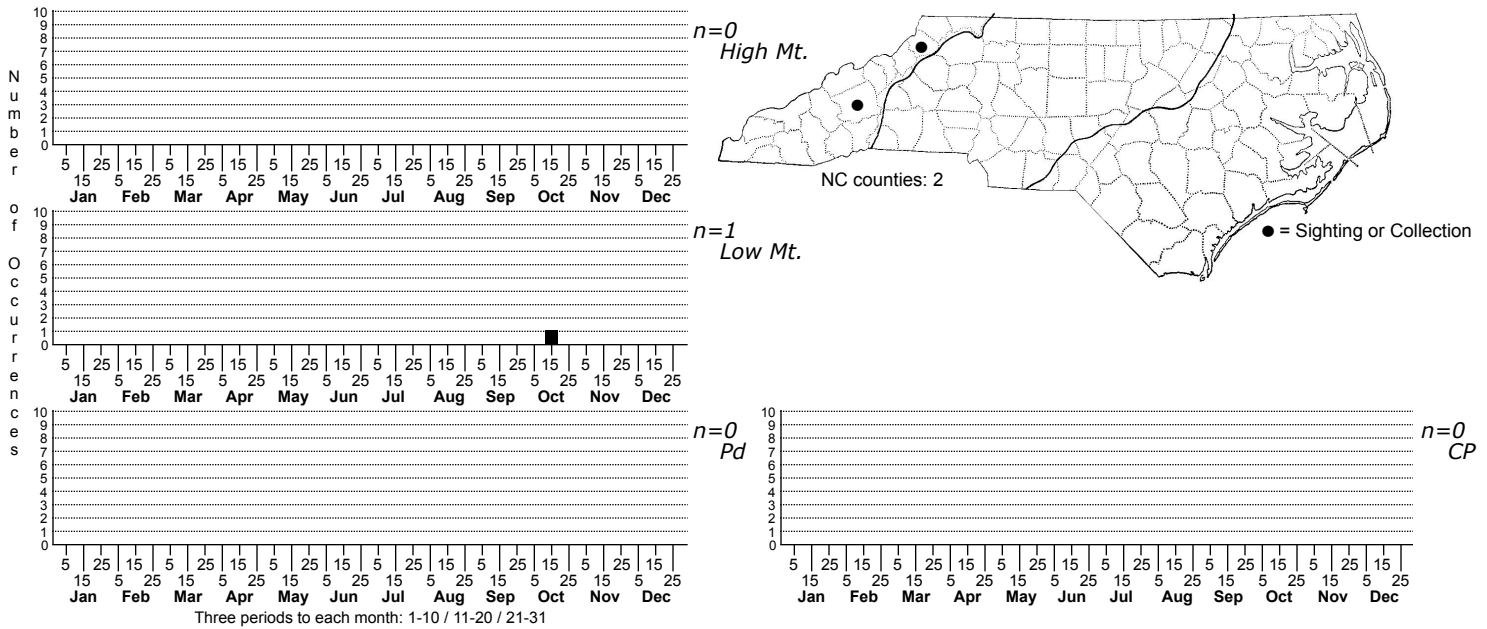


## *Viridiscus perviridis*



FAMILY: Echiniscidae

TAXONOMIC COMMENTS: The genus was recently analyzed with integrative taxonomy by Momeni et al. 2023. This species was transferred from Echiniscus by Gasiorek et al. 2019.

SPECIES COMMENTS: Terrestrial. Records from Asia, Costa Rica, but in the US only from NC and TN.

ID COMMENTS: In reflected light the tardigrade appears dorsally as a very dark brownish-green color, almost black, while ventrally the color is yellowish in the young and brick-red in the adults; in transmitted light it appears instead an olive-green coloration and of this color are the dorsal and median plates, the cirri A, the claws and the proximal region of the 4th pair of legs, including the dentate collar (6-9 teeth, often multiple), while the other parts of the cuticle, the buccal cirri, the elongated cephalic papilla and the clava are extremely light greenish, almost colorless. The interior of the body contains the usual red granulation, typical of the Echiniscus. The sculpture of the plates -- especially observed with phase contrast -- calls to mind that of *E. wendti* and especially of *E. phocae*; however it is composed of projecting granules, which appear clearly in the profile of the tardigrade, where it is seen in optical section; the granules are larger on the scapular, terminal, median 1, and in the caudal zone of the first and second paired plates (II, III) and of median 2; smaller in the rostral zone of these last plates and in the regions included between the second paired plate (III) and the terminal, where the cuticle is strongly thickened and sculptured (as far as the flanks of the animal), so much that one may perhaps consider the presence of median plate 3, in spite of the absence of a clear lateral delineation. Other than the larger sculpture cited, there is also -- on all the plates -- a dense extremely fine regular granulation visible only with strong magnification. The plates -- as occurs in *E. viridis* -- have greater relief than those of the other Echiniscus, probably because of greater thickness. The claws of the 4th pair of legs are long (up to 26  $\mu\text{m}$ ) and those internal bear -- on their basal part -- an extremely slender spur, very difficult to see. Exuvia observed with 3 eggs (72 x 65  $\mu\text{m}$ ). Characteristic of the species is the great length of the lateral cirri A, which in general varies from 150 to 170  $\mu\text{m}$  for the larger individuals, while in the other three species of the "viridis group" the cirri A are short, or extremely short (about 30-40  $\mu\text{m}$  for *E. viridis* and *E. rufoviridis*, about 80  $\mu\text{m}$  for *E. viridissimus*); it is noted that the length of cirri A is one of the more constant characteristics of the Echiniscus, presenting a rather narrow variation.  
- Ramazzotti & Maucci 1983

DISTRIBUTION: Please refer to the dot map.

HABITAT: Moss.

OBSERVATION METHODS: PC and DIC.