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A NEW SPECIES OF _PSAMMOTETTIX_ (HOMOPTERA: CICADELLIDAE) FROM MEXICO

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ABSTRACT
_Psammotettix mexcala_ n. sp., the first known Mexican species of the genus, is described.

INTRODUCTION
The deltocephaline genus _Psammotettix_ was described by Haupt (1929), who placed _Athysanus maritimus_ Perris as the type species. Greene (1971) revised the Nearctic species of _Psammothettix_; he recognized 19 species, all of which occur in Europe and/or North America. He reported no Mexican species. Linnavouri (1959), in his treatment of the Neotropical Deltocephalinae, did not recognize the occurrence of species of _Psammothettix_ in either Central or South America. Recent study of specimens of deltocephaline leafhoppers has revealed a new species of _Psammothettix_ from Mexico City, Mexico; this species is related to _P. lividellus_ (Zetterstedt).

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Psammotettix mexcala n. sp.

Length of male, 3.5 mm; female, 3.8 mm. Crown bluntly angled, length at middle equalling width between eyes at base. Ground color of crown, pronotum, and scutellum cream yellow with pale brown on most of crown except along median line. Pronotum with irregular longitudinal bands of pale brown. Forewings hyaline, veins white, some margined with fuscous. Male genitalia with plates short, one and one-half times as long as median width. Style narrow, apical fourth concavely excavated on outer margin with apex narrowed, curved outwardly, and slightly enlarged by a transverse heavily scleritized apical plate. Aedeagal shaft long, tubular, curved dorsally, apex rounded.

Figures 1–4. Psammotettix mexcala n. sp. 1–3, male genital structures: 1, aedeagus, ventrally; 2, aedeagus, laterally; 3, style. 4, female seventh sternum. X50.

Female genitalia with lateral angles of seventh sternum produced and rounded, posterior margin broadly angularly excavated between lateral angles almost one-third distance to base. Holotype male labelled “Penon Marquez D. F. Mexico. 111–3–24 (A. Dampf Coll.).” Female allotype same data as holotype. Paratypes, 2♂, 9♀, same data as holotype; 1♀, Mexico City, D. F. Mexico IX–9–23 (A. Dampf Coll.). Holotype, allotype, and paratypes in the DeLong Collection.

This species is apparently related to P. lividellus, which the male resembles genitalically. The aedeagal shaft of P. mexcala is proportionately longer, the style is narrow with a heavily sclerotized apical cap and the female seventh sternite angularly excavated between produced lateral angles.

LITERATURE CITED

AN UNUSUAL CASE OF RESISTANCE TO ASPHYXIA IN THE SNAKE PYTHON MOLURUS.—The following is an account of the swallowing of one snake by another and of the subsequent retrieval and recovery of the victim. On 28 October 1972 at about 1100 hours a live mouse (Mus musculus) was placed in a small cage (60 x 30 x 30 cm) containing three small pythons (Python molurus) of lengths approximately 105 cm, 90 cm, and 75 cm. At about 1200 hours it was discovered that the largest python had swallowed the next largest, probably as a result of both snakes attempting to eat the mouse. At about 1230 hours the larger snake was examined; when it opened its mouth the tail of the other snake was seen inside.

The smaller snake was recovered by squeezing the larger, thus forcing it to regurgitate. The victim was covered with mucus and was completely limp, with no signs of muscle tone. The dead mouse was partly protruding from the snake's mouth; when the mouse was removed, the inside of the mouth of the victim was white. The snake was rinsed with warm tap water. An effort was made to insert the tip of a syringe cylinder into the glottis to enable mouth-to-mouth resuscitation, a method that had proved successful for Guido Dingerkus (personal communication, May 1972) in reviving a drowned anaconda. However, in this case, the glottis was too small. The snake was massaged by gently squeezing the body in sections from the neck region to the posterior and vice versa and was periodically held with its head down to facilitate drainage of fluid that had gotten into the lungs.

At about 1300 hours muscle tone returned to the tail. At about 1330 hours we noticed the glottis opening and closing and the body wall expanding and contracting. At first breathing was rapid, then it gradually slowed. Muscle tone continued developing, first at the posterior and then at the anterior, and the inside of the mouth became pinker. The snake started moving its head about when muscle tone finally reached that area. By about 1430 hours the snake was flicking its tongue and striking at its handler. The following day the python showed good coordination when it successfully captured and ate a mouse. The only evidence of its ordeal was a few minor abrasions on its scales from the teeth of the larger snake.

In light of these observations one wonders how long a snake can tolerate asphyxic conditions. Belkin (1963) presented data on tolerance times of anoxic anoxia (which is similar to asphyxia) in various families of reptiles. Three species of snakes belonging to the same family as the pythons (Boidae, species and size not indicated) showed a mean tolerance time of 59 minutes, with a range of 41 to 61 minutes. The python reported on here was under asphyxic conditions for, at most, 70 minutes. Belkin (1968) found that reptiles in general tolerated stagnant anoxia (lack of oxygen resulting from stopping the circulation) less well than anoxic anoxia (lack of oxygen resulting from gas mixtures containing no oxygen). Asphyxia more closely resembles anoxic anoxia. The whiteness of the python's oral mucosa possibly reflected shunting of the blood to more vital areas (brain and heart), as occurs in shock. Although the initial swallowing and the possible accompanying struggle were not observed, the flaccid condition of the snake upon retrieval would suggest a minimal rate of metabolism at least after being swallowed. More detailed knowledge of circulatory and biochemical adjustments to being swallowed by a snake is needed before this unusual occurrence can be placed into proper perspective.—MARIAN B. VINEGAR AND ALLEN VINEGAR. Department of Biology, Pyle Center Box 1214, Wilmington College, Wilmington, Ohio 45177

LITERATURE CITED


1Manuscript received January 1, 1973.