TRUJILLO: 6 males and 5 females ex *Phyllostomus hastatus*, 23 km NNW Valera, Río Motatan, Valera, 90 m, 2-IX-65.

YARACUY: 2 males and 1 female ex *Phyllostomus hastatus*, 11 km NW Urama, El Central, Urama, 25 m, 14-22-III-66.

ZULIA: 4 females ex *Phyllostomus hastatus*, 39 km WNW Encontrados, El Rosario, 37 m, 31-III—1-IX-68.

# OTHER VENEZUELAN MATERIAL EXAMINED

MIRANDA: 1 male ex *Carollia* sp., Alfredo Jahn Cave, 7-V-61, J. Racenis, J. Ojasti, and C. Bordón.

## HOST ASSOCIATIONS

Of 379 specimens of Strebla consocia that were collected by the survey teams, 247 (65 percent) were from 83 Phyllostomus hastatus, 125 (33 percent) ex P. elongatus, and 7 (2 percent) were from 4 bats of 4 other species. Some of the specimens from the miscellaneous hosts are probably contaminants, and I suspect that this is true of the specimens from Trachops cirrhosus, too, since all other specimens of that host that were collected at the same locality and on the same date as those from which S. consocia are reported were parasitized as usual by S. mirabilis. For a discussion of the subspecies of P. hastatus and the species of Strebla that parasitize them, see Wenzel and Tipton (1966:682-687).

The records from *Phyllostomus elongatus* are of special interest, since, as noted above, these bats do not appear to be parasitized by any parasites that are specific to them, but by species that are common parasites of other hosts.

Strebla curvata, new species (Fig. 60D, 63F)

Strebla carolliae Wenzel, 1966:619, in part (paratype from El Salvador)

Strebla curvata is most similar to S. guajiro, but smaller, with distinctly shorter dorsolateral abdominal connexival setae, more numerous setae on tergum 9 of the male, fewer setae on the seventh sternites of the female (7-10 as opposed to  $\pm$  15), and 7 as opposed to 6 setae on the anterior division of each laterovertex. It is also similar to S. harderi n. sp. (see below) but is distinguishable from that species by the characters given in the key. The following description includes chiefly characters by which curvata differs from guajiro or which were not mentioned in the description of that species (as carolliae Wenzel, 1966:619).

#### DESCRIPTION

Smaller than Strebla guajiro. Head. Postvertex as in guajiro; anterior division of each laterovertex with 7 setae, not including the seta inserted above the eye (which is on the posterior

division); detached frontoclypeal plates rectangular, either slightly longer than broad or square. Thorax. Chaetotaxy as in guajiro. Abdomen. Dorsolateral connexival setae distinctly shorter than in *guaiiro*, of about the same length as the ventromedial setae, those of the female not nearly as long as the shorter anterodorsal setae of the lateral lobes of tergum 1+2. Sternum 2 with  $\pm$  10 marginal setae, all longer than the discals, about 4 of them longer macrosetae. Female. Tergum 7 teardrop shaped, similar to that of guajiro but usually not as strongly narrowed anteriorly. Seventh sternites short, transverse, subreniform, with  $\pm 7$  setae, including 4 macrosetae, one of these shorter than the others. Ventral arc with a short triangular lobe. Male. Sternum 5 broadly emarginate posteriorly, the lateral portions with 2 transverse rows of discal setae; posterior margin with from 14-16 setae of which 6-10 may be macrosetae, the others shorter but longer than the discals. Sternum 7+8 with a single very long dorsolateral macroseta on each side. Tergum 9 on each side with 3-4 laterodistal macrosetae, the lower one shortest: anterior to these are 5-8 other short setae (4 in guajiro). Postgonites similar to those of guajiro but more evenly and less strongly curved, the ventral setae inserted slightly more distad.

## MEASUREMENTS

|    | Males       | Females     |
|----|-------------|-------------|
| BL | 2.02-2.14   | 2.00 - 2.48 |
| TL | 0.71 - 0.80 | 0.76 - 0.85 |
| WL | 1.35-1.48   | 1.52 - 1.62 |
| WW | 0.68 - 0.74 | 0.74 - 0.79 |

Type Data: Male holotype ex Glossophaga soricina (SVP 9276), Venezuela, Bolívar, 59 km SE El Dorado, Km 74, El Manaco, 150 m, 13-VI-66 and female allotype, same host (SVP 9406), same locality data but Km 67, 16-VI-66. Paratypes—VENEZUELA. Apure: 1 female ex 1 Noctilio labialis, 46 km NE Pto. Páez, Río Cinaruco, Hato Cariben, 76 m, 14-XII-65; 2 males and 2 females ex Glossophaga longirostris, 32 km NE Pto. Páez, La Villa, Hato Cariben, 76 m, 6-9-XII-65. BA-RINAS: 1 female ex 1 Carollia brevicauda, 4 males ex 2 Carollia perspicillata, 2 km SW Altamira, Altamira, 620 m, 27-28-XII-67. Bolívar: 1 female ex Glossophaga soricina, 56 km SE El Dorado, Km 67, El Manaco, 150 m, 16-VI-66; 2 males and 2 females, same host and locality data as the holotype but 13-21-VI-66; 1 male and 2 females, same host, 20 km W La Paragua, Hato San José, 300 m,

4-7-IV-67. FALCÓN: 1 male ex Glossophaga soricina, 14 km ENE Mirimire, nr. La Pastora, 122 m, 11-XI-67; 3 males and 2 females, same host, 16 km ENE Mirimire, nr. La Pastora, 70 m, 28-XI-1-XII-67; 2 males, same host, 13 km ESE Mirimire, nr. San Pablo, 270 m, 17-XI-67; 2 males and 1 female ex Glossophaga longirostris, 20 km NNE Mirimire, nr. Aguide, 1-5 m, 13-XI-67. Guajira: 1 male ex Glossophaga longirostris, 44 km NNE Paraguaipoa, nr. Cojoro, 50 m, 28-VI-68. Nueva Esparta: 1 male ex Glossophaga longirostris, 3 km NNE La Asunción, Isla Margarita, 37 m, 7-I-67; 1 male and 1 female, same host, 3 km S La Asunción, Isla Margarita, 53-57 m, 31-I-2-II-67. MIRANDA: 2 males and 3 females ex Glossophaga soricina, Birongo, 60 m, 22-23-I-68. Monagas: 1 female ex Glossophaga soricina, 55 km SSE Maturín, Hato Mata de Beiuco, 18 m. 3-VI-68. T. F. Amazonas: 1 male ex Glossophaga longirostris, 20 km S Pto. Ayacucho, Las Queseras, Pto. Ayacucho, 135 m, 27-IX-67; 2 males, same host, 65 km SSW Pto. Ayacucho, nr. Morganito, Pto. Ayacucho, 161 m, 4-X-67; 5 males and 1 female ex Glossophaga soricina, 56 km NNW Esmeralda, Río Cunucunuma, Belén, 150 m, 2-3-I-67; 5 males and 5 females, same host, 163 km ESE Pto. Ayacucho, Río Manapiare, San Juan, 155 m, 6-27-VII-67; 3 males, same host, Río Orinoco, Tamatama, 135 m, 2-4-V-67.

### OTHER MATERIAL EXAMINED

El Salvador, Morazan: 1 female (Senckenberg Museum, paratype of *Strebla carolliae* Wenzel) ex *Glossophaga soricina leachii*, Mineral Encuentro, 19-VI-53, H. Felten.

#### HOST ASSOCIATIONS

Of 63 specimens of Strebla curvata that were collected by the survey teams, 57 (90.5 percent) were from species of Glossophaga, 33 (52.4 percent) ex 34 Glossophaga soricina, and 14 (22 percent) ex 12 G. longirostris. Of the remaining 6 specimens, 4 (6.3 percent) were from 2 Carollia perspicillata, 1 ex C. brevicauda, and 1 ex Noctilio labialis (!). It is interesting that this new species—which is so similar to S. guajiro, the characteristic species of Strebla on species of Carollia—was occasionally taken from species of Carollia in Venezuela, but not together with S. guajiro. Strebla curvata was not taken from Glossophaga soricina in Panama, although S. guajiro was (Wenzel loc. cit.).

#### Remarks

The number and length of the setae on posterior margins of sternum 2 in both sexes, and of sternum 5 of the male, vary greatly in S. curvata, S. guajiro, and S. harderi. In general, they are not apt to be quite as long and strong in curvata and in harderi as they are in guajiro. Further, these two species are usually less strongly pigmented thin is guajiro.

Strebla curvata is the first species of the genus Strebla that appears to be a characteristic parasite of bats of the genus Glossophaga.

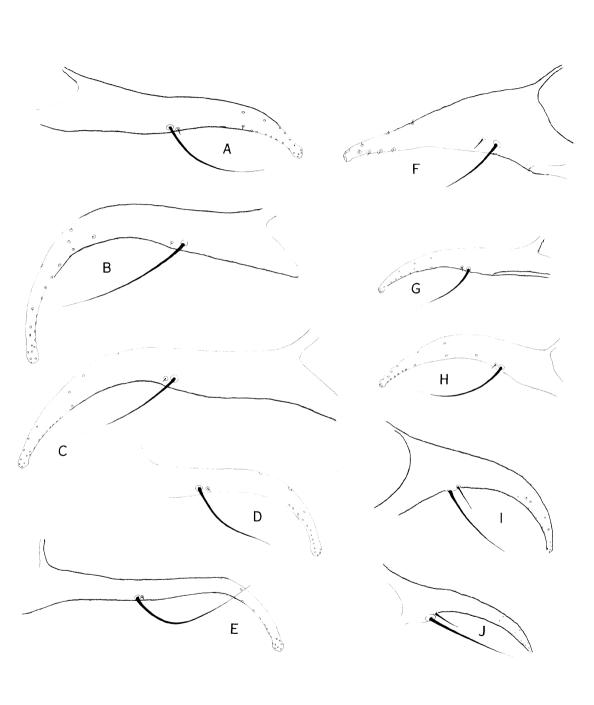


Fig. 60. Male postgonites: A, Strebla obtusa, new species (SVP 7743); B, Strebla proxima, new species (SVP 14931); C, Strebla paramirabilis, new species (holotype); D, Strebla curvata, new species (SVP 5552); E, Strebla harderi, new species (SVP 29349); F, Strebla asternalis, new species (SVP 16779); G, Strebla matsoni, new species (SVP 17737); H, Strebla chrotopteri, new species (SVP 14880); I, Anastrebla spurrelli, new species (SVP 8358); J, Anastrebla caudiferae, new species (SVP 10508).

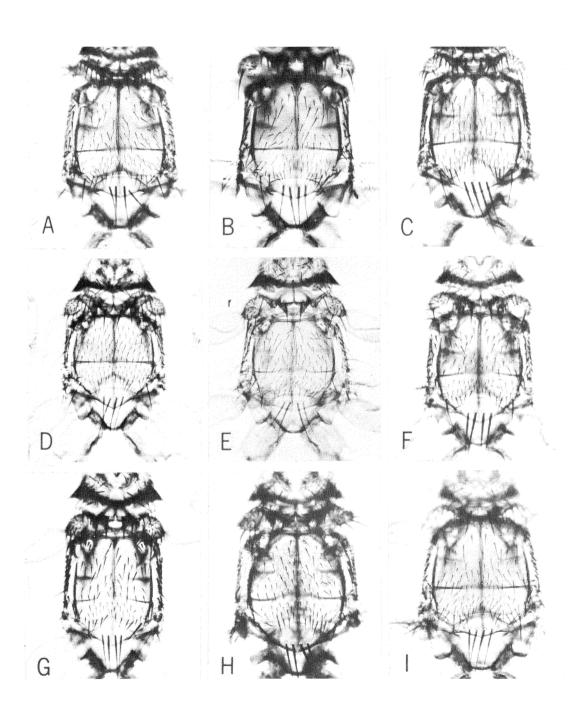


Fig. 63. Thorax, dorsal view: A, Strebla proxima, new species, female (SVP 14936); B, Strebla cormurae, new species, male (FMNH 95357); C, Strebla harderi, new species, female (SVP 8336); D, Strebla matsoni, new species, male (SVP 16870); E, Strebla altmani Wenzel, male; F, Strebla curvata, new species, female (SVP 9343); G, Strebla alvarezi Wenzel, male; H, Strebla obtusa, new species, female (SVP 7448); I, Strebla asternalis, new species, male (SVP 16779). E, G from Wenzel et al. (1966).