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A New Species of *Damaracheta* from South Africa

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Abstract

A new species of the southern African genus *Damaracheta* is described. It is one six species in a genus which ranges from Lake Malawi to the Cape.

Introduction

The genus *Damaracheta* was described in 1987 to include five species (Otte 1987): *D. schultzei* (Karny) from Botswana, *D. capensis* Otte from Cape Province, South Africa; *D. mlozi* from Lake Malawi, Malawi; *D. kasungu* from Kasungu National Park, Malawi; and *D. zomba*, from the Zomba Plateau, Malawi.

Kriegbaum, Toms, and Brozowski have discovered a new species in extreme northern Transvaal in the Ben Lavin Reserve, near Luis Trichardt.

Damaracheta kriegbaumi new species

Type.—Holotype male. South Africa: Transvaal, Luis Trichardt area, Ben Lavin Reserve, 23-09S 7-18E, 26 ii 1995 (Kriegbaum, Toms, Brozowski) Transvaal Museum, Pretoria.

Diagnosis.—This species differs from all others by the male calling song (see Otte 1987 for songs of other species—those of *D. schultzei*, *D. zomba*, and *D. capensis* are not known) or by the male genitalia. The latter character easily distinguishes the species from all others.

Etymology.—Named after the late Helmut Kriegbaum who loved the African continent and its fauna. His work and collections will be remembered for a long time.

Description (of holotype).—Head: mostly black, but with large white ocelli (Fig. 1A). Face mostly black in upper half, brownish in lower half; cheeks pale immediately below eyes, black posterior to eyes. Pronotum: dorsum mostly black but with triangular pale area at posterior shoulders (Fig. 1B); lateral lobes with pale area at lower front corner (Fig. 1B). Forewings long, narrow, with a well-developed apical area and a well-developed mirror with one dividing vein; with 5 harp veins. Stridulatory file with xxx teeth. Hindwings very long, extending approximately 2/3 of the forewing length beyond the abdomen. Legs: Femur-1 brownish with pale spots at the bases of larger bristles; tibia-1 dark brown, with a small inner and a large outer auditory tympanum; with three apical spurs. Tibia-2 dark brown, with 4 apical spurs. Femur-3 darker brown in upper 2/3, pale below, with oblique dark stripes on outer face. Tibia-3 with 9 inner and 9 outer spurs (including apical spurs). Tarsus-1 with two rows of spurs on upper face. Cerci, pale brown. Abdomen: upper surface nearly black, with some pale markings, venter very pale, becoming darker brown at end of subgenital plate. Genitalia as shown in Figs. 1D-G.

Genitalia with exceptionally long spermatophore tube mold.

Measurements.—

	BL(a)	BL(w)	F3L	FWL	FWW	CL	OL
HM	20	25	11	11	4.3	9.5	-
PM	21	23	11	10	4	10	-
PF	22	29	14	13		br	18
PF	19	26	12	12		10	15.5

Song.—(Figs. 2A-E). The song consists of a trail of chirps produced approximately once each second (in males singing alone; in alternating males the chirp rate is slower). Each chirp consists of two parts—the first half consists of pulses with a period of approximately 20 ms, the second half contains chirps with a period of approximately 40 ms; during the second half the pulse period becomes steadily longer. The carrier frequency of pulses is about 4.5 kHz between 20C and 24C.

Males may alternate in their chirping such that one male places his chirps halfway between two successive chirps of a neighboring male. In these periods of alternation there may also be longer bouts of synchronized, i.e., simultaneous chirping. In alternating males the chirp rate is slower (see Fig. 2).

Habitat.—The Ben Lavin area where this species was collected is typical low veld thorn savanna. In the summer it is covered by tall grass and thorn trees. Thicker bush is found nearer the water courses.

Distribution.—This species is known only from the type locality.

Literature Cited

Otte D. 1987. African crickets (Gryllidae). 9. New genera and species of Brachytrupinae and Gryllinae. Proceedings Acad. Nat. Sci. Philadelphia 139: 315-374.

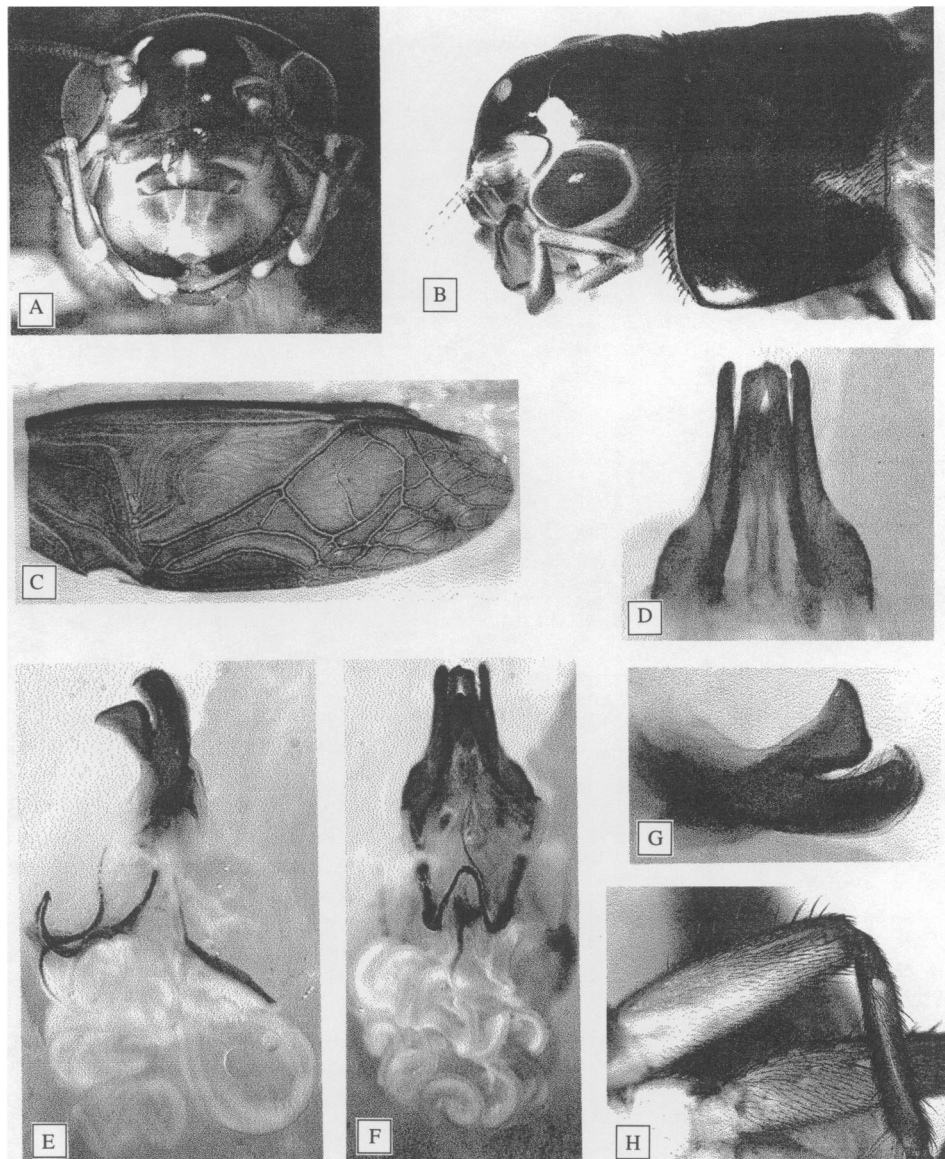


Fig. 1. A, face. B, head and pronotum. C, forewing. D, male genitalia dorsal view. E, male genitalia lateral view. F, dorsal view. G, lateral view. H, inner face of tibia-1.

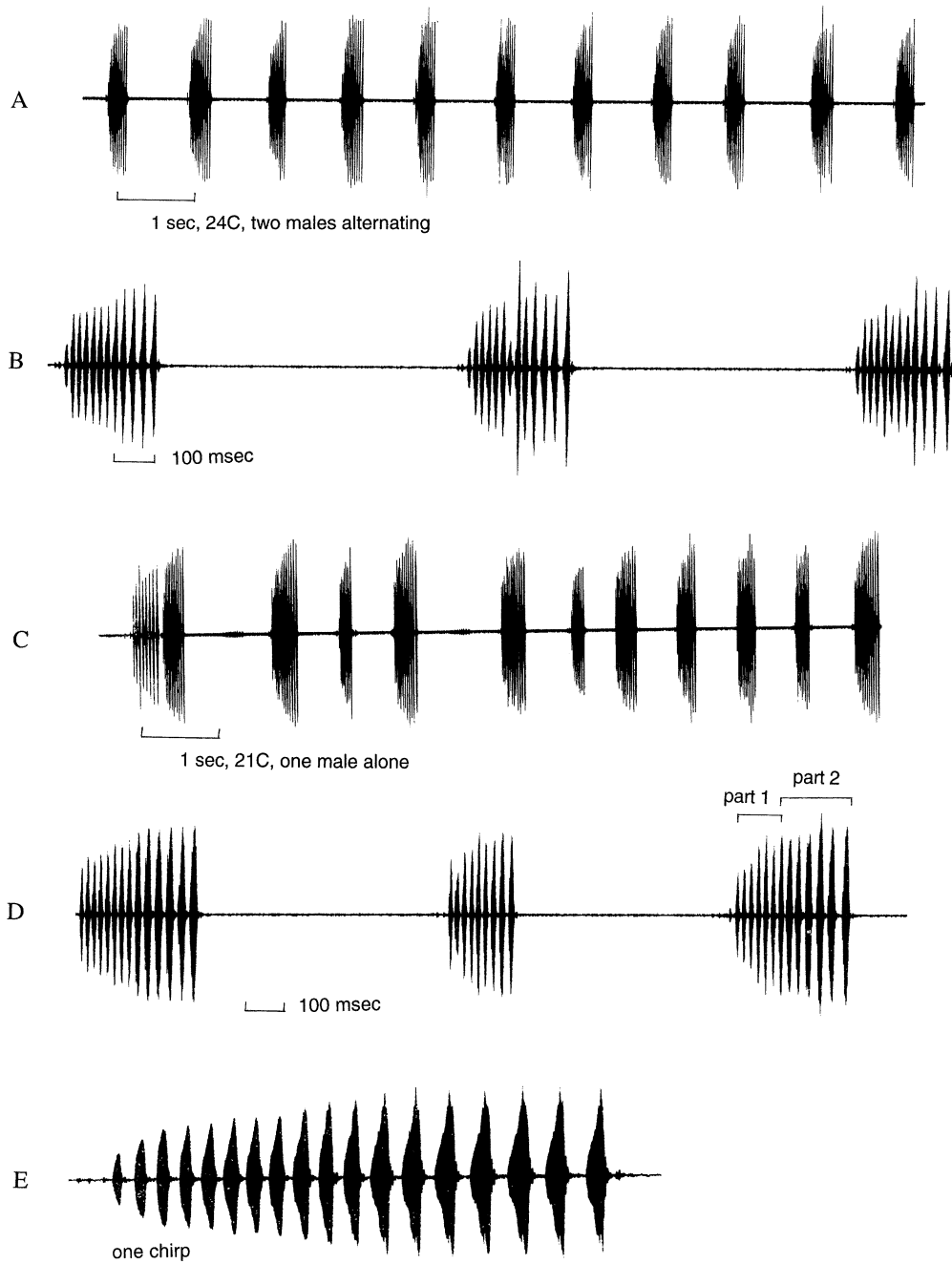


Fig. 2. A, song of solo male. B, same song close up. C, two males alternating. D, same, close up. E, a single chirp.