

## A New Species of *Gyropus* (Mallophaga: Gyropidae) from the Arboreal Spiny Rat *Diplomys labilis* in Panama<sup>1</sup>

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### ABSTRACT

*Gyropus diplomys*, new species, from *Diplomys labilis* (Bangs) is described and illustrated. The relationship of this species to *G. setifer* Ewing, a species found on terrestrial spiny rats, is considered, and the genitalia of both

species are figured to illustrate differences. The genus *Diplomys* is recorded as a host for Mallophaga for the first time. The known distribution of the type-host is discussed.

The following description is based on specimens collected from an adult female gliding spiny rat taken August 25, 1965, in Achiote, Province of Colon, Panama. Immature ticks of the genus *Amblyomma* also were taken from this rat. It is of interest to note that there is no record in the literature of biting lice or other ectoparasites collected from this arboreal member of the family Echimyidae. This report also represents a new record of a host genus parasitized by Mallophaga.

I am indebted to Dr. V. E. Thatcher for providing the type host of the species here treated, and to Dr. K. C. Emerson for confirming my belief in its undescribed status.

### *Gyropus diplomys*, new species

(Fig. 1, 2)

*Type-data*.—Holotype male, allotype female, 7 ♂, 7 ♀ paratypes, and 7 immature specimens from *Diplomys labilis* (Bangs), Achiote, Province of Colon, Panama, 25 August 1965, V. E. Thatcher collector.

Holotype and allotype will be deposited in the U. S. National Museum, Washington, D.C. One paratype of each sex will be deposited in the British Museum (Natural History). The remaining para-

types are deposited in the collection of the Gorgas Memorial Laboratory, Panama, and in the author's collection.

*Diagnosis*.—*Gyropus diplomys* appears closest to *G. setifer* Ewing, a species found in Panama on the terrestrial spiny rats *Hoplomys gymnurus*. It may be readily separated from *G. setifer* by the morphology of the male genitalia and by the shape of the accessory tubercle of the femoral tenaculum of leg III. This structure is globular in *G. diplomys*, angular in *G. setifer* (Fig. 3).

*Description*.—**MALE** (Fig. 1, 2). Head broader than long, with anterior margin slightly sinuate, provided with 4 short setae. Palpus 4-segmented, not reaching level of anterior margin of head; basal segment widest, following 2 segments successively narrower, apical segment smaller than remaining segments, rounded on its free margin. Antenna short, 4-segmented; terminal segment semiglobular, moderately scaled, provided with scattered, fine setae; antennal fossa deeply excavated, with strongly concave margin very sclerotized. Temples truncate, moderately projecting, each bearing several short and medium-size setae and 1 conspicuous long seta inserted at lower angle. Prothorax smaller than head, almost twice as broad as long, provided with 2 anteroventral angular processes armed with single setae, limiting insertion of head; in addition, this segment bears several setae of different sizes. Pterothorax larger than prothorax, subtrapezoidal in shape, dorsally

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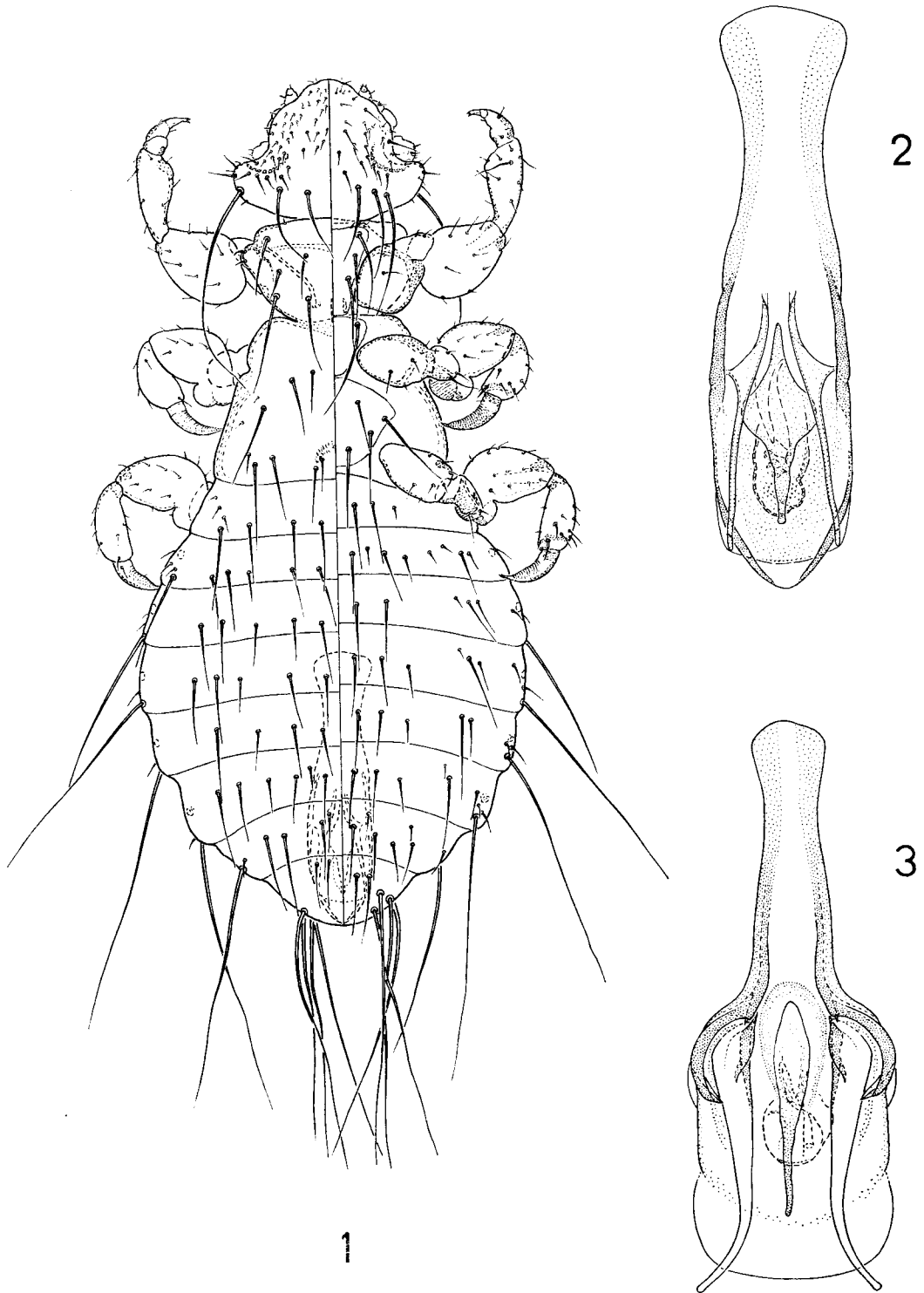


FIG. 1.—*Gyropus diplomys*, dorsal-ventral view of male. FIG. 2.—Same, genitalia of male. FIG. 3.—*G. setifer* Ewing, genitalia of male.

clothed with several short and medium-size setae. Thoracic sternal plates distinct: anterior 1 subtriangular, with 1 minute seta on each side and 3 moderately long lateromarginal setae; median thoracic sternal plate subtriangular, smaller than upper plate, with 3 moderately long setae; posterior thoracic sternal plate shield shaped, with 8 conspicuous setae. Legs short, stout, typical of genus, with variable number of short setae sparsely distributed on segments and coxae; femoral tenacula globular, limited to legs II and III; all legs with tarsi ending in a bidentate claw; tarsi II and III with claws subequal, striated, being different to that of first leg, which is somewhat shorter and stouter, without striations. Abdomen elongate, oval, with sides sinuate, bearing simple spiracles; segments provided dorsally and ventrally with setae arranged in 1 irregular row; segments II-VII each bearing a conspicuous lateral seta accompanied by small group of marginal and submarginal short setae; last segment evenly rounded, with 2 lateral groups of 4 long setae preceded by ventral and dorsal rows of 4 medium-size setae. Genitalia diagnostic, with basal plate moderately elongate, anterior half spatulate, posterior half with lateral margins strongly chitinized and caudal margin subacute; parameres broad at base, gradually tapering and curved inward; ejaculatory sac membranous, spiculose.

FEMALE.—Except for sexual characters and slightly larger size, this sex closely agrees with the male in general chaetotaxy and morphology. The 2 sexes differ mainly in chaetotaxy of the modified abdominal segments, since the female genital region has 2 lateral groups of about 12 setae of different sizes separated by an area of short and minute setae. The female head also shows fewer dorsal setae in comparison with the male.

Length.—Male, 1.23 mm; female, 1.42 mm.

NYMPHS.—But for smaller size, reduced chaetotaxy, and absence of primary sexual characters, no striking differences are detected between these instars and the adults.

Comments.—Information on the distribution and abundance of *D. labilis*, the type-host of *Gyropus diplomys*, is scant. This rodent appears to be strictly arboreal and has been collected in Panama almost from sea level to an elevation of 5000 ft. Its presently known geographical distribution includes San Miguel Island and the eastern region of continental Panama from the Canal Zone to Darien Province. Presumably its range extends into northern Colombia, since a specimen has been obtained in Cerro Mali, Darien, an area near the border. The genus *Diplomys* is known to occur in eastern Panama, Colombia, and northern Ecuador.

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