

**Gomphus maxwelli, a New Species of Dragonfly
from Texas (Odonata, Gomphinae,
Group Arigomphus)¹**

*Alice Ferguson*²

Four males of the species herein described as new, were collected by Dr. Richard E. Maxwell in Hardin County, Texas, May 11, 1940. Hardin County is in the Big Thicket area of southeastern Texas, where long and short leaf pines are common. The annual precipitation is c. 50 inches; springs, bogs and ponds are frequent; and the humidity is high.

The following description is based on the specimen designated as holotype (which has "Number 1" on the label). The paratypes are compared with the holotype. The types will be deposited in the Cornell University collection of Odonata.

Gomphus maxwelli, new species.

Holotype, Male:

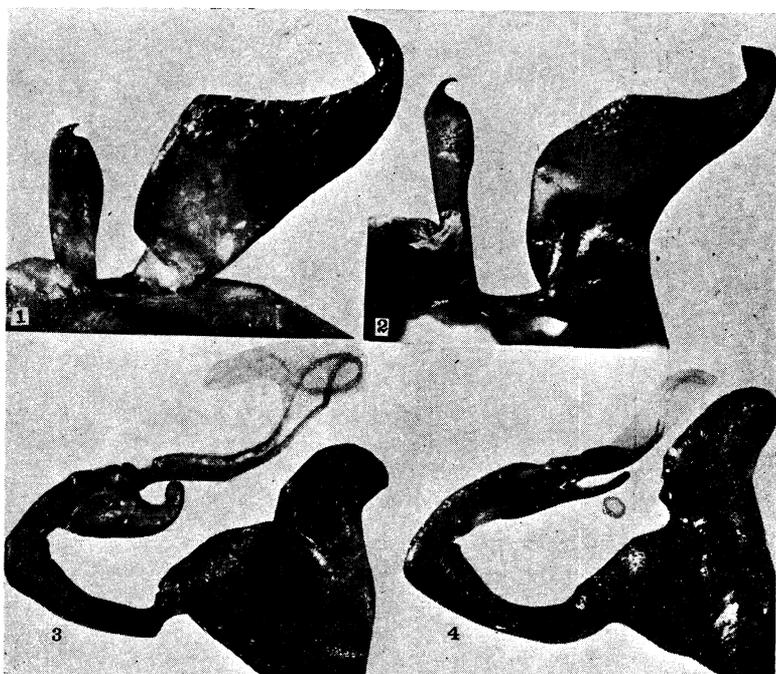
Labium, labrum, anteclypeus, the frons including all but the basal third, yellow. Vertex and basal third of dorsal portion of frons black. Outer half of the occiput pale; occiput of paratype two, one-fourth pale; of paratypes three and four, completely pale. Dark of the occiput probably due to changes caused by drying. Hind margin of the occiput nearly straight with few hairs bordering the outer edge.

Lateral areas of all three lobes of the prothorax dark. Synthorax greenish olive, yellowish beneath. Collar and mid-dorsal carina light. Mid-dorsal keel and crest edged in black. Median dorsal stripe wide at base, narrowing to a point at tip, well separated by pale areas from collar, carina, and crest. Antehumeral dark stripe wider, abbreviated above, with sides almost parallel, separated from median dorsal stripe by a little more than its width. Humeral stripe about the same width as the antehumeral stripe, but narrow below, widening upward to the humeral pit, bordered by a diffuse lighter brown area. Stripe IV narrow, abbreviated above, the middle third very narrow, almost diffused. Stripe V complete, narrow below, wide above. Antealar sinuses pale.

¹My best thanks are due to Professor J. G. Needham, who confirmed my opinion that the species is yet undescribed. I am also grateful to Mr. Otha C. Spencer, Instructor in Journalism and Photography at East Texas State Teachers College for the accompanying photographs.

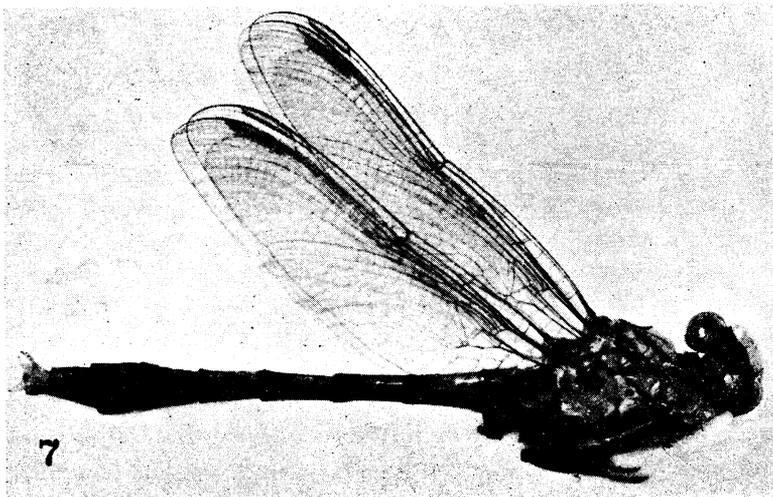
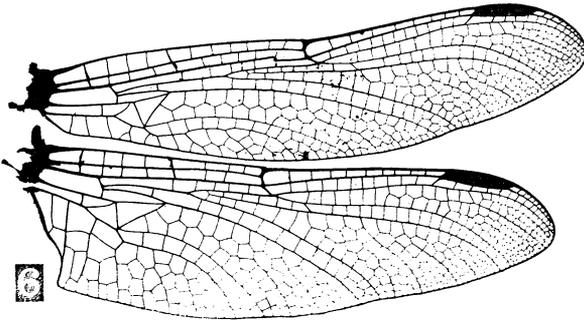
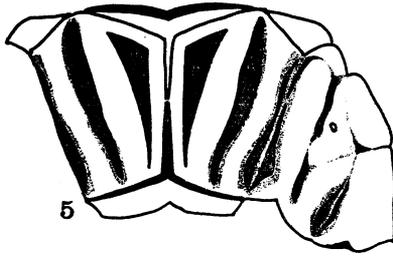
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Coxae light. Trochanters of first and second pair of legs light but with a little black on the second segment of the latter. First segment of trochanter of third pair of legs pale, the second segment black on ventral side. Femora black except for dorsal side of leg I, the dorso-lateral half of leg II, and the dorso-lateral third of leg III. Tibiae black except for narrow light line on the dorsal side of all three legs. Tarsi and claws all black. Tibial spines black, short, and numerous.



Costa of wing light anteriorly except above stigma. Stigma light, other veins dark. Wings hyaline. Antenodal cross veins: front wing, 11-10, hind wing, 8-7. Postnodal cross veins: front wing, 8-11, hind wing, 9-9.

Lateral dark markings on abdominal segments I and II, dorsal and ventral areas light. Antero-lateral areas of segments III to VI pale, dark portions less distinct. Segments VII, VIII, and IX completely dark, at least they appear so in the dried specimens. Segment X entirely light. Caudal appendages light, with black tubercles at outer angles and



tips of superior appendages; and at tips of inferior appendages.

Anterior hamules dilated above the middle, and contracted at the end to a single inturned hook. The low unarmed shoulder of posterior hamules more angulate than that exhibited by *Gomphus lentulus* Needham.

Total length of holotype: 50 mm. Dorsal surface of hind femur: $7\frac{1}{2}$ mm. Length of abdomen plus appendages: 35 mm. Length ratio of segments VII, VIII, IX, X: 3.5: 3.0: 2.3: 1.2.

Fore wing length: 30 mm. Hind wing length: 29 mm. Stigma of fore wing: $3\frac{1}{2}$ mm. Stigma of hind wing: 4 mm.

EXPLANATION OF FIGURES

The figures of *Gomphus lentulus* Needham were made from a specimen in the Southern Methodist University collection labeled "Dallas, Denton, or Caddo Lake, Texas?", Spring, 1938. (This identification has been confirmed by both Professor J. G. Needham and Mrs. Leonora K. Gloyd.)

Fig. 1. *Gomphus maxwelli*, n.s., Anterior and posterior hamules dissected. Compare the definite angle of the anterior edge of the shoulder, the slight differences between the anterior hamule of the species, and those of *Gomphus lentulus*, shown in Figure 2.

Fig. 2. *Gomphus lentulus* Needham. Anterior and posterior hamules dissected.

Fig. 3. *Gomphus maxwelli*, n.s. Penis dissected from specimen (paratype), and extended to show the more rounded hood and the thicker peduncle.

Fig. 4. *Gomphus lentulus* Needham. Penis dissected from specimen and extended.

Fig. 5. *Gomphus maxwelli*, n.s. Color pattern of thorax.

Fig. 6. *Gomphus maxwelli*, n.s. Wings.

Fig. 7. Holotype of *Gomphus maxwelli*.

A New *Lesquerella* (Cruciferae) from Northeastern Texas

V. L. Cory¹

LESQUERELLA longifolia Cory, sp. nov. Annuu unicaulis ramosa; folia basalia oblanceolata integra ad 4.5 cm. longa 8 mm. lata, caulina lineari-oblanceolata integra ad 8 cm. longa 3.5 mm. lata. Petala obcordata vel obovata subemarginataque 6 mm. longa 3 mm. lata (basi unguiculari ca. 1.25 mm. longa). Pedicelli fructiferi 13-16 mm. longi recti ascendentes. Capsulae brevissime stipitatae (stipite 0.3 mm.) globosae 4-5 mm. diametro 4-spermae stylo persistente 2.5 mm. longo. Semina marginata.

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