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STUDIES OF THE PHALANGID FAUNA OF TRINIDAD

BY CLARENCE J. AND MARIE L. GOODNIGHT¹

During the past few years, the authors have been so fortunate as to obtain a considerable collection of phalangids from Trinidad. These were presented to them by Messrs. Robert Ingle and R. H. Montgomery.

These collections contained not only specimens of previously described species but a number of new forms. Thus it has been possible for the authors to study all forms so far known from Trinidad.

For the first time the subfamily Tricommatinae (Phalangodidae) was found in Trinidad. Two species were represented in the collections. The Phalangodinae, Cosmetinae, two subfamilies of the Gony-

leptidae, and one member of the suborder Palpatores were also represented.

The collections made by Ingle were confined to a small valley in southwest Trinidad known locally as Tucker Valley. Ingle writes that most of the small phalangids were obtained by sifting under sticks and logs which were partially decomposed. The area was an abandoned cocoa plantation which was covered with thick tropical vegetation.

The authors wish to express their appreciation to these two men for making the collections available for their study.

All holotypes of new species are deposited in the collection of the American Museum of Natural History.

SUBORDER LANIATORES THORELL

PHALANGODIDAE Simon

Phalangodinae Roewer

Kalina tuberculata, new species

Figure 4

HOLOTYPE: Total length of body, 2.1 mm. Cephalothorax, 0.7 mm. Width of body at widest portion, 1.7 mm.

	I	II
Frochanter	0.2 mm.	0.3 mm.
Femur	0.9	1.4
Patella	0.4	0.5
Tibia	0.7	1.2
Metatarsus	1.0	1.4
Tarsus	0.7	1.4
Total	3.9 mm.	6.2 mm.

	III	IV
Trochanter	0.3 mm.	0.3 mm.
Femur	1.0	1.6
Patella	0.4	0.6
Tibia	0.8	1.4
Metatarsus	1.3	2.0
Tarsus	0.8	1.0
Total	4.6 mm.	6.9 mm.

Dorsum with five areas, the boundaries of which are parallel. First area without a median line. Dorsal scute smooth except for an irregular transverse row of fine granulations across each area. A row of lateral granulations also present on the dorsal scute. Free tergites each with a transverse row of small tuberculations. Cephalothorax smooth; eye tubercle removed from the anterior margin, a pair of very small spines above the eye tubercle. A slight elevation on the cephalothorax anterior to the eye tubercle. Anal operculum covered with granulations. Free sternites with scattered hairs, a few small tuberculations on the first coxa, second coxa with some dorsal tuberculations, third with some very small anterior and posterior teeth. Remainder of venter and all coxae with scattered hairs. Spiracles visible.

Legs clothed throughout with scattered hairs, small tuberculations more or less arranged in rows on the femora. These are somewhat larger on the anterior margin of

¹Department of Biology, Purdue University, West Lafayette, Indiana.

the first femur. Metatarsi not divided into astragali and calcanei. Tarsal segments: 3-7-5-6. Distitarsus of first tarsus with two segments, second with three.

Palpus: trochanter, 0.2 mm. long; femur, 0.5; patella, 0.2; tibia, 0.4; and tarsus, 0.3. Total length, 1.6 mm. Palpus armed retrolaterally as in figure; prolaterally the femur has a median apical spine; the patella has a median apical spine; the tibia and tarsus armed as on the retrolateral surface.

Chelicera normal, with scattered hairs.

Body reddish brown with darker brown mottlings. Many of these mottlings on the cephalothorax. Dorsal scute bordered with darker brown; with a transverse dark stripe across each area, giving an appearance of alternating lighter and darker stripes. Free tergites, anal operculum, and sternites darker. Legs with much dark brown mottling excepting the trochanters which are light. Palpus and chelicera mottled.

TYPE LOCALITY: Holotype from Tucker Valley, near Navy Base in southwest Trinidad, November, 1944 (R. Ingle).

Kalina tuberculata, new species, is related to *Kalina parallela* Goodnight and Goodnight, differing by lacking the elongate fourth leg of *K. parallela* and also by having more tuberculations on the dorsum and free tergites.

Pellobunus longipalpus, new species

Figure 10

HOLOTYPE: Total length of body, 2.3 mm. Cephalothorax, 0.8 mm. Width of body at widest portion, 1.4 mm.

	I	II
Trochanter	0.3 mm.	0.4 mm.
Femur	1.7	4.3
Patella	0.6	0.9
Tibia	1.2	4.1
Metatarsus	1.9	4.5
Tarsus	1.0	2.7
Total	6.7 mm.	16.9 mm.

	III	IV
Trochanter	0.4 mm.	0.4 mm.
Femur	1.7	2.2
Patella	0.6	0.7
Tibia	1.3	1.8
Metatarsus	1.7	2.3
Tarsus	1.3	1.9
Total	7.0 mm.	9.3 mm.

Dorsum finely granulate. Dorsal scute with five areas, the boundaries of which are parallel, first area without a median line. A row of small tubercles across each area, a row of larger hair-tipped tubercles at the posterior boundary of the fifth area and across each free tergite. Eye tubercle rounded above, low, covered with granulations, removed from the anterior margin of the cephalothorax, approximately in the center of the cephalothorax. Anal operculum tuberculate. Each free sternite with a transverse row of tubercles, coxae with scattered tubercles and hairs, tubercles larger on the first coxa. Anterior and posterior rows of teeth on the third coxa. Tuberculations of the fourth coxa visible from above. Spiracles visible, but narrow.

Legs clothed throughout with hairs. Small tuberculations scattered over the femora, patellae, and tibiae; metatarsi not divided into astragali and calcanei. Tarsal segments: 4-7-5-6. Distitarsus of first tarsus with two segments, second with three.

Palpus: trochanter, 0.4 mm. long; femur, 1.9; patella, 1.3; tibia, 1.1; tarsus, 0.8 mm. Total length, 5.4 mm. Palpus tremendously elongate. Armed retrolaterally as in figure 10. Prolaterally armed as follows: femur with a median spine, no apical median or apical dorsal spine present; patella with a small median apical spine; tibia with three spines; tarsus with two.

Chelicera with scattered hairs, proximal segment with a dorsal elevation.

Body reddish brown with darker brown mottlings on the cephalothorax, appendages lighter. Some darker brown mottlings on the femur and patella of the palpus and on the legs.

TYPE LOCALITY: Holotype from St. Augustine, Trinidad, October 19, 1944 (T. S. Jones).

This species differs from other members of the genus *Pellobunus* by having greatly enlarged palpi.

Pellobunus trispinatus, new species

Figures 1-3

MALE HOLOTYPE: Total length of body, 2.2 mm. Cephalothorax, 0.8 mm. Width of body at widest portion, 1.4 mm.

	I	II
Trochanter	0.2 mm.	0.3 mm.
Femur	1.3	3.4
Patella	0.4	0.8
Tibia	1.0	3.4
Metatarsus	1.4	3.9
Tarsus	0.8	1.1
Total	5.1 mm.	12.9 mm.

	III	IV
Trochanter	0.3 mm.	0.4 mm.
Femur	1.4	1.8
Patella	0.4	0.5
Tibia	1.1	1.6
Metatarsus	1.5	2.1
Tarsus	0.8	1.3
Total	5.5 mm.	7.7 mm.

Body pyriform, boundaries of areas parallel. First area without a median line. Entire dorsum somewhat granulate, with a row of hair-tipped small tubercles across each area and each free tergite. Eye tubercle slightly removed from the anterior margin of the cephalothorax, rounded above, covered with small scattered tuberculations. A row of larger tubercles along the lateral margin of the dorsal scute. Anal operculum tuberculate, free sternites each with a transverse row of small tuberculations. Coxae thickly covered with small tuberculations and scattered hairs. Fourth coxa widened, the granular surface visible from above. A row of larger hair-tipped tubercles across the first coxa, third coxa with anterior and posterior rows of teeth. Spiracles visible.

Legs clothed throughout with scattered hairs. Trochanters covered with small granulations, globular in shape. Femora covered with small hair-tipped tubercles. Remaining segments without tuberculations, but sometimes a few granulations present on the fourth tibia. Tarsi with investing hairs. Metatarsi not divided into astragali and calcanei. Tarsal segments: 4-6-5-6. Distitarsus of first tarsus with three segments, second with three. Some specimens among those studied had the second leg much elongated.

Palpus: trochanter, 0.3 mm. long; femur, 0.7; patella, 0.4; tibia, 0.5; and tarsus, 0.4. Total length, 2.3 mm. Palpus armed retrolaterally as in figure 3. Pro-laterally armed as follows: femur with a median apical spine; patella with a me-

dian apical spine; tibia with three spines; and tarsus with two.

Chelicera normal, with scattered hairs. A slight dorsal elevation on the first segment.

Dorsum, venter, and coxae reddish brown, with some darker brown mottlings particularly conspicuous on the cephalothorax. Trochanters of all appendages yellowish, lighter; but in some specimens the color of the trochanters was nearly as dark as that of the legs. Legs darker reddish brown, mottled. Tarsi lighter. Femur and patella of palpus dark reddish brown, tibia and tarsus lighter.

FEMALE: Total length of body, 1.9 m. Cephalothorax, 0.7 mm. Width of body at widest portion, 1.4 mm.

Identical in appearance with the male.

TYPE LOCALITY: Male holotype and male and female paratypes from Tucker Valley, near Navy Base in southwest Trinidad, November, 1944 (R. Ingle).

This species differs from *Pellobunus insularis* Banks by having three spines on the inner margin of the tibia of the palpus; *P. insularis* Banks has only two.

Tricommatinae Roewer

TRINELLA, NEW GENUS

Dorsum with five areas, the boundaries of which are parallel. First area without a median line. First to fourth areas each with low, median, paired tubercles. Femur and patella of palpus each with a median apical spine, but without dorsal apical spines. Tarsal segments all number more than six. Distitarsus of first tarsus with three segments, of second three. Spiracles visible. Eye tubercle unarmed and removed from the anterior margin of the cephalothorax.

GENOTYPE: *Trinella intermedia*, new species.

Trinella is most closely related to *Vima*. It differs by having low, median, paired tubercles on the dorsal areas.

Trinella intermedia, new species

Figure 8

HOLOTYPE: Total length of body, 4.3 mm. Cephalothorax, 1.2 mm. Width of body at widest portion, 2.4 mm.

	I	II
Trochanter	0.4 mm.	0.7 mm.
Femur	5.7	12.6
Patella	0.7	1.4
Tibia	4.3	8.4
Metatarsus	8.1	15.6
Tarsus	1.4	6.1
Total	20.6 mm.	44.8 mm.

	III	IV
Trochanter	0.7 mm.	0.7 mm.
Femur	9.8	13.2
Patella	1.6	1.6
Tibia	5.7	7.5
Metatarsus	8.4	15.0
Tarsus	2.8	3.6
Total	29.0 mm.	41.6 mm.

Dorsum with five areas, the boundaries of which are parallel, first area without a median line. Dorsum smooth except for the paired low tubercles of the dorsal areas. These paired tubercles are very low. A transverse row of very small tubercles across the fifth area and each free tergite. The lateral portion of the dorsal scute bends at an abrupt angle, causing a prominent keel to be present. Eye tubercle low, unarmed, in the median portion of the cephalothorax. Anal operculum with only a few scattered hairs, a transverse row of hair-tipped tuberculations across each free sternite. Spiracle visible. Coxae smooth except for a transverse row of tubercles across the first and the fourth, a few small tubercles on the second, a dorsal posterior spine on the fourth coxa.

Legs smooth except for a few irregularly scattered hairs. All legs long and slender with the first one being particularly slender. Tarsal segments: 8-24-8-8. Distitarsus of first tarsus with three segments, second with three.

Palpus: trochanter, 0.6 mm.; femur, 1.2; patella, 0.8; tibia, 0.9; and tarsus, 0.9. Total length, 4.4 mm. Palpus armed retrolaterally as in figure 8. Prolaterally armed as follows: the femur has a median apical spine; the patella has a median apical spine; the tibia has three spine-bearing tubercles; the tarsus has three.

Chelicera normal, with scattered hairs, tuberculations on the proximal segment.

Color of entire body and appendages reddish brown, with darker brown mottlings

which are particularly numerous on the dorsum.

TYPE LOCALITY: Holotype from St. Augustine, Trinidad, November 12, 1944 (R. H. Montgomery).

Vima albiornata, new species

Figure 5

HOLOTYPE: Total length of body, 3.6 mm. Cephalothorax, 0.8 mm. Width of body at widest portion, 2.2 mm.

	I	II
Trochanter	0.6 mm.	0.6 mm.
Femur	5.0	8.8
Patella	0.7	1.2
Tibia	3.8	4.8
Metatarsus	6.6	10.2
Tarsus	1.4	1.8
Total	18.1 mm.	27.4 mm.

	III	IV
Trochanter	0.4 mm.	0.6 mm.
Femur	12.8	11.9
Patella	1.1	1.4
Tibia	9.8	6.5
Metatarsus	1.1	13.8
Tarsus	6.0	3.0
Total	31.2 mm.	37.2 mm.

Dorsum with five areas, the boundaries of which are parallel. First area without a median line. Dorsal scute covered with small granulations, a few irregularly scattered larger granulations also present. Eye tubercle low, unarmed, towards the posterior portion of the cephalothorax. A transverse row of larger granulations across the posterior margin of the fifth area and the first free tergite. Posterior to the eye tubercle is an elevation equal in height to the eye tubercle, but somewhat constricted in the middle. Anal operculum smooth, a transverse row of granulations across each free sternite. Coxae granulate, several enlarged tubercles present on the first coxa, only a few anterior and posterior teeth on the third coxa. Spiracles visible.

Legs long and slender, smooth except for scattered hairs. Tarsal segments: 9-?-7-9. Distitarsus of first tarsus with three segments.

Palpus: trochanter, 0.4 mm. long; femur, 1.1; patella, 0.6; tibia, 0.7; and

tarsus, 0.7. Total length, 3.5 mm. Palpus armed retrolaterally as in figure 5. Prolaterally armed as follows: femur and patella each with a median apical spine; tibia with three spines, the distal one being the smallest; tarsus with three spines, the distal one also being the smallest.

Chelicera normal, with scattered hairs, proximal segment with a few scattered tubercles, some hair-tipped tubercles on the anterior portion of the second segment. Claws strongly curved towards the median line.

Dorsum reddish brown, the elevation behind the eye tubercle white: this white patch extends down from the elevation to the first abdominal segment where it ends with a few white flecks. A white dot in the median portion of the third free tergite, a large white spot in the median portion of the dorsal part of the anal operculum. Venter and coxae reddish brown, legs lighter brown with distal portion of the femora and patellae dark brown. Distal portion of tibiae and proximal portion of metatarsi of second to fourth legs each with a light band; darker brown areas surround these light bands. The first leg small and thread-like, without darker areas. Chelicera and palpus reddish yellow, lighter than the body, cheliceral claws darker brown.

TYPE LOCALITY: Holotype from Diego Martin, November 9, 1944 (R. H. Montgomery).

Vima albiornata, new species, differs from *Vima insignis* Hirst by having the white raised area posterior to the eye tubercle rather than on the second and third areas of the dorsum.

COSMETIDAE Simon

Cosmetinae Cambridge

Cynortula granulata Roewer

Figure 6

Cynortula granulata ROEWER, 1912, Arch. Naturgesch., vol. 78, sect. A, no. 10, p. 46; 1923, Die Weberknechte der Erde, p. 323, fig. 359.

MALE: Total length of body, 4.2 mm. Cephalothorax, 1.6 mm. Width of body at widest portion, 3.1 mm.

	I	II
Trochanter	0.5 mm.	0.6 mm.
Femur	2.4	5.2
Patella	0.8	1.0
Tibia	1.6	3.8
Metatarsus	2.6	5.0
Tarsus	1.7	3.6
Total	9.6 mm.	19.2 mm.

	III	IV
Trochanter	0.6 mm.	0.6 mm.
Femur	3.8	5.4
Patella	1.1	1.2
Tibia	2.1	3.2
Metatarsus	3.6	3.8
Tarsus	2.0	1.9
Total	13.2 mm.	16.1 mm.

Entire dorsum including the eye tubercle covered with many small tuberculations which are more numerous on the median and lateral portions of the scute. A transverse row of these tuberculations across the posterior margin of the fifth area and each free sternite. Median paired tubercles on the first and third areas. In some specimens the tubercles of the third area are much enlarged. Anal operculum tuberculate, a transverse row of small tuberculations across each free sternite. Coxae with scattered hairs and granulations; a transverse row of large tubercles across the first coxa. Anterior and posterior rows of teeth on the second coxa.

Legs with scattered hairs, granulations present on the femora and patellae. Third and fourth legs not enlarged over the first and second. Tarsal segments: 6-10-7-7. Distitarsus of first tarsus with three segments, second with three.

Palpus: trochanter, 0.5 mm. long; femur, 1.1; patella, 0.8; tibia, 1.1; and tarsus, 0.5. Total length, 4.0 mm. Palpus characteristically flattened, a row of teeth on the ventral margin of the femur.

Chelicera normal.

Dorsum reddish brown, with a pale white pencilling arranged as in figure 6. Appendages somewhat lighter.

RECORDS: Tucker Valley, November, 1944 (R. Ingle); Tucker Valley, September, 1944 (R. Ingle); Sangre Grande, December 6, 1944 (R. M. Montgomery); and El Tueuche, November, 1944 (R. M. Montgomery).

***Paecilaemainglei*, new species**

Figure 7

MALE: Total length of body, 5.6 mm. Cephalothorax, 1.8 mm. Width of body at widest portion, 4.4 mm.

	I	II
Trochanter	0.7 mm.	0.8 mm.
Femur	4.4	9.8
Patella	0.7	1.5
Tibia	2.7	7.8
Metatarsus	4.9	11.2
Tarsus	2.4	5.5
Total	15.8 mm.	36.6 mm.
	III	IV
Trochanter	0.7 mm.	0.8 mm.
Femur	7.4	9.7
Patella	1.5	1.6
Tibia	3.6	5.5
Metatarsus	6.8	10.2
Tarsus	3.3	3.8
Total	23.3 mm.	16.0 mm.

Dorsum smooth, arched in the region of the third area. Paired tubercles on the first area, median paired spines on the third. The spines of the third area are very straight and quite heavy at the base. A transverse row of very small tubercles across the posterior margin of the fifth area and across each free tergite. Eye tubercle low. Anal operculum smooth, a transverse row of small hair-tipped tubercles across each free sternite. Coxae with scattered hairs, third coxa with an anterior and posterior row of teeth, a transverse row of prominent tubercles across the first coxa.

Legs with scattered hairs, otherwise smooth. Basal segments of third and fourth legs not enlarged over those of the first and second. Legs long and slender. Basitarsus of first tarsus not enlarged. Tarsal segments: 7-14-10-11. Distitarsus of first tarsus with three segments, second with three.

Palpus: trochanter, 0.7 mm. long; femur, 1.4; patella, 0.9; tibia, 1.7; and tarsus, 0.6. Total length, 5.3 mm. Palpus characteristically flattened, a ventral row of teeth on the femur.

Chelicera slightly enlarged.

Dorsum light yellowish brown, darker brown patches in the anterior third of the cephalothorax and around the eye tubercle. A darker brown portion also present around

the paired tubercles of the first area. Basal area of the spines of the third area darker brown, spines dark brown. Dorsum covered with scattered white spots. These spots are more numerous at the lateral portion of the scute; a few of the spots extend onto the eye tubercle. A transverse row of white spots across each free tergite. Anal operculum without white markings. Venter and coxae reddish brown, legs lighter brown. Palpus and chelicera with much darker brown mottling, making them appear somewhat darker than the legs.

FEMALE: Total length of body, 5.5 mm. Cephalothorax, 1.6 mm. Width of body at widest portion, 4.1 mm.

Similar in appearance to male, but lacking the enlarged chelicera.

TYPE LOCALITY: Male holotype and male and female paratypes from Tucker Valley, southwest Trinidad, November, 1944 (R. Ingle); additional male and female paratypes from El Tucuche, November, 1944 (R. H. Montgomery); and Diego Martin, September 12, 1944 (R. H. Montgomery). One paratype from St. Anne, July 6, 1926, in the collection of Dr. Alexander Petrunkevitch of Yale University.

This species is related to *Paecilaema guttatum* Roewer. It differs in the color pattern of the dorsum. *P.inglei* lacks the transverse white line behind the spines of the third area which is present in *P.guttatum*.

GONYLEPTIDAE Sundevall**Cranainae** Roewer***Cranellus montgomeryi*, new species**

Figures 11-12

FEMALE: Total length of body, 3.8 mm. Cephalothorax, 1.4 mm. Width of body at widest portion, 3.1 mm.

	I	II
Trochanter	0.5 mm.	0.6 mm.
Femur	2.5	5.5
Patella	0.7	1.0
Tibia	1.2	3.8
Metatarsus	2.4	4.0
Tarsus	1.7	4.3
Total	9.0 mm.	19.2 mm.

	III	IV
Trochanter	0.6 mm.	0.7 mm.
Femur	3.9	4.7
Patella	1.0	0.5
Tibia	2.0	2.3
Metatarsus	3.1	4.8
Tarsus	1.8	1.4
Total	12.4 mm.	14.4 mm.

Dorsal scute with four areas. First area with a median line. First area with median paired spines; in addition, on either side, four small spines arranged in a semicircle anterior to the median spine. Second area without median armature, but with a row of seven or eight small spines. Third area with a pair of long acute spines, and in addition seven or eight smaller spines clumped around the base of each large spine. Fourth area without median armature, but with a small tubercle near the lateral margin. First free tergite without median armature, but with a small tubercle near the lateral margin. Second free tergite with only a few very small tubercles, third free tergite with a median pair of spines and a few small tubercles. Eye tubercle in the middle of the cephalothorax, a small spine over each eye. On either side two small spines posterior and laterad to the eye tubercle. Anal operculum with scattered hairs, free sternites each with a transverse row of hair-tipped tubercles. Coxae with scattered hair-tipped tubercles somewhat arranged in rows, largest ones on the first coxa. A few anterior and posterior teeth on coxa three. Fourth coxa with several dorsal and lateral hair-tipped spines, visible from above. A larger dorsal apical spine also present, but fourth coxa not widened laterally. Trochanters with scattered hairs, with small spines on trochanters two to four, the largest on four. Distal portion of second to fourth femora with two apical spines. Remainder of legs smooth except for scattered hairs. Fourth femur straight. Tarsal segments: 6-12-6-6. Distitarsus of first tarsus with three segments, second with three. One paratype has but five segments in the fourth tarsus.

Palpus: trochanter, 0.5 mm. long; femur, 1.3; patella, 0.7; tibia, 0.9; and tarsus, 0.8. Total length, 4.2 mm.

Palpus armed retrolaterally as in figure 12. Prolaterally armed as follows: femur and patella without armature; tibia with four spine-tipped tubercles; tarsus with two.

Chelicera normal, smooth except for a few scattered hairs. A slight elevation on the proximal segment.

Body reddish brown, darker brown mottlings on the dorsum, particularly around the margin of the scute and the anterior margin of the cephalothorax. Appendages lighter.

TYPE LOCALITY: Female holotype and female paratype from El Tucuche, Trinidad, November 12, 1944 (R. H. Montgomery).

This species differs from *Cranellus balthazai* Roewer by being more spinose and in lacking the white dorsal pattern. Unfortunately only females were available for study, and in these there were definitely no paired spines on the second free tergite, but in one the median tubercles of the second free tergite were somewhat enlarged. Possibly male specimens would show definite paired spines.

Phareicranus calcariferus (Simon)

Figures 13-14

Goniosoma calcariferum SIMON, 1879, Ann. Soc. Ent. Belgique, vol. 22, p. 232.

Phareicranus calcariferus ROEWER, 1913, Arch. Naturgesch., vol. 79, sect. A, no. 5, p. 402, fig. 159; 1923, Die Weberknechte der Erde, p. 559, fig. 700.

MALE: Total length of body, 9.6 mm. Cephalothorax, 3.5 mm. Width of body at widest portion, 7.8 mm.

	I	II
Trochanter	0.9 mm.	1.1 mm.
Femur	5.9	14.4
Patella	1.6	2.2
Tibia	3.9	9.7
Metatarsus	7.1	11.0
Tarsus	3.0	9.7
Total	22.4 mm.	48.1 mm.

	III	IV
Trochanter	1.3 mm.	1.6 mm.
Femur	9.5	12.2
Patella	1.8	2.7
Tibia	5.2	7.1
Metatarsus	9.8	13.8
Tarsus	3.6	4.7
Total	31.2 mm.	42.1 mm.

Dorsum smooth, paired tubercles on the first area. Paired spines on the third. Paired spines on the second and third free tergites. First area with a median line. Eye tubercle smooth, with a pair of large spines. Anterior and lateral margins of the cephalothorax with several tubercles. A transverse row of tuberculations across each free tergite except in the median area. Venter and coxae with scattered hairs, a transverse row of tuberculations across each free sternite. Anal operculum with a few scattered hairs and several tubercles. First to third coxa each with a transverse row of tubercles; these are largest on the first. Fourth coxa not widened laterally, but with a strong apical spine, and ventrally with one large tubercle anterior to the stigmén.

Legs with scattered hairs and tuberculations on the trochanters, femora, and patellae; very small ones on the tibiae. These tuberculations are more or less arranged in rows and are largest on the fourth femur. Apical portion of fourth femur with larger tubercles and two large spines, one on the retrolateral margin, the other on the prolateral margin. Fourth tibia with a prolateral row of heavy spines. Femora of all legs straight. Tarsal segments: 8-20-9-11. Distitarsus of first tarsus with three segments, second with three.

Palpus: trochanter, 1.2 mm. long; femur, 3.2; tibia, 1.6; metatarsus, 1.8; and tarsus, 2.2. Total length, 10 mm. Palpus armed retrolaterally as in figure 14. Prolaterally armed as follows: femur with a dorsal apical spine, but no median apical spine, otherwise unarmed; patella unarmed; tibia with four spine-bearing tubercles; tarsus with four spine-bearing tubercles, the proximal one very small. Entire palpus clothed throughout with hairs.

Chelicera slightly enlarged, with scattered hairs and a few dorsal tuberculations.

Dorsum light reddish brown with a very dark brown pattern giving a netted appearance over the entire dorsum. Spines of the eye, third area, and free tergites light, a small strip of white on the lateral border of the scute, extending from the

first to the third area. A strip of white at the posterior margin of the fourth area, a small strip of white at the posterior margin of the first and second free tergites, a broad strip of white at the posterior margin of the third free tergite, the last free sternite also white. The dark anal operculum appears to be surrounded by a ring of white. Venter and coxae reddish brown, with dark brown fleckings. Appendages lighter, with much darker brown mottling particularly on the chelicera and palpi.

FEMALE: Total length of body, 9.6 mm. Cephalothorax, 3.6 mm. Width of body at widest portion, 7.8 mm.

Identical in appearance with male, but the large spines of the fourth femur and the ventral tubercles of the fourth coxa are missing.

RECORDS: Tucker Valley, near Navy Base, southwest Trinidad. November and December, 1944 (R. Ingle).

Rhopalocranaus albilineatus Roewer

Figures 19-20

Rhopalocranaus albilineatus ROEWER, 1932, Arch. Naturgesch., new ser., vol. 1, no. 2, p. 285, fig. 3.

MALE: Total length of body, 5.4 mm. Cephalothorax, 1.8 mm. Width of body at widest portion, 4.2 mm.

	I	II
Trochanter	0.6 mm.	0.7 mm.
Femur	3.2	7.6
Patella	1.0	1.5
Tibia	1.6	4.7
Metatarsus	2.3	5.1
Tarsus	3.2	5.2
Total	11.8 mm.	24.8 mm.
	III	IV
Trochanter	0.7 mm.	0.8 mm.
Femur	7.0	6.6
Patella	1.4	1.1
Tibia	2.4	3.3
Metatarsus	4.5	6.6
Tarsus	2.5	3.3
Total	18.5 mm.	21.7 mm.

Dorsum with four areas. First area with median paired spines, and a small tubercle laterad to each spine. No median line present. Second area without median

armature, but with a small tubercle on either side midway between the median line and the lateral margin. Third area with a pair of robust spines, small tubercles laterad to each of the spines. Fourth area and first free tergite smooth. Second and third free tergite with a pair of median tubercles. Eye tubercle with a small spine over each eye. Cephalothorax smooth, one or two small spines on either side at the anterior lateral margin. Anal operculum smooth except for scattered hairs, each free sternite with a transverse row of hairs and small granulations. Coxae with scattered hairs and tubercles, a transverse row of tubercles across the first coxa. Third coxa with a few anterior and posterior teeth. Several spinose tubercles on the fourth coxa, visible from above. Fourth coxa not widened laterally and with a dorsal apical spine.

Legs smooth. A few tubercles on the trochanters of the legs, remaining segments smooth except for scattered hairs. Tarsal segments: 6-15-7-7. Distitarsus of first tarsus with three segments, second with three. Basitarsus of first tarsus much enlarged.

Palpus: trochanter, 0.7 mm. long; femur, 1.6; patella, 0.9; tibia, 10; and tarsus, 0.8. Total length, 5 mm. Palpus armed retrolaterally as in figure 19. Pro-laterally armed as follows: femur and patella unarmed; tibia with five spine-bearing tubercles; tarsus with two spine-bearing tubercles.

Chelicera normal, with scattered hairs.

Dorsum reddish brown with white lines as in figure 20. Venter concolorous with the dorsum, legs lighter with darker brown mottlings. Chelicera and palpus yellowish.

RECORD: Tucker Valley, southwest Trinidad, November, 1944 (R. Ingle).

Heterostygninae Roewer

Pseudostygnopus clavotibialis, new species

Figures 15, 16, 18

MALE: Total length of body, 4.4 mm. Cephalothorax, 3.7 mm. Width of body at widest portion, 2.1 mm.

	I	II
Trochanter	0.6 mm.	0.7 mm.
Femur	3.1	6.7
Patella	0.8	1.2
Tibia	1.8	4.8
Metatarsus	3.3	5.8
Tarsus	1.7	4.2
Total	11.3 mm.	23.4 mm.
	III	IV
Trochanter	0.8 mm.	0.8 mm.
Femur	4.8	6.3
Patella	1.3	1.4
Tibia	2.7	3.7
Metatarsus	4.8	7.0
Tarsus	2.1	2.2
Total	16.5 mm.	21.4 mm.

Dorsum with four areas, first area with median line. First area with median paired tubercles and with another tubercle on either side laterad to the median paired ones. Second area without median armature, but with three tubercles on either side. Third area with a pair of large acute diverging spines. In addition there are several small tubercles laterad and posterior to the median spines. Fourth area with only a few granulations, free tergites smooth except for scattered hairs. Cephalothorax without an eye tubercle, eyes widely separated and at the posterior portion of the cephalothorax. A median spine on the cephalothorax, arising from a mound. Anterior margin of cephalothorax with two small spines on either side. Anal operculum smooth except for scattered hairs. A row of very fine tubercles across each free sternite, coxae with scattered hairs, a few small tubercles present. First coxa with a transverse row of hair-tipped tubercles, third coxa with anterior and posterior rows of teeth.

Legs with scattered hairs. Trochanters except for the first with scattered tubercles which are enlarged into several spines on the fourth, including a very large dorsal one. A particularly prominent dorsal posterior spine present on the fourth coxa. Second to fourth femora with tubercles more or less arranged in rows, two distal dorsal spines on the second to fourth femora. Fourth femur with the tubercles enlarged, several actually spines at the distal retrolateral margin. These are arranged into two rows. Fourth patella with

several dorsal spines, two very prominent ventral ones. Fourth tibia clavate with several spines at the distal end. Patella and tibia of first to third legs clothed only with hairs. Tarsal segments: 7-19-7-8. Distitarsus of first tarsus with three segments, second with three. A few specimens had only six segments in the first tarsus. Scopula present on the third and fourth tarsi; tarsal claws toothed.

Palpus: trochanter, 0.7 mm. long; femur, 3.3; tibia, 1.8; metatarsus, 1.8; and tarsus, 1.6. Total length, 9.2 mm. Palpus elongate. Armed retrolaterally as in figure 18. Prolaterally: femur and patella unarmed; tibia with armature the same as on the retrolateral margin; tarsus with armature the same as on the retrolateral margin.

Chelicera with scattered hairs. Second segment considerably enlarged. A few tubercles on the proximal segment.

Entire body reddish brown, with mottlings on the cephalothorax, giving a netted appearance of lighter punctations. Appendages except for femur, patella, and tibia of fourth leg lighter than the body, with brown mottlings. Fourth leg with

segments the same color as the body. A pencilling of white at the posterior lateral margin of the dorsal scute. This is lacking in some specimens.

FEMALE: Total length of body, 4.5 mm. Cephalothorax, 2.1 mm. Width of body at widest portion, 3.9 mm.

Similar in appearance to male, but with reduced chelicera. Also lacking the heavy spination of the fourth leg.

TYPE LOCALITY: Male holotype and male and female paratypes from Tucker Valley, southwest Trinidad, November, 1944 (R. Ingle). Additional paratypes from Sangre Grande, Trinidad, December, 1944 (R. H. Montgomery) and from Caparo, Trinidad, March 15, 1910 (P. B. Whelpley).

This species is related to *P. longipalpus* Goodnight and Goodnight, differing in the spination of the fourth leg. It lacks the single large spine on the tibia. (See fig. 17.)

The animal listed as *Pseudostygnoplus longipalpus* Goodnight and Goodnight (1942, Amer. Mus. Novitates, no. 1234, p. 13) actually was this new species.

SUBORDER PALPATORES THORELL

Tribe Eupnoi Hansen and Soerensen PHALANGIIDAE Simon Gagrellinae Thorell

Prionostemma vittatum Roewer

Figure 9

Prionostemma vittatum ROEWER, 1910, Abhandl. Ver. Hamburg, vol. 19, no. 4, p. 186, pl. 2, fig. 27, pl. 3, figs. 18-19; 1923, Die Weberknechte der Erde, p. 1085, fig. 1204.

MALE: Total length of body, 3.4 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.2 mm. Length of femora: I, 9.7 mm.; II, 15.7 mm.; III, 10.5 mm.; IV, 11.7 mm.

Dorsum with numerous small depressions giving a netted appearance. Eye tubercle at the posterior portion of the cephalothorax, canaliculate, with a row of sharp spines over each carina. Supracheliceral lamella prolonged into two obtuse spines. Free sternites each with a transverse row of small tubercles and with

scattered hairs. Coxae and genital operculum with scattered tuberculations. Three pronged teeth on the anterior and posterior margins of each coxa.

Legs with scattered hairs, rows of small spines present on the femora, patellae, and a few on the tibiae. Nodules: 0-3-0-1.

Palpus: trochanter, 0.2 mm. long; femur, 1.0; patella, 0.5; tibia, 0.7; and tarsus, 1.2. Total length, 3.6 mm. Palpus with scattered hairs on all segments. Femur armed ventrally with spines. Patella and tibia covered with spines; patella with an inner apophysis which is likewise armed with spines.

Body golden, eye tubercle dark brown to black, a dark spot on the cephalothorax at the base of the eye tubercle. In some specimens there is more brown mottling, present on the abdomen. Trochanters, bases of femora dark brown, contrasting strongly with the coxae. Remainder of

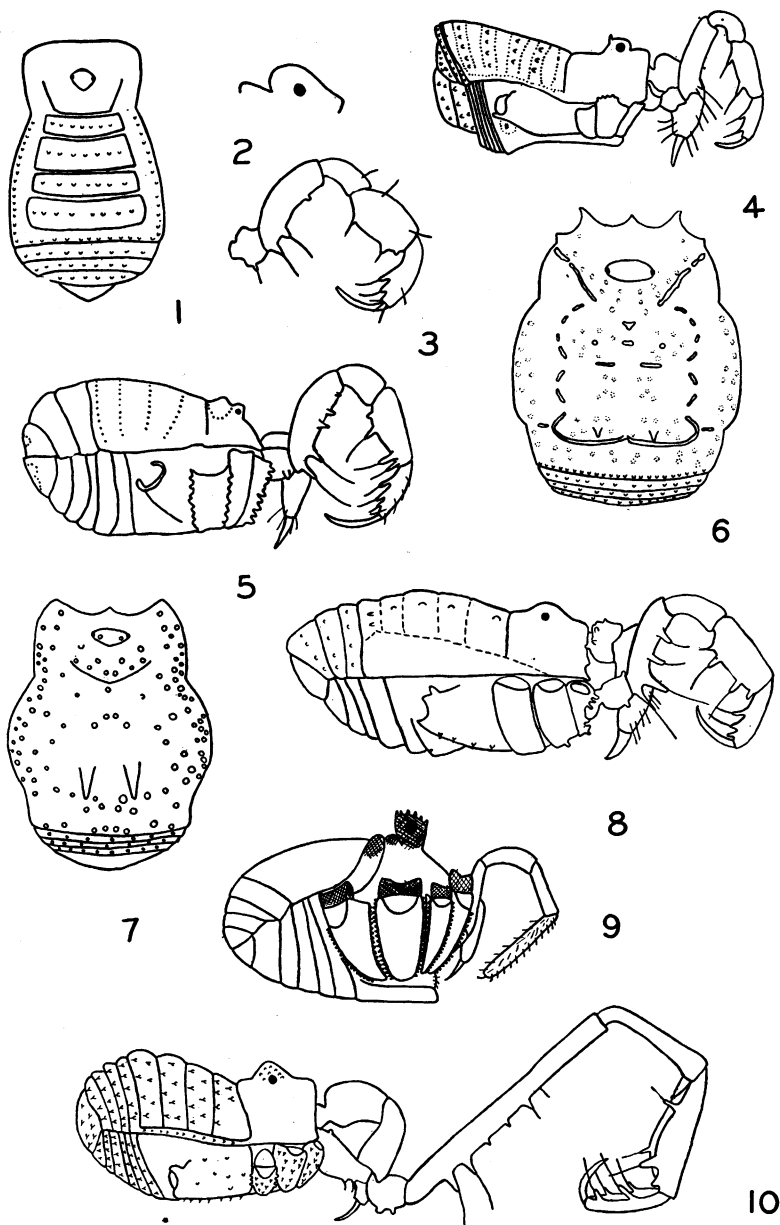
legs brownish. Chelicera and palpus light yellow.

FEMALE: Total length of body, 3.9 mm. Cephalothorax, 1.6 mm. Width of body at widest portion, 2.9 mm. Length of fem-

ora: I, 8.4 mm.; II, 13.6 mm.; III, 9.9 mm.; IV, 9.2 mm.

Similar in appearance to male.

RECORDS: Tucker Valley, southwest Trinidad, November, 1944 (R. Ingle); Port-of-Spain, Trinidad, July 4, 1926.



- Fig. 1. *Pellobunus trispinatus*, new species, dorsal view of male.
 Fig. 2. Idem, lateral view of eye tubercle of male.
 Fig. 3. Idem, retrolateral view of palpus of male.
 Fig. 4. *Kalina tuberculata*, new species, lateral view of holotype.
 Fig. 5. *Vima albiornata*, new species, lateral view of holotype.
 Fig. 6. *Cymortula granulata* Roewer, dorsal view of male.
 Fig. 7. *Paecilaema inglei*, new species, dorsal view of male.
 Fig. 8. *Trinella intermedia*, new species, lateral view of holotype.
 Fig. 9. *Prionostemma vittatum* Roewer, lateral view of male.
 Fig. 10. *Pellobunus longipalpus*, new species, lateral view of holotype.

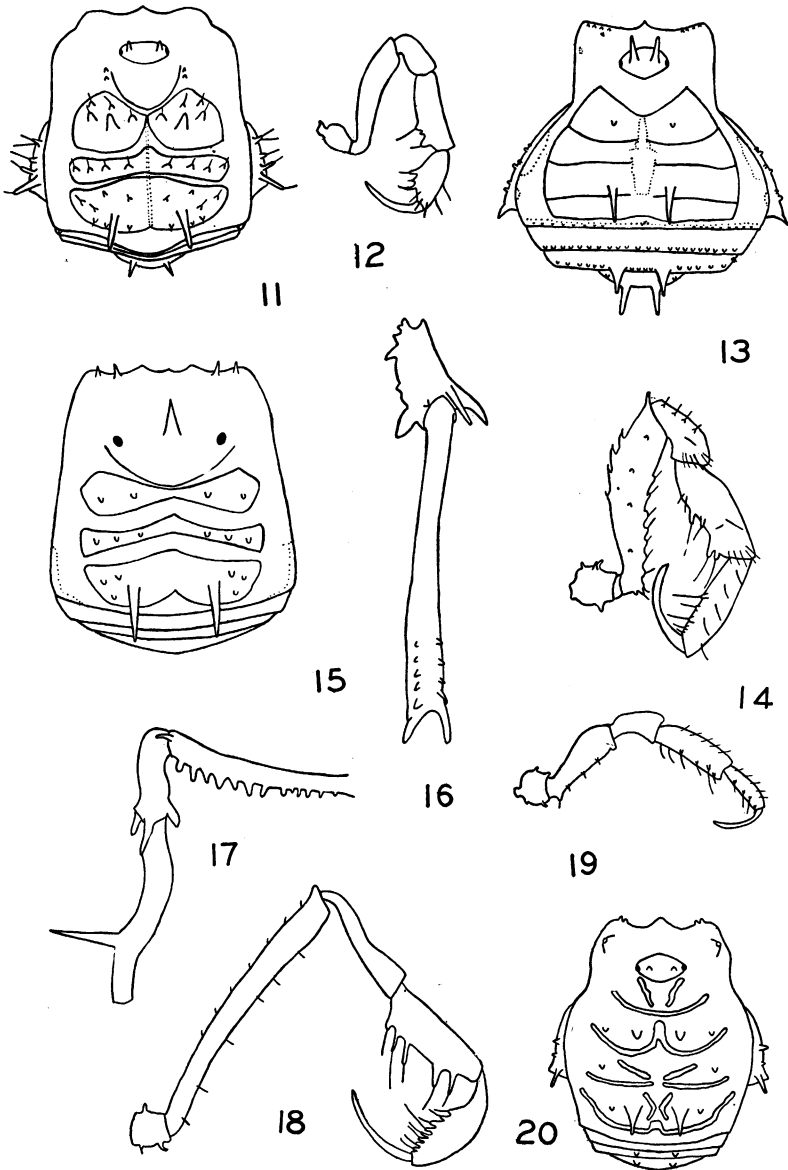


Fig. 11. *Cranellus montgomeryi*, new species, dorsal view of female.
 Fig. 12. Idem, retrolateral view of palpus of female.
 Fig. 13. *Phareicranus calcariferus* (Simon) dorsal view of male.
 Fig. 14. Idem, retrolateral view of palpus of male.
 Fig. 15. *Pseudostygnoplus clavotibialis*, new species, dorsal view of male.
 Fig. 16. Idem, ventral view of patella and tibia of fourth leg of male.
 Fig. 17. *Pseudostygnoplus longipalpus* Goodnight and Goodnight, dorsal view of femur, patella, and tibia of fourth leg of male.
 Fig. 18. *Pseudostygnoplus clavotibialis*, new species, retrolateral view of palpus of male.
 Fig. 19. *Rhopalocranus albilineatus* Roewer, retrolateral view of palpus of male.
 Fig. 20. Idem, dorsal view of male.

