

Microstructure of the Adhesive Pads on the Legs of the Millipede
Sichotanus eaurygaster (Polydesmida : Paradoxosomatidae)

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Microstructural characteristics of the adhesive pads on the walking legs and their sexual dimorphism in the millipede, *Sichotanus eaurygaster* is studied by using both of light and field emission scanning electron microscopes. The millipede possesses a number of secondary sexual characters which are designed to improve the efficiency with which spermatophores are transferred from males to females. As a secondary sexual character, the adult male of this millipede has developed typical adhesive pads on the legs which help the male hold on to the female during mating. The adhesive pads are located on the ventral surface of the tarsus and tibia as a form of numerous filamentous bristles with horizontal striations.

These bristles are counted about 300 on the tarsus, and about 100 on the surface of the tibia, respectively. The average length of bristles is measured approximately 60 μm . Moreover, each bristle has its round socket on the surface of tarsus and tibia, the typical striation appears only distal half of each bristle acuminating toward the tip, characteristically.

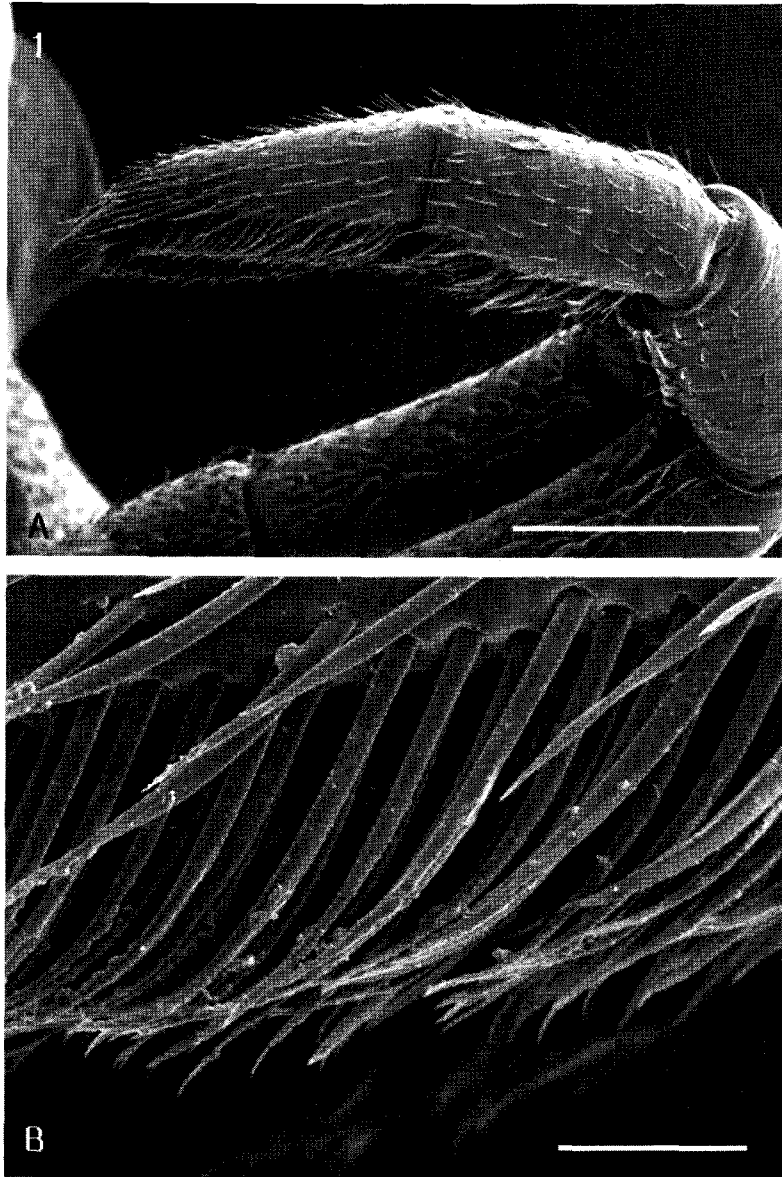


Plate 1. Scanning electron micrographs of the enlarged view of male *Sichotanus eaurygaster* with two pairs of legs. A, Adhesive pads of the legs help the male to hold onto the female during mating. B, The adhesive pads is observed on the leg. Scale bars = 500 μ m (A); 50 μ m (B).