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FROM LIBERTY COUNTY, FLORIDA

(ORTHOPTERA, TETTIGONIIDAE)

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A REMARKABLE NEW GENUS AND SPECIES OF DECTICID FROM LIBERTY COUNTY, FLORIDA (ORTHOPTERA, TETTIGONIIDAE)

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During the later part of the Summer of 1925, Mr. T. H. Hubbell camped for some time near the Appalachicola River, in Liberty County, western Florida. While there, a single specimen of a large green Decticid, having only slightly reduced organs of flight and a long, gently upcurved ovipositor, was secured. Though it has not been possible to find additional material, the insect is of so distinctive a phylum that the new genus and species which it represents can be easily characterized.

HUBBELLIA new genus

This genus is erected to include a single species, *H. praestans* here described. It is nearest *Pediodectes* Rehn and Hebard, though the female subgenital plate is more similar to the type developed in species of *Atlanticus* Scudder.

It agrees with *Pediodectes* as follows. Prosternum strongly bispinose. Lateral carinae of pronotal disk suggested only in metazonal portion and there very weak and broadly rounded. Caudal femora very elongate, much more than twice as long as pronotum, reaching well beyond apex of abdomen. Ovipositor elongate and weakly curved dorsad, its margins unarmed. Pronotum with dorsal outline straight in lateral aspect, no sellation indicated; lateral lobes longer than deep. Caudal tibiae with three pairs of apical spurs, the ventral pair therefore present. Size large. Plantula slightly longer than wide.

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From Pediodectes we separate Hubbellia by the following features. Fastigium decidedly narrower, distinctly less than one-third as wide as the width between the eyes and showing a broad and shallow longitudinal impression disto-dorsad. notum with metazonal portion of disk flattened and subglabrous (not as in *Pediodectes*, glabrous and smooth, often with faint longitudinal rugae; often showing a trace of tectation if a faint medio-longitudinal carina is indicated), its caudal margin distinctly truncate; humeral sinus of lateral lobes very faint, weaker than in *Pediodectes* and more dorsal in position. Mesosternal lobes bluntly spiniform produced. Tegmina and wings of female surpassing apex of abdomen, only moderately reduced (vestigial and wholly concealed by the pronotum in this sex of Pediodectes). Femora with genicular lobes all minutely unispinose and all ventral margins (except the caudal of the cephalic femora) armed with small spines. Cephalic tibiae with dorsal surface armed only externally with a distal and meso-distal spine; foramina rimate.

The genus might also be compared with the Californian Cyrtophylleicus Hebard which, however, differs in the smaller size, smaller eyes and much narrower fastigium which is strongly sulcate dorsad, flattened pronotal disk which expands more strongly caudad and has distinct lateral bounding carinae in over the caudal half, tegmina which are coriaceous, more reduced and broader, vestigial wings, much shorter caudal femora, ventral margins of femora all armed, cephalic tibiae with dorso-external margin armed with four spines, caudal tibiae with ventral pair of spurs well separated (instead of adjacent) and plantula even shorter. These genera may very possibly be relicts of very ancient faunistic invasions.

The coloration of *Hubbellia* is distinctive; being in general green, with a broad median band of brown on head and pronotum which is weakly margined with yellowish, the tegmina having the discoidal vein and their margins also yellowish.

¹ The same sex can not be compared, as *Cyrtophylleicus* is known only from a male.

Hubbellia praestans new species (Pl. I)

It is surprising to find so large and distinctive an unknown species of the Orthoptera in the eastern United States.

Type: 9; "Camp Torreya," Township 2 N-R 7 W, Liberty County, Florida. July 29, 1925. (T. H. Hubbell.) [Hebard Collection, Type No. 1087.]

Size large; form moderately stout, but more graceful than in Pediodectes. Fastigium about three-quarters as wide as first antennal joint. Surface smooth and shining, except metazona and dorsal portions of tegmina, which have more the appearance of ground glass. Sulci of pronotum with only the first well indicated. Tegmina tapering to the rather sharply rounded apices: ulnar vein branching proximad, humeral vein briefly separated from the discoidal, this slightly greater proximad where the former shows some convexity toward the costal margin: mediastine vein reaching two-fifths of length of costal margin and slightly heavier than the oblique costal veins. Ultimate tergite produced in two sharply acute-angulate processes with apices sharply rounded, on each side of the equilaterally triangular supra-anal plate, the dorsal surface of which is impressed. Ovipositor very elongate and gently curving dorsad to its acute apex, which is median in position. Subgenital plate large, proximad with coarse and very broadly rounded meso-lateral carinae, which curve to become parallel and then disappear before the strongly bilobate apex is reached. Limbs as described above.

General coloration light yellowish oil green. Dorsal surface of fastigium auburn, broadening and becoming blackish chestnut brown on occiput. Dorsal surface of pronotum with a moderately broad band of auburn obscurely margined with chalcedony yellow. Discoidal vein and margins of tegmina to near their apices chalcedony yellow. Ventro-external margin of caudal femora amber yellow. Margins of ovipositor buffy, the apex chestnut brown. All femoral spines with distal portions blackish brown.

Length of body 30.5, length of pronotum 8.3, caudal width of pronotal disk 4.7, length of tegmen 25.3, greatest tegminal width 6.7, length of ovipositor 31.3, length of cephalic femur 9.7, length of caudal femur 26 mm.

The type of this remarkable insect is unique. It was taken on a hot, humid night while collecting on the edge of a road bordering the Torreya ravine forest. The specimen was found on the top of a tall weed in the margin of the woods, while Mr. Hubbell was using an electric head light. His field notes state further that the green color and long ovipositor attracted attention at some distance and that the spot was directly beneath a large pine and near a clump of Torreya on the lip of the ravine. These ravine woods are composed of a heavy growth of beech and magnolia, with a few other species of trees; the shrub stratum consists of Torreya, Rhaphidophyllum hystrix (needle palm), a few Taxus floridanus, Ostrya, Red-Bud, Cornus florida a large-leaved Magnolia, abundant Holly, Witch-hazel and Wahoo. The ground is largely bare of herbage, the sandy soil covered with a thick layer of dead leaves and humus. As Hubbellia praestans was taken just above the margin of the woods, its true habitat is doubtful. Prolonged search on succeeding nights was unsuccessful, nor was any unusual song heard that might have been produced by males of the species.

