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Seven new South American species of *Regalana* DeLong & Freytag (Cicadellidae: Iassinae: Gyponini)

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Abstract

Seven new species of the previously monotypic genus *Regalana* DeLong & Freytag, 1975, described from Panama, are described and illustrated. The new species are described from lowland and montane Amazonian/Andean rain forests and Cerrado savanna of Brazil, Ecuador, French Guiana, and Peru. They can be distinguished from each other, as well as from the type-species, *R. corona* DeLong & Freytag, 1975, mainly by features of the aedeagus. A key to the now eight known species of *Regalana* is provided.

Key words: distribution, Dungeons & Dragons, key, Leafhoppers, Neotropical Region

Introduction

Regalana was described by DeLong & Freytag (1975) to include a single species, *Regalana corona* (type-species). This species is recorded for Panama (holotype), Brazil (allotype), and French Guiana (paratype without abdomen). Considering that the species of *Regalana* herein described cannot be identified solely based on the color pattern, it is doubtful that the specimens in the type species from Brazil and French Guiana are conspecific with the holotype from Panama. According to the original description, the genus can be distinguished from other genera of Gyponini by the following set of features: (1) crown short, broadly rounded, with definite margin; (2) interocular width twice as wide as median length of head; (3) disc of crown slightly concave and with transverse striae; (4) ocelli large, equidistant from eyes and median line of crown, slightly closer to anterior than to posterior margin; (5) aedeagus without parameres [processes of the dorsal apodeme], and apex of shaft conspicuously broadened. DeLong & Freytag (1975) added that *Regalana* resembles small species of *Curtara*, but the aedeagus of the former lacks processes of the dorsal apodemes. It also differs from *Ponana* in having transverse striae on the crown.

Based on specimens collected using different methods (light and intercept (window and Malaise) traps and canopy fogging) in Brazil, Ecuador, French Guiana and Peru, seven new species of *Regalana* are described and illustrated. The aedeagus of the type-species, *R. corona*, is redrawn based on the original illustration for comparison (Figs 2, 3) and aedeagal paired processes are named in order to facilitate the following descriptions. General morphology and coloration common to all species are detailed in the revised diagnosis given. A map of distribution and key to all species of *Regalana* is also provided. Specific epithets of the new species refer to characters from the classic TV animated series Dungeons & Dragons, which celebrated its 30th anniversary in 2013.

and other *Regalana* species by the diagnostic characters above, in addition to the aedeagal shaft, absent to laterodorsal process (LD) and lateroventral processes (LV) parallel to shaft (Figs 95, 96).

The new species was collected with a glass intercept trap in an unflooded Amazonian Rainforest.

Key to adult males of *Regalana*:

1. Aedeagus apex with single pair of elongate (LV) processes (Fig. 62) *R. prestoi* sp. nov. (Peru)
- Aedeagus apex with three or four pairs of processes (Figs 26, 50): anteromedian (AM), anterolateral (AL), laterodorsal (LD) and/or lateroventral (LV) 2
2. Aedeagus apex with LV bearing additional branches or processes (Fig. 38) 3
- Aedeagus apex with LV lacking branches or processes (Figs 26, 50) 5
3. Aedeagus shaft with pair of lateral slender elongate processes at mid-length (Fig. 14); apex with LV directed laterally (Fig. 14) *R. bobbyi* sp. nov. (Ecuador)
- Aedeagus shaft without paired elongate processes at mid-length (Fig. 3); apex with LV directed ventrally, parallel to shaft in posterior view (Fig. 2) 4
4. Aedeagus shaft with expanded lateral flanges at mid-length (Fig. 38); apex with LD curved and converging in dorsal and posterior views (Figs 38, 39) and LV as long as half of shaft length (Fig. 37) *R. ericki* sp. nov. (Peru)
- Aedeagus shaft without expanded lateral flanges at mid-length (Fig. 3); apex with LD widely divergent in posterior view (Fig. 3) and LV shorter than half of shaft length (Fig. 2) *R. corona* DeLong & Freytag, 1975 (Panama)
5. Aedeagus apex with LV, in lateral view, positioned in same plane as shaft (Fig. 49) 6
- Aedeagus apex with LV, in lateral view, oriented anteriorly or posteriorly to shaft (Figs 25, 73) 7
6. Aedeagus shaft with lateral dentiform projections along apical half (Fig. 50); apex with AL, in dorsal view, with apices abruptly converging (Fig. 51) and LD sharing a common stem with LV; style without serrated ventral margin (Fig. 48) *R. hanki* sp. nov. (Peru)
- Aedeagus shaft without lateral dentiform projections (Fig. 96); apex with AL, in dorsal view, completely parallel to each other (Fig. 97) and LD absent (Fig. 95); style with ventral margin serrated (Fig. 94) *R. uni* sp. nov. (French Guiana)
7. Aedeagus apex with LD much shorter than AD in dorsal view (Fig. 75) and LV extended anterior to shaft in lateral view (Fig. 73) *R. sheilae* sp. nov. (Brazil)
- Aedeagus apex with LD approximately as long as AD in dorsal view (Fig. 27) and LV extended posterior to shaft in lateral view (Fig. 35) *R. dianae* sp. nov. (Peru)

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