

AMERICAN MUSEUM NOVITATES

Number 1255 THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City

April 18, 1944

NEW PHALANGIDS FROM THE OLD WORLD

BY CLARENCE J. AND MARIE L. GOODNIGHT¹

A few undescribed species of Phalangida from the Old World were encountered by the authors during their studies of the collections of the American Museum of Natural History. Although these animals are from widely separated areas, it was

thought best to include them in a single paper.

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

SUBORDER LANIATORES THORELL

ASSAMIIDAE Soerensen

Polycoryphinae Roewer

PARAKODAIIKA, NEW GENUS

Dorsum with five distinct areas, all dorsal areas and free tergites without median armature. Area I with a median line. Eye tubercle in the form of a rounded cone, unbedecked, slightly separated from the anterior median margin of the cephalothorax. Femur of the palpus without a median apical spine. Tarsal segments: 4-more than 6-4-6. Distitarsus of first tarsus with 2 segments; of second, 3 segments.

GENOTYPE: *Parakodaika angolae*, new species.

Parakodaika is related to *Kodaika* Roewer; however, it has a median line in area I of the dorsum, and the tarsal segments are 4-more than 6-4-6, rather than 4-more than 6-5-6.

Parakodaika angolae, new species

Figures 8-12

MALE: Total length of body, 3.4 mm. Cephalothorax, 1.3 mm. Width of body at widest portion, 2.0 mm.

Dorsum with five distinct areas. Area I with a median line. Areas I to V and free tergites without median armature. Surface of the dorsal scute with fine granulations. Each dorsal area with irregular

	I	II
Trochanter	0.4 mm.	0.4 mm.
Femur	1.6	2.2
Patella	0.5	0.5
Tibia	1.0	1.9
Metatarsus	1.5	2.4
Tarsus	0.7	1.5

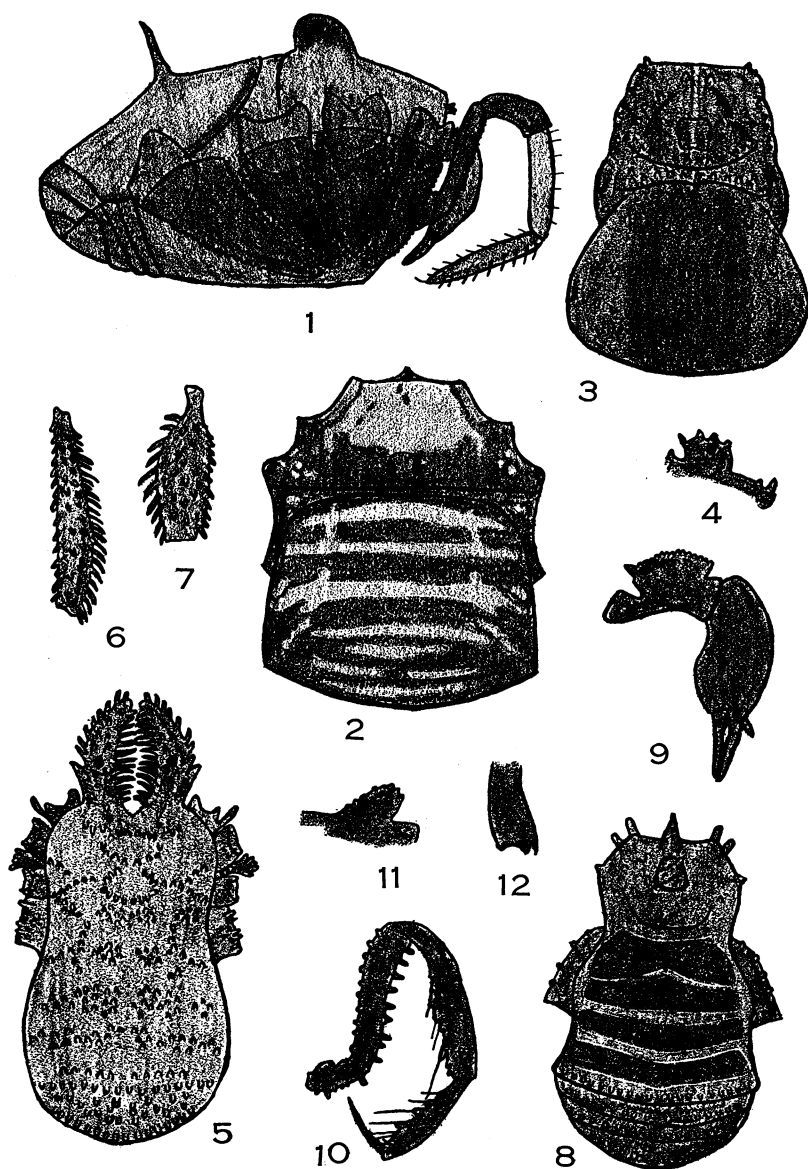
Total	5.7 mm.	8.9 mm.
-------	---------	---------

	III	IV
Trochanter	0.4 mm.	0.3 mm.
Femur	1.6	2.2
Patella	0.5	0.5
Tibia	1.3	1.6
Metatarsus	1.8	2.3
Tarsus	0.9	1.2

Total	6.5 mm.	8.1 mm.
-------	---------	---------

rows of granulations, which are more nearly regular on area V. Each free tergite with a transverse row of spinose tubercles, additional tubercles on the third free tergite. Eye tubercle slightly removed from the anterior margin of the cephalothorax, rounded, thickly covered with tuberculations, eyes at the base, several larger tubercles at the apex. Cephalothorax finely granulate, with scattered tuberculations just posterior to the eye tubercle and smaller ones scattered throughout. Projecting teeth underneath the anterior margin of the cephalothorax number: 2:1:2. The median tooth very small and hidden by the curved heavy spine of the cephalothorax; the median tooth of the lateral pair is the larger. The heavy

¹ University of Illinois, Urbana, Illinois.



- Fig. 1. *Gagrellula indigena*, new species, lateral view of male.
 Fig. 2. *Nelima morova*, new species, dorsal view of male.
 Fig. 3. *Novabunus spinosus*, new species, dorsal view of male.
 Fig. 4. Idem, lateral view of eye tubercle.
 Fig. 5. *Dicranalasma napolé*, new species, dorsal view of male.
 Fig. 6. Idem, fourth femur of male.
 Fig. 7. Idem, first femur of male.
 Fig. 8. *Parakodaika angolae*, new species, dorsal view of male.
 Fig. 9. Idem, lateral view of chelicera of male.
 Fig. 10. Idem, retrolateral view of palpus of male.
 Fig. 11. Idem, lateral view of eye tubercle of male.
 Fig. 12. Idem, dorsal view of distal portion of femur of palpus of male.

spine of the cephalothorax is located in front of the eye tubercle and curves strongly over the anterior margin; it bends ventrally between the chelicerae. Genital operculum roughly tuberculate. A transverse row of fine tubercles across each free sternite. Stigmen hidden by a group of thickly placed tubercular projections. Anal operculum granulate. Coxae granulate. Lateral teeth present on the anterior and posterior margins of coxa III; large tuberculations present on the entire anterior margin of coxa I, the distal posterior margin of coxa II, and both the anterior and posterior margins of coxa IV. Coxa IV widened.

Legs: granulate, femur IV slightly curved, a few scattered hairs throughout. Double claws of third and fourth tarsi simple. Third and fourth tarsi without a false claw. Tarsal segments: 4-8-4-6. Distitarsus of first tarsus with 2 segments; of second, 3 segments.

Palpus: trochanter, 0.4 mm. long; femur, 1.0; patella, 0.5; tibia, 0.6; and tarsus, 0.5. Total length, 3.0 mm. Palpus armed retrolaterally as in figure 10; prolaterally: femur and patella unarmed except for a somewhat larger spinous tubercle at the median apical portion of the femur (fig. 12). This scarcely appears to be a truly median apical spine; tibia and tarsus armed similarly to the retrolateral surface except for an extra spine-bearing tubercle on the tibia.

Chelicera: enlarged as in figure 9. Median immovable claw with a hook at the proximal portion. Movable claw with a large median tooth.

Entire animal reddish yellow, distal portion of appendages and venter somewhat lighter.

TYPE LOCALITY: Holotype from Chitau, Angola, August 13, 1925 (H. Lang and R. Boulton).

SUBORDER PALPATORES THORELL

Tribe **DYSPNOI** Hansen and Soerensen

TROGULIDAE Simon

Dicranalasma napolii, new species

Figures 5-7

MALE: Total length of body, 2.7 mm. Cephalothorax, 0.7 mm. Width of body at widest portion, 1.7 mm.

	I	II
Trochanter	0.3 mm.	0.4 mm.
Femur	0.9	1.9
Patella	0.5	0.5
Tibia	0.5	0.5
Metatarsus	0.7	0.7
Tarsus	0.4	0.4
Total	3.3 mm.	4.4 mm.
	III	IV
Trochanter	0.4 mm.	0.4 mm.
Femur	0.8	1.3
Patella	0.5	0.4
Tibia	0.6	0.9
Metatarsus	1.0	1.6
Tarsus	0.4	0.5
Total	3.7 mm.	5.1 mm.

Dorsum roughly granulate, with numerous obtuse spines. These spinose projections are more numerous on the abdomen; more or less arranged in an irregular pattern on the cephalothorax. Posterior portion of the abdomen with transverse rows of slightly longer projections. Eye tubercle characteristically prolonged into two projections; each of these projections is strongly curved and somewhat widened in the median portion. Eyes carried forward to the median portion of the projection. Each lateral margin of the eye projection with a row of spines. These spines much longer on the prolateral margin. Entire eye tubercle roughly granulate. A single, blunt, club-like projection at each anterior lateral margin of the cephalothorax. Venter finely granulate, coxae very roughly granulate. Anterior portion of first coxa with numerous spinose projections. Anterior lateral margin of coxa IV with long projections; posterior distal portion of coxa II with eight or ten projections in a group. Dorsally the distal portion of coxa I has a short projection.

Legs: roughly granulate, with lateral

rows of large spine-like projections. Femur II with projections reduced, femora I and III heavier and shortened. Tarsal segments: 4-4-4-4. Distitarsus of first tarsus with 1 segment; of second, 1 segment. Ultimate segment of second tarsus characteristically elongate.

Palpus: trochanter, 0.1 mm. long; femur, 0.4; patella, 0.3; tibia, 0.4; and tarsus, 0.3. Total length, 1.5 mm. Palpus characteristic, clothed throughout with hairs.

Chelicera: normal, claw strongly curved.

Entire animal yellowish brown, some darker mottlings present.

TYPE LOCALITY: Holotype from Naples, Italy.

This species differs from other members of the genus in the arrangement of the dorsal spines and in the number of tarsal segments.

Tribe EUPNOI Hansen and Soerensen

PHALANGIIDAE Simon

Leiobuninae Banks

Nelima morova, new species

Figure 2

MALE: Total length of body, 3.8 mm. Cephalothorax, 1.5 mm. Width of body at widest portion, 3.5 mm. Length of femora: I, 11.4 mm.; II, 17.5 mm.; III, 10.5 mm.; IV, 15.0 mm.

Dorsum smooth, eye tubercle slightly canaliculate, smooth above, located towards the posterior portion of the cephalothorax, somewhat slanted posteriorly. Supracheliceral lamella in the form of an expanded plate. Venter finely granulate. Coxae roughly granulate, without lateral teeth.

Legs: with a few small scattered hairs, without nodules. Metatarsi with false articulations.

Palpus: trochanter, 0.3 mm. long; femur, 1.6; patella, 0.5; tibia, 0.9; and tarsus, 1.8. Total length, 5.1 mm. Palpus clothed throughout with hairs, a few small, spine-like hairs on the ventral portion of the femur. Patella without apophyses. Tarsal claw toothed.

Chelicera: normal.

Dorsum dark brown, with a series of transverse yellowish stripes. Anterior portion of cephalothorax with a large light spot. Eye tubercle light at base and in the median dorsal portion; dark around the eyes. A few lighter spots scattered irregularly over the lateral portions of the cephalothorax. Venter and coxae yellowish. Trochanters and bases of femora dark brown, contrasting. Remainder of legs reddish brown with a light portion at the distal portion of each segment but the patellae. This lighter portion is sometimes absent, is quite variable. Chelicerae and palpi reddish brown. Tips of cheliceral claws dark.

TYPE LOCALITY: Male holotype from Misaki, Japan (north Yatsu).

This species is related to *N. nigracoxa* Sato and Suzuki, differing by having the coxae yellowish rather than black.

Phalangiinae Simon

NOVABUNUS, NEW GENUS

Eye tubercle spinose, chelicera not abnormally enlarged. No median dorsal spines. The anterior median portion of the cephalothorax with two spines.

GENOTYPE: *Novabunus spinosus*, new species.

Novabunus is related to *Diabunus* Thor-ell, but differs by having a spinose eye tubercle.

Novabunus spinosus, new species

Figures 3 and 4

MALE: Total length of body, 3.9 mm. Cephalothorax, 1.6 mm. Width of body at widest portion, 2.9 mm.

	I	II
Trochanter	0.5 mm.	0.4 mm.
Femur	1.9	3.0
Patella	1.0	0.9
Tibia	1.8	2.7
Metatarsus	2.0	2.0
Tarsus	2.7	—
Total	9.9 mm.	—

	III	IV
Trochanter	0.4 mm.	0.6 mm.
Femur	1.8	2.7
Patella	0.9	1.0
Tibia	1.2	2.4
Metatarsus	2.5	2.4
Tarsus	3.4	4.5
Total	10.2 mm.	13.6 mm.

Dorsum finely granulate, with a transverse row of small spines across the first four abdominal segments. Smaller scattered spines, which are not arranged in as definite rows, on the posterior abdominal segments. Cephalothorax with numerous scattered small spines. Two transverse rows of spines posterior to the eye tubercle. A thicker group of spines just laterad to the eye tubercle on either side. Anterior median portion of the cephalothorax with two distinctly larger spines. Eye tubercle at the posterior portion of the cephalothorax, slightly canaliculate, a row of four to five spines over each eye, posterior spine the largest. Venter and coxae with scattered spine-like hairs. Coxae without lateral teeth. Maxillar lobes of coxa II slanted.

Legs: Femora, patellae, and tibiae of legs somewhat enlarged, basal portions of legs I and III heavier than those of II and IV. Leg IV heavier than II. Femora with rows of small spines, giving an angular appearance. All remaining segments of legs with scattered hairs. Patellae and tibiae with rows of small tubercles which give an angular appearance. Metatarsi with some false articulations.

Palpus: trochanter, 0.5 mm. long; femur, 1.1; patella, 0.6; tibia, 0.6; and tarsus, 1.3. Total length, 4.1 mm. Palpus clothed throughout with hairs; black spine-like hairs on all segments but the tarsus. Tarsal claw smooth.

Chelicera: with scattered hairs, a group of small spines on the distal dorsal portion of the proximal segment. Proximal segment without a ventral spine, distal segment with a slight dorsal elevation.

Dorsum dark brown, with lighter motings. Some specimens are considerably lighter, having an indefinite darker broad median stripe. Eye tubercle dark, with a median light line. Venter and coxae

concolorous with the dorsum, varying from dark to light brown. Trochanters of legs lighter brown. Legs brown, lighter distally. Chelicera and palpus brown, varying from light to dark. In some specimens the dorsal spines are lighter.

FEMALE: Total length of body, 7.0 mm. Cephalothorax, 2.0 mm. Width of body at widest portion, 4.3 mm.

Female similar in appearance to male. Spines somewhat reduced, lacking the slight cheliceral elevation.

TYPE LOCALITY: Male holotype and male and female paratypes from Abyssinia, November 25, 1920 (B. Brown).

Gagrellinae Thorell

Gagrellula indigena, new species

Figure 1

MALE: Total length of body, 3.6 mm. Cephalothorax, 1.1 mm. Width of body at widest portion, 2.4 mm. Length of femora: I, 7.7 mm.; II, 12.3 mm.; III, 8.0 mm.; IV, 10.8 mm.

Dorsum roughly granulate; eye tubercle towards the posterior portion of the cephalothorax, canaliculate, smooth above except for a few small hairs. Supracheliceral lamella in the form of two projections, with several spinules at the distal portion. The posterior portion of the second segment of the dorsum with a long median spine. This spine is slender, pointed, and in some specimens slightly curved. Venter and coxae roughly granulate, granulations particularly heavy on the coxae. Lateral teeth well developed on the anterior and posterior margins of all coxae. Teeth 3-pronged, but the prongs are much reduced in size, tending to give a flat appearance to the teeth.

Legs: all segments but metatarsi and tarsi armed with small black spines, which are more or less arranged in rows. Metatarsi and tarsi clothed only with hairs. Metatarsi with false articulations. Nodules of femora: 0-3-0-0.

Palpus: trochanter, 0.3 mm. long; femur, 1.0; patella, 0.4; tibia, 0.8; and tarsus, 1.0. Total length, 3.5 mm. Palpus clothed throughout with hairs. All segments but the tarsus with small spines.

Ventral portion of femur thickly armed with black-tipped spines. Patella without apophyses.

Chelicera: normal, smooth, first segment with only a few very fine tubercles.

Dorsum reddish to dark brown. In the lighter colored specimens there is a darker brown margin around the cephalothorax and abdominal scute. Dorsal spine dark brown, eye tubercle dark, lighter at base. Venter, coxae, and trochanters dark brown. Legs somewhat lighter. Femur and patella of palpus dark brown. Tibia

and tarsus lighter. Chelicera light brown with dark blotches.

TYPE LOCALITY: Male holotype and paratypes from Szechwan Province, China (W. Granger). Male paratype in the collection of the Chicago Natural History Museum.

This species is related to *G. unicolor* Roewer, but differs in the dorsal coloration, length of legs, and the lateral teeth of the coxae. In *G. unicolor* the teeth are 4-pronged, but in *G. indigena* they are only 3-pronged and very much flattened.