TWO NEW SYNONYMS IN THE GENUS LUTZOMYIA

(DIPTERA, PSYCHODIDAE)1

The following synonymies are proposed as the result of the analysis of many years of collecting data in the case of the first taxon, and after careful comparison of slide mounted material of the second taxon.

Lutzomyia insolita (Fairchild & Hertig)

Phlebotomus insolitus Fairchild & Hertig, 1956, Ann. Ent. Soc. Amer. 49: 307–12 (3; Almirante, Bocas del Toro Prov., Panama).

Phlebotomus rubidulus Fairchild & Hertig, 1956, Ann. Ent. Soc. Amer. 49: 307–12 (♀; Mojinga Swamp, Fort Sherman, Canal Zone). New synonymy.

Lutzomyia insolita, Theodor, 1965, J. Med. Ent. 2: 171–97 (3).

Lutzomyia rubidula, Theodor, 1965, J. Med. Ent. 2: 171– 97 (♀).

Fairchild and Hertig, in their original description of "P. insolitus" and "P. rubidulus," were aware of the possibility that they may have been describing the male and female of a single species and stated "It is possible that this [Phlebotomus insolitus] is in reality the male of P. rubidulus n. sp., but it is so different from other males of this group, whereas rubidulus is quite similar to anthophorus Addis, that we prefer to describe it as a distinct species until further evidence is available." At the time the holotype and a single paratype of L. insolita and the holotype of L. rubidula represented the entire collection. Our current records show a total of 18 33 and 46 99 collected from the following localities in Panama: Cerro Galera, Canal Zone (5 33, 15 QQ); Mojinga Swamp, Canal Zone (1 ♀); Gamboa, Canal Zone (10 ♂♂, 21 ♀♀); Cerro Azul, Panama Prov. (2 ♂♂, 1 ♀); Almirante, Bocas del Toro Prov. (1 9); Rio Chucunaque, Darien Prov. (1 ♀); Rio Tuira, Darien Prov. (1 ♀, 6 ♀♀).

In addition, Chaniotis et al. (1971, J. Med. Ent. 8:

'The work reported here was supported in part by a research grant (AI-1251) from NIAID, NIH, U. S. Public Health Service. 339–52; 1972, J. Med. Ent. **9**: 91–93) reported collecting a total of 18 99 of L. rubidula and 2 33 of L. insolita near Gamboa, Canal Zone.

The males and females of this uncommon species have been taken together on several occasions in different localities. Other members of the subgenus *Damphomyia* have never been taken during collections in which males, females or both sexes of *L. insolita* were present. Moreover, specimens of undetermined taxa have not been encountered in these collections.

Lutzomyia gorbitzi (Blancas)

Phlebotomus gorbitzi Blancas, 1960, Rev. Med. Exper. 13: 124–33 (Peru).

Phlebotomus hansoni Fairchild & Hertig, 1961, Ann. Ent. Soc. Amer. 54: 237-55 (Panama; Costa Rica).— Hanson, 1961, Ann. Ent. Soc. Amer. 54: 317-22 (Panama). New synonymy.

Lutzomyia gorbitzi, Theodor, 1965, J. Med. Ent. 2: 171-97. Lutzomyia hansoni, Theodor, 1965, J. Med. Ent. 2: 171-97.

Four Peruvian specimens of L. gorbitzi (2 33 and 2 99) mounted in balsam were furnished us from the laboratory of Dr Fortunato Blancas in Lima, Peru. They were compared closely with the 14 paratype slides (8 33 and 6 ♀♀) of L. hansoni from Panama in the Gorgas Memorial Laboratory collection. We are unable to distinguish any morphological differences between either sex of the material examined from the 2 countries. The specimens from Peru are slightly larger than those from Panama, but we have found a considerable range in size of Panamanian populations and do not consider this difference beyond the variations expected from widely separated populations of the same species.-Howard A. Christensen, Gorgas Memorial Laboratory, Apartado 6991, Panama 5, Republic of Panama and Louis C. Rutledge, U. S. Army Medical Research Unit, Panama, Post Office Box 2011, Balboa Heights, Canal Zone,