

A new species of *Portanus* (Hemiptera, Cicadellidae, Xestocephalinae) from Brazil

Adenomar N. de Carvalho

Instituto de Biodiversidade e Florestas, Universidade Federal do Oeste de Pará, Rua Vera Paz, s/n, Salé, 68035-110, Santarém, Pará, Brasil. (adenomarc@yahoo.com.br)

ABSTRACT. *Portanus* Ball, 1932 comprises 45 species that occur in Brazil, including *Portanus felixi* sp. nov. described and illustrated herein. The genus is close to *Paraportanus* Carvalho & Cavichioli, 2009 and can be distinguished from it by having a transversal groove on the basal third of the subgenital plates. The new species can be distinguished from the other species of the genus by the characters of male genitalia, especially by the pygofer with the apical process pointed, sclerotized and dorso-ventrally directed; and by the aedeagus with apodeme on the basal third.

KEYWORDS. Leafhoppers, Neotropical Region, *Portanus felixi* sp. nov., Taxonomy.

RESUMO. Uma nova espécie de *Portanus* (Hemiptera, Cicadellidae, Xestocephalinae) do Brasil. *Portanus* Ball, 1932 compreende 45 espécies que ocorrem no Brasil, incluindo *Portanus felixi* sp. nov. descrita e ilustrada neste estudo. O gênero está relacionado a *Paraportanus* Carvalho & Cavichioli, 2009 e pode ser diferenciado deste por apresentar um sulco transversal no terço basal das placas subgenitais. A nova espécie pode ser distinguida das demais do gênero principalmente pelos caracteres da genitália masculina, especialmente o pigóforo, que apresenta um processo apical pontiagudo, esclerotizado e direcionado dorsoventralmente; e pelo edeago, com apódema no terço basal da haste.

PALAVRAS-CHAVE. Cigarrinhas, Região Neotropical, *Portanus felixi* sp. nov., Taxonomia.

Portanini (Cicadellidae, Xestocephalinae) comprises two genera, 53 species and are among the smallest cicadellids, ranging from 4.00 to 7.00 mm (CARVALHO & CAVICHIOLI, 2009).

Portanus Ball, 1932 is characterized by the following character combination: crown produced; anterior margin ranging from rounded to subangulate in dorsal view, without carinae between the transition with the face; ocelli on anterior margin, equidistant from anterior angle of the eyes and from the coronal suture, this presents itself as long as half the length of the crown; antennae as long as the body; styles with apex broad and bifid. It can be easily distinguished from *Paraportanus* Carvalho & Cavichioli, 2009 by the transverse groove in the basal third of the subgenital plates.

MATERIAL AND METHODS

For the analysis of genital structures, the abdomen was removed and placed in heated KOH 10%, following OMAN (1949). Softened genitalia were washed for 5 to 10 minutes in hot water and placed on a concave slide with glycerin to maintain the desired position for the illustrations. Dissected structures were kept in microvials with glycerin, and pinned together with the specimen. Illustrations were made using camera lucida attached to a stereoscopic microscope.

The terminology follows YOUNG (1968, 1977) and BLOCKER & TRIPLEHORN (1985), except for the head structures, which follows HAMILTON (1981). Information given within square brackets correspond to personal observations or additional data that are not present on the specimen labels.

RESULTS

Portanus felixi sp. nov.

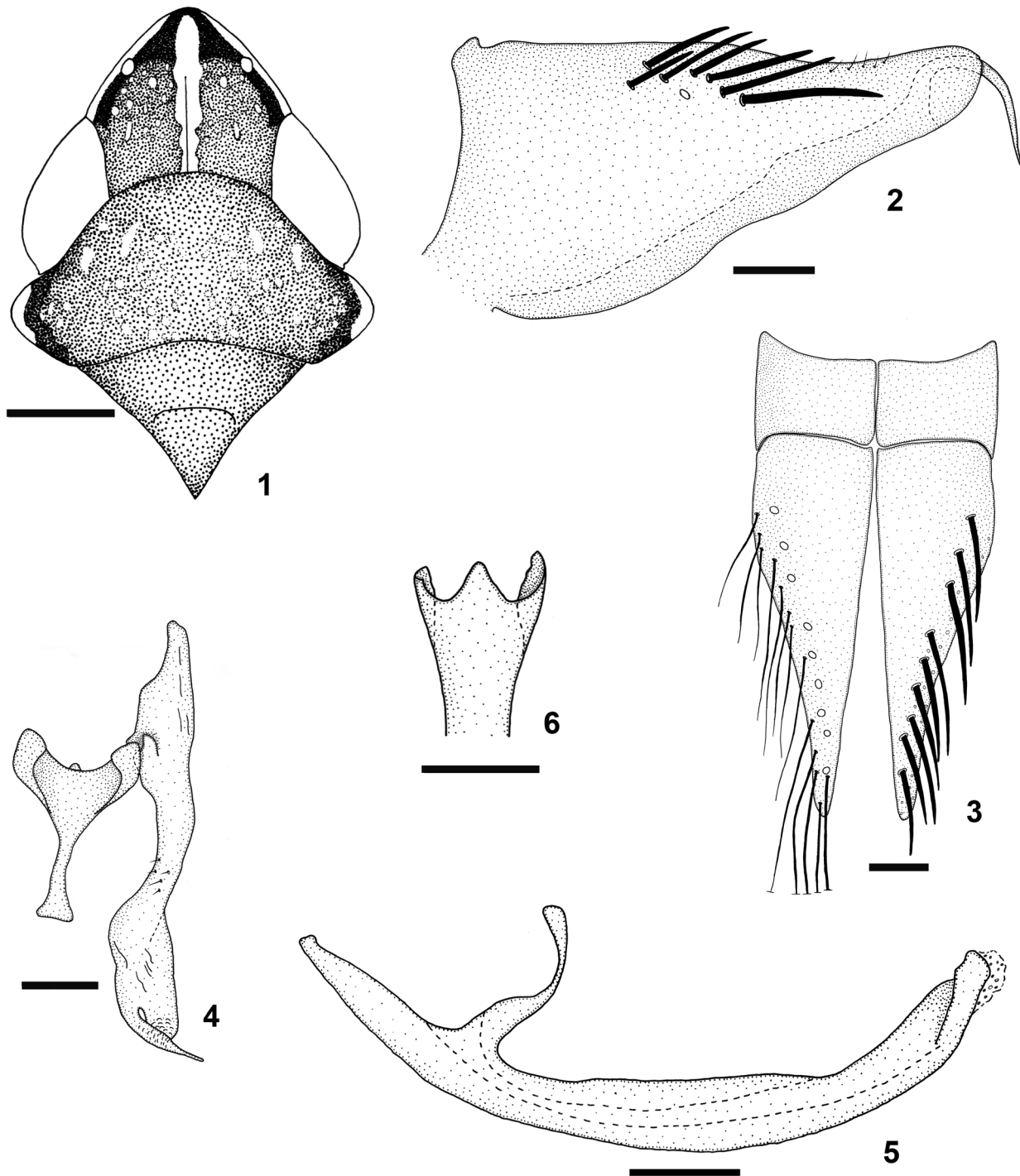
(Figs 1-6)

Diagnosis. Body light brown with white spots sparsely distributed; crown and apex of forewing dark brown; pygofer produced posteriorly with a long spiniform process, acute and directed dorsoventrally; aedeagus with dorsal apodeme in basal third; shaft of aedeagus with apex broad bearing a median tooth.

Measurements (mm). Male: total length 6.00; female: total length 7.00.

Coloration. Body light brown with translucent and opaque areas. Crown light brown with black anterior margin; anterior margin with a narrow yellow band involving the eyes, ending in a black spot at apex of the crown; disc of the crown with whitish band along the coronal suture and several unsightly yellow spots widely distributed. Pronotum light brown with two pairs of white spots and elongated anterior margin, followed by several straw-yellow spots of irregular shape; lateral margins white with a brown band. Forewings light brown semi-hyaline with dark brown spot at apex and transverse veins; clavo veins orange with white spots apically.

Description. Crown strongly produced anteriorly; anterior margin subangulate in dorsal view (Fig. 1). Pronotum (Fig. 1) convex, wider than head; lateral margins subangulate in dorsal view; with dorsopelural carinae; posterior margin with slight median concavity. Forewings with venation slightly distinct, with three closed antepical cells; antepical cell median longer than the outer cell; fourth apical cell subtriangular. Other characters as in generic description (CARVALHO & CAVICHIOLI, 2003).



Figs 1-6. *Portanus felixi* sp. nov., holotype ♂: 1, head, pronotum and mesonotum, dorsal view; 2, pygofer, lateral view; 3, subgenital plates, ventral view; 4, connective and style, dorsal view; 5, aedeagus, lateral view; 6, apex of aedeagus, posterior view. Scales: 0.15 mm.

Male genitalia. Pygofer enlarged basally in lateral view, apical half slightly narrowed towards rounded apex, bearing an apical spiniform process long, pointed, sclerotized and directed dorsoventrally (Fig. 2). Subgenital plates triangular, enlarged at basal two-thirds, narrowed at apical third; basal third with a transverse line unpigmented; each of the subgenital plates with uniseriate macrosetae on ventral side, followed by long, thin bristles (Fig. 3). Styles with apex broad and forked,

with the internal branch unciform, approximately parallel and longer than the outer cell (Fig. 4). Connective T-shaped with stalk long and apically expanded (Fig. 4). Aedeagus with robust preatrium, corresponding to one third of the total length of aedeagus, articulated to connective; in lateral view, shaft with apical fifth abruptly curved dorsally; aedeagus with dorsal apodeme (Fig. 5); apex enlarged with a median tooth (Fig. 6). Gonopore apical.

Female genitalia. Sternite VII, in ventral view, not very produced posteriorly; anterior margin straight; posterior margin with a small tooth in the middle portion.

Distribution. Brazil (Rio de Janeiro and Minas Gerais).

Type material. Holotype ♂, BRASIL, [Rio de Janeiro], Nova Friburgo, 26.II.1992, M. Felix leg. (MNRJ). Parátipos: *Ibidem*, ♂, 02.I.1993; ♀, 26.X.1991. *Ibidem*, ♀, 25.IV.1992; ♂, Minas Gerais, Itamonte, 30.IX-03.X.1999, [D.] Takia leg. (MNRJ).

Etymology. The species name refers to the collector of specimens, Márcio Felix (FIOCRUZ, Brazil).

Comments. *Portanus felixi* sp. nov. differs from all species of the genus by the costal cell with half the length of the outer anteapical cell, by the crown strongly produced anteriorly, and the anterior margin subangulate in dorsal view. However, aedeagus resembles *P. tridens* (DeLong, 1980), but this differs by having only one median tooth at the apex of aedeagus.

Acknowledgements. I am grateful to Rodney Cavichioli (DZUP) for intermediating loan of specimens from the Museu

Nacional (MNRJ); to Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Fundação de Amparo à Pesquisa do Estado do Pará (FAPESPA) and Universidade Federal do Oeste do Pará (UFOPA) for financial support.

REFERENCES

- BLOCKER, H. D. & TRIPLEHORN, B. W. 1985. External morphology of leafhoppers. In: NAULT, L. R. & RODRIGUES, J. G. eds. **The Leafhoppers and Planthoppers**. New York, John Wiley & Sons. 500p.
- CARVALHO, A. N. & CAVICHIOLI, R. R. 2003. *Portanus* Ball: descrições de dez espécies novas (Hemiptera, Cicadellidae, Xestocephalinae). **Revista Brasileira de Entomologia** 47:547-558.
- _____. 2009. Novo gênero e espécie de Portanini Linnavuori e notas taxonômicas (Hemiptera, Cicadellidae, Xestocephalinae). **Revista Brasileira de Entomologia** 53:26-31.
- HAMILTON, K. G. A. 1981. Morphology and evolution of the rhynchotan head (Insecta: Hemiptera, Homoptera). **Canadian Entomologist** 113:953-974.
- OMAN, P. W. 1949. The Nearctic leafhoppers (Homoptera: Cicadellidae). A generic classification and check list. **Memoirs of the Entomological Society of Washington** 3:1-253.
- YOUNG, D. A. 1968. Taxonomic study of the Cicadellinae (Homoptera, Cicadellidae). Part 1. Proconiini. **Bulletin of the United States National Museum** 261:1-287.
- _____. 1977. Taxonomic study of the Cicadellinae (Homoptera: Cicadellidae). Part 2. New World Cicadellini and genus *Cicadella*. **Bulletin of the North Carolina Agricultural Experiment Station** 239:1-1135.