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Resultados de la expedición Peris-Alvarez a la isla de Annobón

(13) *Oribatid mites* (4th series)

BY

CARLOS PÉREZ-ÍÑIGO.

This paper is the fourth in a continuing series devoted to the oribatid mites of Annobón Island, and contains further records and descriptions of new species collected by Dr. J. ÁLVAREZ and Prof. S. V. PERIS in 1959.

In earlier papers (PÉREZ-ÍÑIGO, 1969, 1982, 1983) records and descriptions were given of twenty species of oribatid mites, as well as some interesting notices about the geographic and climatic features of this little island, that lies near the equatorial line, in the Gulf of Guinea, and belongs to the Republic of Equatorial Guinea.

In the present paper an account is given of six interesting species. Four of these species appear to be new for the Science and are described under the names of *Leoppia longicoma* n. g., n. sp.; *Annobonzetes sphaericus* n. g., n. sp.; *Magyaria atlantica* n. sp., and *Mesoplophora insularis* n. sp.

New records are given of two interesting species: *Allozetes africanus* BALOGH, 1958 and *Galumnopsis sellnicki* BALOGH, 1960.

OPPIIDAE GRANDJEAN, 1954.

Leoppia n. g.

This new genus is similar in some respects to *Teratoppia* BALOGH, 1959, particularly in the general shape, the length and aspect of the sensillus, prodorsum without costulae, lamellar setae very thin, pedotectum I greatly developed, six genital setae on each plate, monodactyle tarsi and tibiae I and II furnished with remarkable ventral blunt apophyses (see BALOGH, 1959: 98).

Leoppia differs from *Teratoppia* in the number and arrangement of the notogastral setae, that are 12 pairs in the new genus instead of 10 pairs. They are arranged as it is shown in figure 1, that is to say, in a very different way that they are distributed in the species of *Teratoppia.*

Moreover the interlamellar setae are missing in *Leoppia,* and the setae *2a,* absent in *Teratoppia,* are present on the coxisternal region of *Leoppia.*

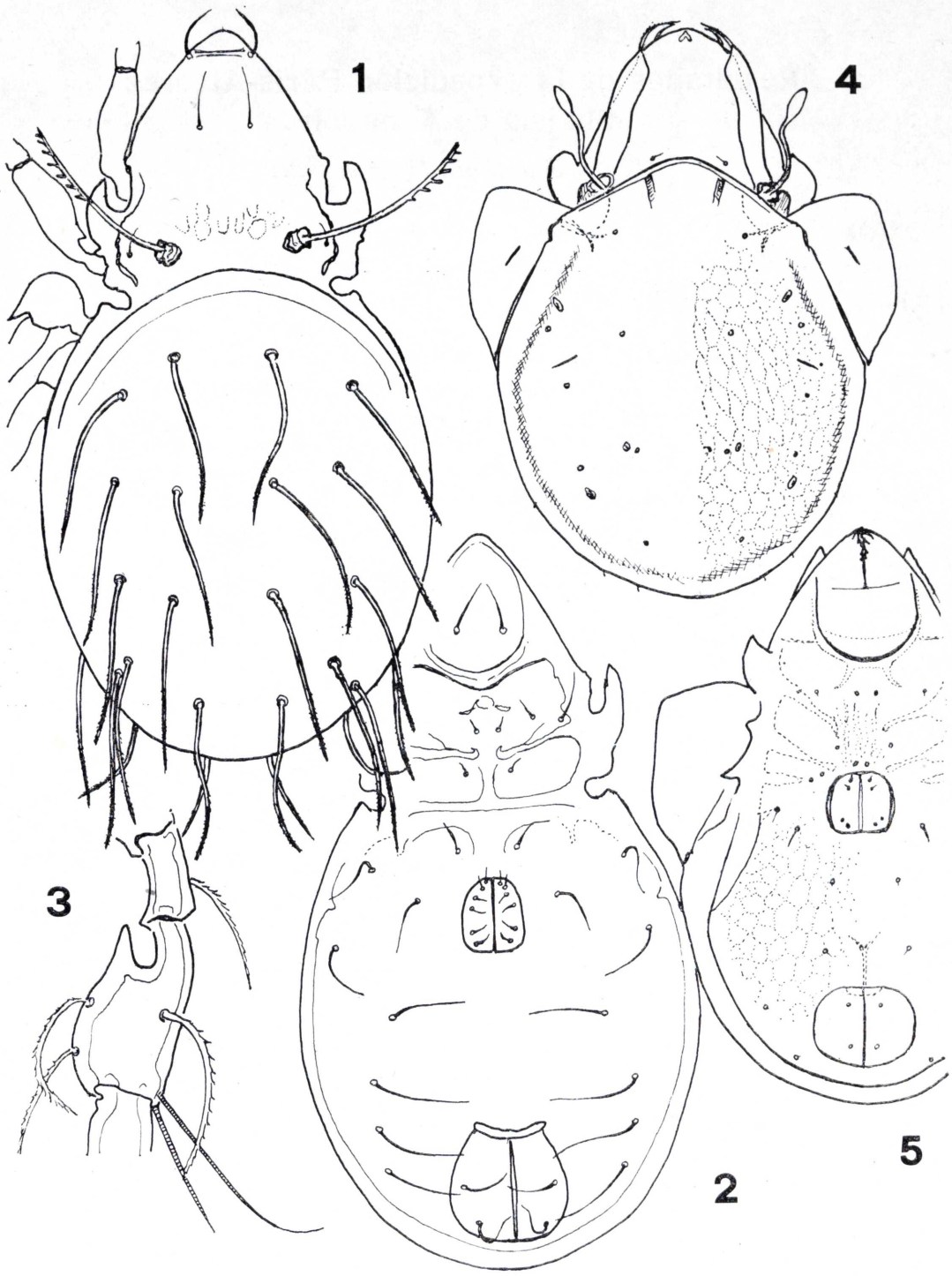
Type species: *Leoppia longicoma* n. sp.

Leoppia longicoma n. sp. (figs. 1-3).

Material examined.—Three adult specimens.

Measurements.—Body length = 408-436 μ; body width = 232-258 μ.

Prodorsum.—Rostrum rounded and entire. Rostral setae inserted at each end



Figs. 1-5.—*Leoppia longicoma* n. sp.: 1) Dorsal view; 2) Ventral view; 3) Tibia I. *Magyaria atlantica* n. sp.: 4) Dorsal view; 5) Ventral view.

of a faint band that crosses the rostral region; they are well developed setae, at least as long as their mutual distance, smooth and incurved.

Neither lamellae nor costulae are visible on prodorsum. Lamellar setae slender and smooth, inserted in their usual position, longer than other prodorsal setae. Each bothridium is a strongly chitinized cup with an aperture directed sidewards. The interlamellar setae are missing and their alveoli are not visible. Some pale areas are present in the interbothridial region. Exobothridial setae short but easily visible. Sensillus long, bearing in the posterior edge of the distal half some short branches. Pedotectum I strongly developed.

Notogaster.—Ovoid in shape, slightly widening anteriorly. Anterior margin broadly rounded. Twelve pairs of notogastral setae, which are long, curved and finely barbed distally, arranged in two longitudinal rows at each side (inner row of four, and outer row of five setae) and a marginal row of three setae. Seta *ta* does not exist and a vestigial alveolus is dubious.

Ventral side.—Coxisternal ridges and their associated apodemes developed in the usual manner (fig. 2). Coxisternal setae very short and fine, difficult to discern, their formula seems to be [3-1-2-3]. Genital and anal apertures far separated one from the other; their mutual distance is approximately twice as long as the genital hole. There are six slender setae on each genital plate inserted down the length of the plate. Adgenital and adanal setae long, directed inwards, as it is shown in fig. 2. Anal setae similar to the other ventral setae but a little shorter.

Legs.—They are not so developed as in the species of *Teratoppia.* All tarsi are monodactyle. Tibiae I and II with conspicuous ventral blunt apophyses, as in *Teratoppia.*

Discussion.—This species is similar, in general appearance, to those of the genus *Teratoppia* but these ones have ten pairs of short and fine notogastral setae, distributed in a longitudinal row of seven and a posteromarginal row of three setae, at each side.

ORIBATULIDAE Thor, 1929.

Annobonzetes n. g.

Pteromorphs large, immovable hinged, prolonged posteriorly, curved ventrad, with a rounded free margin. Anterior border of notogaster complete, broadly rounded. Lamellae narrow, without cusps, inserted in a very lateral position. Sublamella well developed but no prolamella present. There is an incomplete translamella in central part of prodorsum. Notogaster broadly oval in shape, only slightly longer than its breadth. Four pairs of sacculi. Eight (?) pairs of notogastral setae very short and difficult to discern. Four pairs of genital setae, rather long. Tridactyle and almost homodactyle tarsi (the central claw slightly bigger than the lateral ones). Genu I with a dorsal apophysis.

Type species: *Annobonzetes sphaericus* n. sp.

Annobonzetes sphaericus n. sp. (figs. 6-9).

Material examined.—One adult specimen.

Measurements.—Body length = 1380 μ; body width = 900 μ.

Cerotegument.—A very thin layer that can be removed easily by means of lactic acid.

Prodorsum.—Rostrum entire and acuminate; its shape is better seen in lateral view (fig. 8). Lamellae inserted laterally on prodorsum, extending anteriorly from bothridial region for a distance equal to 2/3 length of prodorsum; they narrow anteriorly to a sharp end where the lamellar setae are inserted. At the base of insertion of each lamellar seta a translamella is present, although weakly chitinized in the mid-line. This translamella is, in fact, the visual image of a steep depression of the prodorsal surface.

All prodorsal setae are smooth and almost straight. The rostral setae reach about 120 μ long; the lamellars and interlamellars are a little longer (about 150 μ). The prodorsal surface is smooth. In a lateral view the exobothridial seta is visible, rather long and slender. There is a well developed sublamella converging anteriorly with the lamellar blade at the point of insertion of the lamellar seta. No prolamella is present. Tutorium weakly developed. Pedotectum I rounded and small.

Bothridia covered almost completely by the anterior margin of notogaster. Sensillus relatively short (120 μ) with a smooth and strongly curved outwards stem and a spindle-shaped head.

Notogaster.—It is only a little longer than broad, giving the body a spherical appearance from wich the species takes its name. The cuticle covering the dorsal shield is generally smooth, except over the pteromorphs and the anterior region of notogaster, near the disjugal suture, where a pattern of striae is evident. The pteromorphs are long, immovable, strongly curved ventrad. There are four pairs of sacculi arranged following the usual pattern. Notogastral setae absent or vestigial, their alveoli are difficult to see. Their number could not be ascertained, probably they are eight pairs.

Ventral side.—Coxisternal apodemes do not extend to the mid-line, except apodeme *sj*. No sternal ridge present. All setae are short and slender, difficult to discern, arranged as it is shown in fig. 7.

Each genital plate bears four thin setae, arranged in two groups, two setae, remarkably long, on the anterior part, and the other two setae, shorter, on the posterior region of each plate.

Anal aperture relatively large, broader anteriorly than posteriorly. Two anal setae on each plate. Adanal setae ad_3 inserted antero-lateral to the anterior margin of anal aperture. Seta ad_2 postero-lateral and seta ad_1 posterior to anal border. All of them are short and slender, as well as the adgenital setae.

Surface at both sides of genital aperture shows a fenestrate sculpture.

Legs.—All tarsi bear three claws, from which the central one is slightly stronger than the lateral claws. Genu I bears dorsally a conspicuous spiny process.

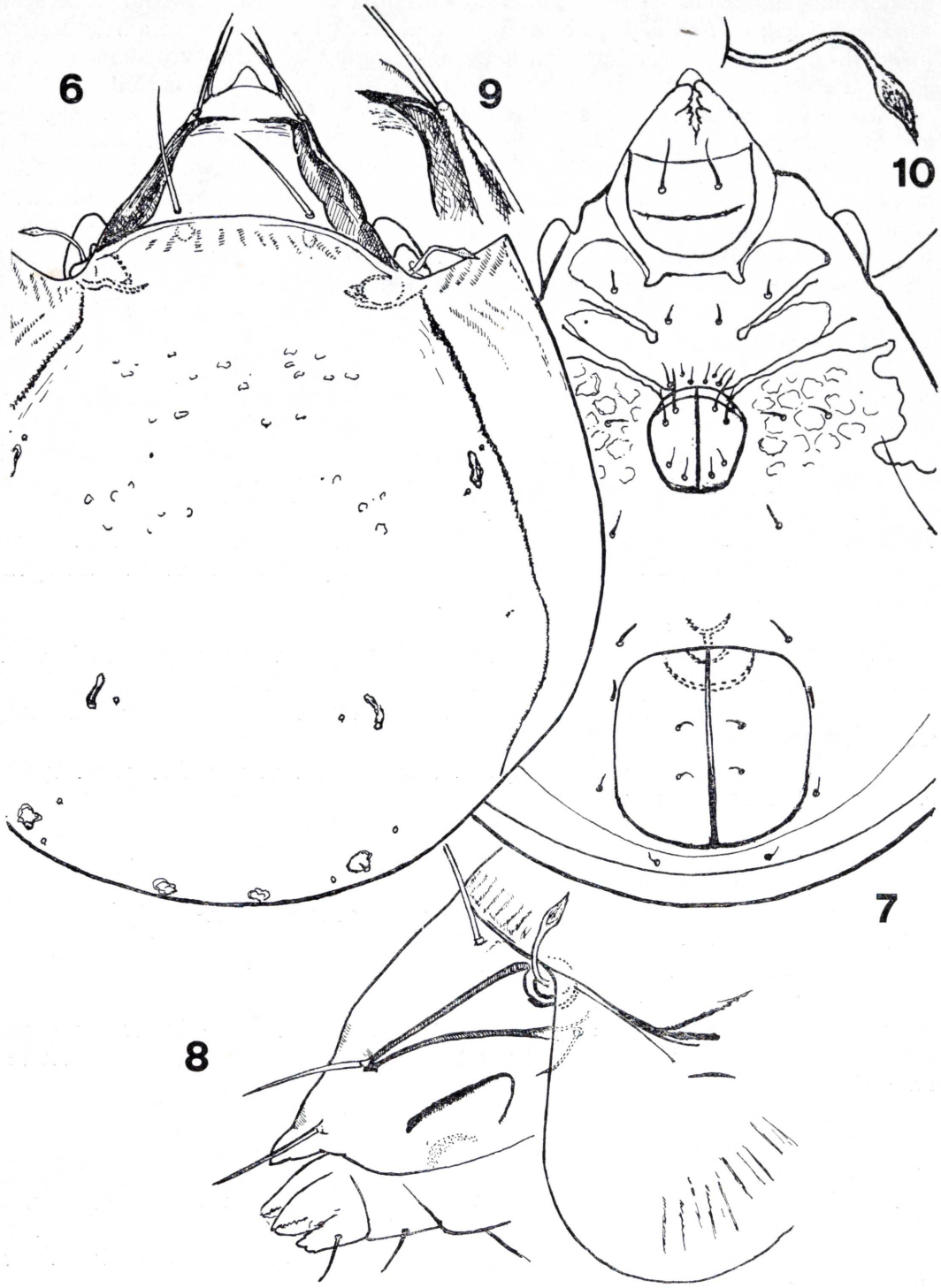
HAPLOZETIDAE GRANDJEAN, 1936.

Magyaria atlantica n. sp. (figs. 4 and 5).

Material examined.—Four adult specimens.

Measurements.—Length of body = 300-312 μ; width of body = 192-216 μ (without the pteromorphs).

Prodorsum.—Rostrum rounded and entire, showing in its middle region a sort



Figs. 6-10.—*Annobonzetes sphaericus* n. sp.: 6) Dorsal view; 7) Ventral view; 8) Lateral view of prodorsum; 9) Distal end of lamella; 10) Sensillus.

of arrow-shaped window. Each lamella is a broad plate situated laterally on prodorsum, similar to those of other species in this genus. Rostral setae fine, somewhat incurved, difficult to be seen from above. Lamellar setae a little longer, inserted on the end of each median lamellar margin attached to prodorsal surface. They are setae curved inwards, that do not reach the tip of rostrum, thin and provided with very short barbs in the outer margin. Interlamellar setae very fine and very short, inserted on the posterior region of prodorsum. Each bothridium is a broad cup, partly covered by the anterior margin of notogaster. The sensillus has a relatively long and recurvate stem and an ovoid head beset with minute bristles.

Notogaster.—As in other species in this genus the anterior margin of notogaster is complete and arched; pteromorphs are movable hinged, short and triangular in outline; no indentation is visible on the anterior end of pteromorphal joint. There are ten pairs of setae reduced to alveoli. Four pairs of sacculi are present on notogaster arranged in a normal way. Fissure *ia* on the pteromorph is remarkably developed. The integument shows a faint network pattern that covers the whole notogastral surface excepting the anterior region and the pteromorphs.

Ventral side.—The appearance of this region is that typically associated with the genus *Magyaria*; details are given in figure 5. Four pairs of genital setae reduced to alveoli, one pair adgenital, two pairs of anal and three of adanal setae, all of them very short, almost virtual. Ad_3 inserted far in front of anal aperture. A network pattern, similar to that of notogaster, is present on the lateral regions of ventral plate.

Legs.—Monodactyle.

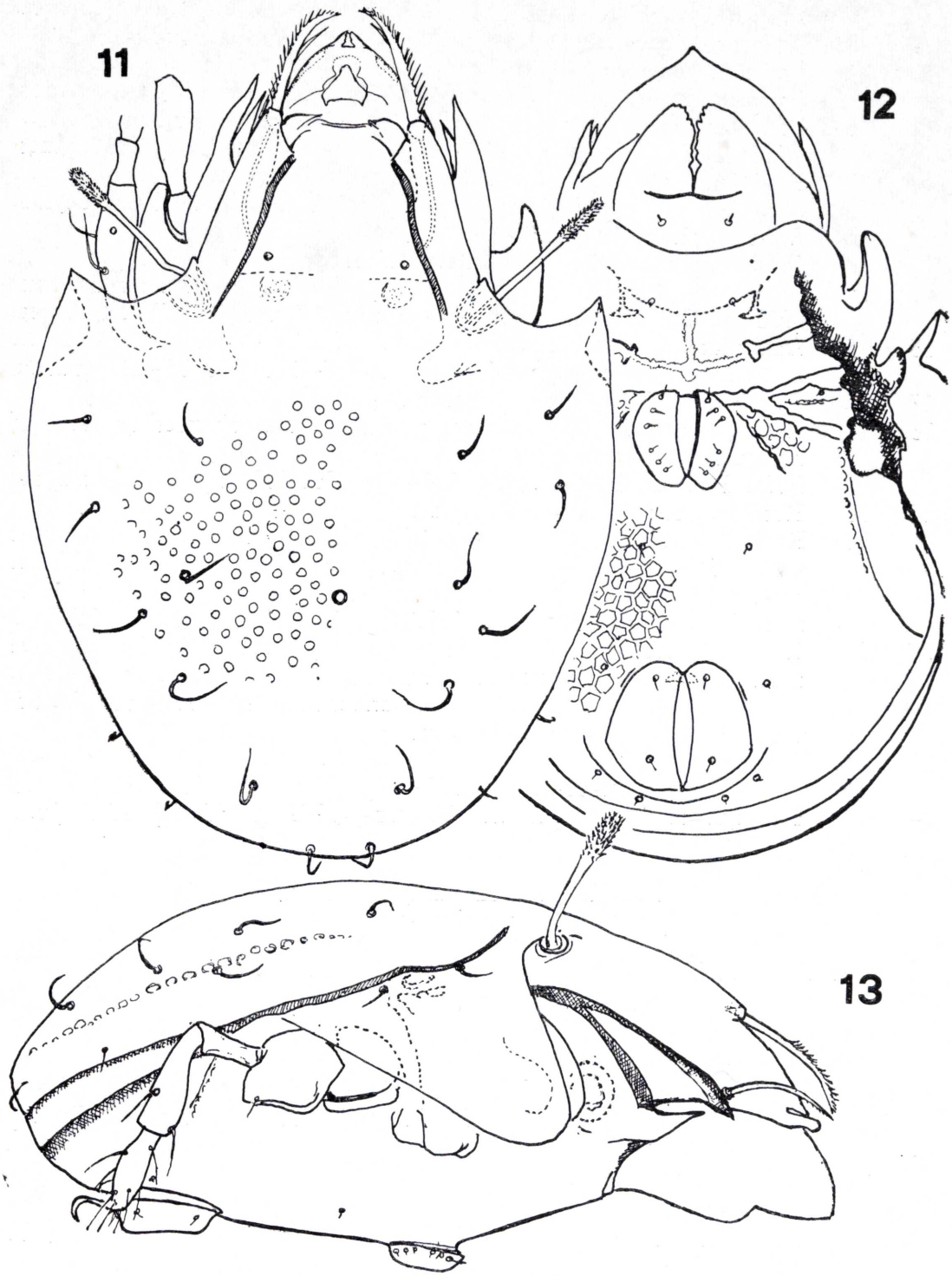
Discussion.—This is the second species of *Magyaria* found on Annobón Island; the other species, *Magyaria annobonica* PÉREZ-ÍÑIGO, 1981 (pp. 205-206, figs. 10-14), is quite different, since it is a tridactyle mite provided with long interlamellar setae.

The new species can be easily separated from the others in this genus by the following combination of characters:

a) Monodactyle tarsi.
b) Short and fine interlamellar setae.
c) Prodorsum and pteromorphs smooth, without reticulate sculpture.
d) Fenestrate rostrum.
e) Reticulate sculpture of notogaster strongly developed.

A diagnostic key for the species of *Magyaria* was made by BALOGH and MAHUNKA (1974, p. 263). I modify their key to put in it the species described since 1974, as follows:

1 (4) Interlamellar setae long.
2 (3) Monodactyle legs ... ... *ornata* BALOGH, 1964 (pp. 46-47, figs. 18-20). West Africa.
3 (2) Tridactyle legs ... ... *annobonica* PÉREZ-ÍÑIGO, 1981 (pp. 205-206, figs. 10-14). Annobón Island.
4 (1) Interlamellar setae minute or reduced to alveoli.
5 (22) Monodactyle legs.
6 (13) Pteromorphs with reticulate sculpture.
7 (12) Prodorsum at least partly with reticulate sculpture.



Figs. 11-13.—*Allozetes africanus* BALOGH, 1958: 11) Dorsal view; 12) Ventral view; 13) Lateral view.

8 (9) Notogaster smooth save 6-8 large cell-shaped light spots in a transversal row posterior to disjugal suture ... ... *strinovichi* BALOGH, 1970 a (pp. 321, figs. 83-84). New Guinea.
9 (8) Notogaster covered, at least partly, with a reticulate sculpture.
10 (11) Lamellar setae very short, head of sensillus rounded ... ... *breviseta* MAHUNKA, 1978 (pp. 232-233, figs. 130-131). Mauritius.
11 (10) Lamellar setae rather long, head of sensillus oval in outline ... ... *mindanensis* CORPUZ-RAROS, 1979 (pp. 64-65, fig. 31). Philippines.
12 (7) Prodorsum punctate, without reticulate sculpture ... ... *pulcherrima* BALOGH, 1970 b (p. 62, fig. 54). Ceylon.
13 (6) Pteromorphs without reticulate sculpture.
14 (17) Prodorsum covered by a reticulate sculpture.
15 (16) Anal plate reticulate ... ... *reticulata* BALOGH, 1958 (p. 26) and 1964 (pp. 44-46, figs. 17 and 19). West África.
16 (15) Anal plate not reticulate ... ... *cancellata* (BECK, 1964) (pp. 174-176, figs. 35-41). Sudan.
17 (14) Prodorsum without reticulate sculpture.
18 (19) Rostrum incised. A transverse row of cellular alveoles on front of notogaster, convex anteriorad ... ... *incisa* BALOGH & MAHUNKA, 1974 (pp. 261-262, fig. 11). Malaysia.
19 (18) Rostrum not incised, but fenestrate.
20 (21) Reticular sculpture of notogaster obsolescent, with only some alveoles arranged in two rows more discernible. A short number of alveoles arranged in a transverse row concave anteriorad ... ... *fenestrata* BALOGH & MAHUNKA, 1979 (pp. 262-263, fig. 12). Malaysia.
21 (20) Reticular sculpture of notogaster strongly developed. No concave transverse row of alveoles on notogaster ... ... *atlantica* n. sp. Annobón Island.
22 (5) More than one claw on each tarsus.
23 (24) Tridactyle tarsi ... ... *filipina* CORPUZ-RAROS, 1979 (pp. 63-64, fig. 30). Philippines.
24 (23) Bidactyle tarsi ... *javensis* HAMMER, 1979 (p. 56, fig. 98). Java.

CERATOZETIDAE JACOT, 1925.

Allozetes africanus BALOGH, 1958 (figs. 11-13).

Material examined.—One adult specimen.

Measurements.—264 × 180 μ.

A comparison between the specimen found in Annobón and the original and complementary descriptions (BALOGH, 1958: 56; and 1960 b: 98, figs. 26-27) does not reveal any points of difference.

Other species in this genus are:

1) *A. translamellatus* HAMMER, 1973, from Upolu and Java, appears to be very similar in many morphological respects to *A. africanus*.
2) *A. dispar* HAMMER, 1973, from Tongatapu, is a rather different species but it shows most of the characters commonly associated with this genus.

3) *A. pusillus* (BERLESE, 1913), from Java, has been insufficiently described and as it is the type species of *Allozetes* BERLESE, 1913 a redescription is necessary.

GALUMNELLIDAE PIFFL, 1970.

Galumnopsis sellnicki BALOGH, 1960.

Material examined.—Four adult specimens.

Measurements.—Body length = 408-420 μ; body width = 312-336 μ.

The examined specimens well agree in most respects with the original description (BALOGH, 1960 a: 36, figs. 72-76), from which they only differ in the body size, that appear to be larger than it is indicated by BALOGH (338-363 × 245-264 μ) for the specimens from Angola.

This species has been also recorded from Tanganyika (BALOGH, 1962: 96) and from Rhodesia (MAHUNKA, 1973: 224).

MESOPLOPHORIDAE EWING, 1917.

Mesoplophora insularis n. sp. (figs. 14-16).

Material examined.—Two adult specimens.

Measurements.—Length of prodorsum = 204 μ; width of prodorsum = 175 μ; length of notogaster = 300 μ; width of notogaster = 288 μ.

Prodorsum.—Interlamellar setae inserted near the bothridia, lamellar setae inserted laterally, in front of bothridia. Both of them are straight or slightly curved setae, rather long (70-75 μ) and, when wiewed under high magnification, it can be realized that are covered with minute barbs. Rostral setae shorter (65 μ) but similar to the other prodorsal setae. Exobothridial setae very short and fine, inserted near the bothridium. The rostrum forms a blunt angle. A well developed lateral ridge is present extending from a point exterior to the outer margin of bothridium to the level of the rostral seta, as is shown in figure 14. Sensillus relatively long (90 μ), curved, not expanded, bearing along its outer edge 10-12 bristles.

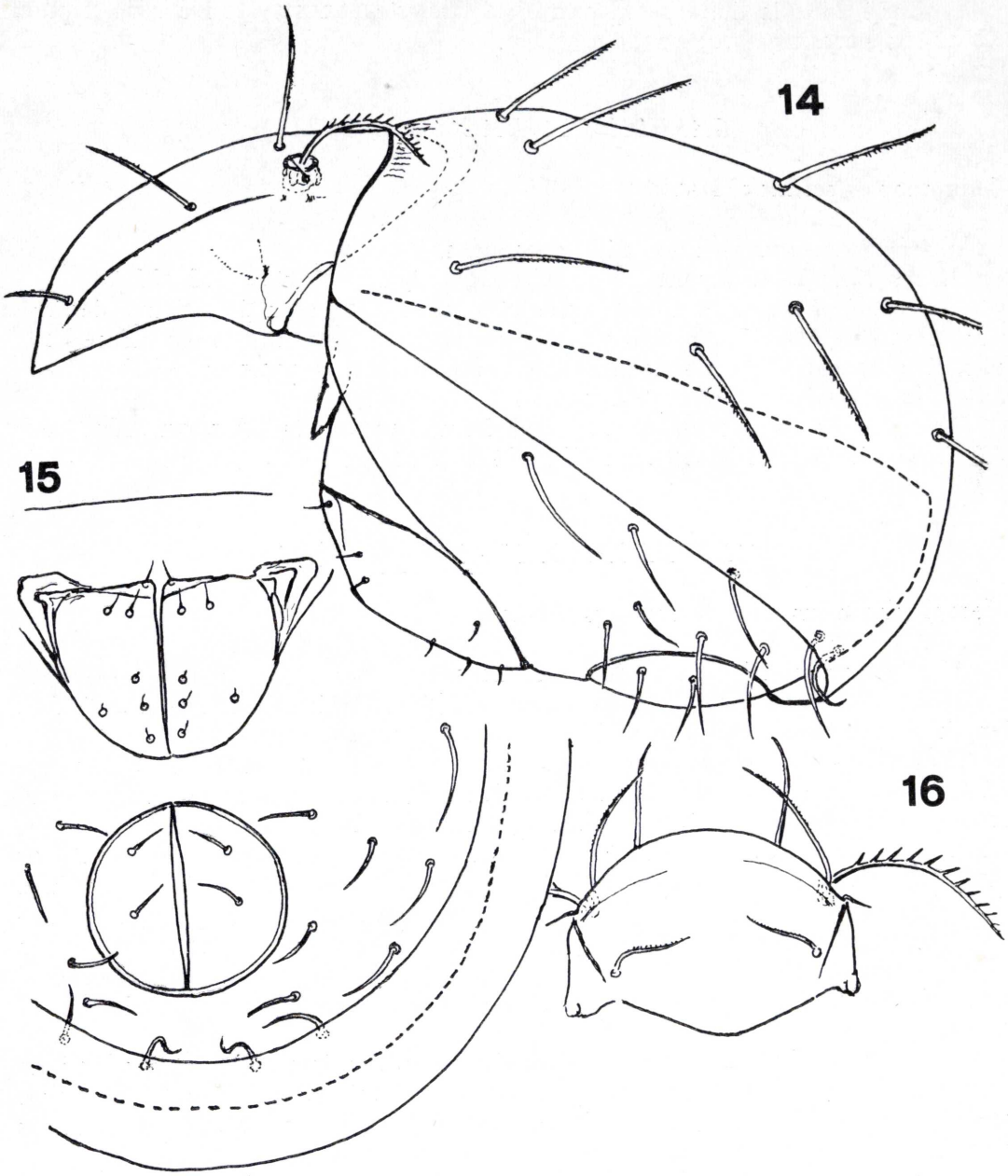
Notogaster.—This region is moderately arched in lateral view, showing no notogastral hood. There are eight pairs of notogastral setae, that are rather long, straight or slightly curving, and beset with minute barbs. The integument is smooth but some striae are visible in its anterior region.

Ventral side.—The ventral plate bears nine pairs of setae, that are slender and smooth, arranged in two rows. The inner row with four setae, the outer one with five. The first seta in the outer row is inserted remarkably to the front, at the level of the posterior margin of the genital aperture.

There are seven minute setae on each genital plate, arranged as is shown in figure 15. The anal setae are two pairs, similar to those of the inner row on the ventral plate.

Legs.—All of them are monodactyle.

Discussion.—The new species resembles in many respects *M. gaveae* SCHUSTER, 1962 (pp. 489-492, figs. 1-4), a species described from Brasil, particularly in



Figs. 14-16.—*Mesoplophora insularis* n. sp.: 14) Lateral view; 15) Anogenital and ventral regions; 16) Anterior view of aspis.

the shape of sensillus and the number of notogastral, ventral, anal and genital setae; but the specimens of the two species differ from each other in the characters of the prodorsal and notogastral setae and the arrangement of the ventral ones.

A key for the identification of the species of the genus *Mesoplophora* may be constructed as follows:

1 (18) Notogastral setae barbed.
2 (5) Sensillus setiform, not barbed (may be rough or provided with a few minute thorns). 8 pairs of notogastral setae.
3 (4) Sensillus with 2-3 minute thorns. Anterior four pairs of notogastral setae longer than the four posterior pairs ... ... *michaeliana* BERLESE, 1904 (p. 23, fig. 51). Italia [1].
4 (3) Sensillus smooth. All the notogastral setae are similar in length, rather long ... *graeca* WALZL, 1973 (pp. 534-539, figs. 1-3). Greece.
5 (2) Sensillus barbed.
6 (9) Four pairs of anal setae.
7 (8) Sensillus barbed on both edges (10-17 barbs). Six pairs of setae on the ventral plate ... *rostrorugosa* HAMMER, 1979 (p. 7, fig. 3). Java.
8 (7) Sensillus barbed only on one edge (15-18 barbs). Seven pairs of ventral setae ... ... *pantotrema* BERLESE, 1913 (p. 101, fig. 94) [2] (= *discreta* BERLESE, 1913). Java and Philippines.
9 (6) Two or three pairs of anal setae.
10 (11) Three pairs of anal setae. Six pairs of setae on the ventral plate. Sensillus with approximately five barbs ... ... *africana* BALOGH, 1958 (p. 32). Angola and South África [3].
11 (10) Two pairs of anal setae.
12 (13) Ten pairs of setae on the ventral plate, sensillus tapering towards the end, with 8-10 short lateral barbs ... ... *pectinata* MAHUNKA, 1979 (pp. 551-554, figs. 11-14). Greece.
13 (12) Nine pairs of setae on the ventral plate, sensillus not tapering towards the end.
14 (15) Six genital setae ... ... *pusilla* SCHUSTER, 1962 (pp. 492-495, figs. 5-7). Brasil.
15 (14) Seven genital setae.
16 (17) The first seta of the ventral external row, inserted at the level of the first seta of the inner row. The barbs of the notogastral, prodorsal and ventral setae of the same length than those of sensillus ... ... *gaveae* SCHUSTER, 1962 (pp. 489-492, figs. 1-4). Brasil.
17 (16) The first seta of the ventral external row inserted in a forward position. The barbs of the notogastral, prodorsal and ventral setae are very short, remarkably shorter than those of the sensillus ... ... *insularis* n. sp. Annobón Island.
18 (1) Notogastral setae not barbed.
19 (22) Sensillus with an enlarged head.
20 (21) Notogastral setae rough, head of sensillus spindle-shaped, smooth, ten pairs of ventral setae ... ... *pulchra* SELLNICK, 1928 (p. 38, fig. 3). Central Europe, North África [4].
21 (20) Notogastral setae smooth, head of sensillus rounded with some minute barbs. Nine pairs of ventral setae ... ... *subtilis* NIEDBALA, 1981 (pp. 511-517, figs. 1-24). Perú.

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[1] See data and figure given by MAHUNKA, 1980: 208, fig. 5.

[2] See data and figures given by AOKI, 1965 (*Nat. & Life in SE Asia*, IV, pp. 130-131) and by HAMMER, 1979 (p. 6, fig. 1).

[3] I accept the characters of *M. africana* given by A. J. ELS, 1965 (pp. 29-32, figs. 1-3). BALOGH's description is too short and without any figure.

[4] See GRANDJEAN, 1933: 308-319, figs. 1-5.

22 (19) Sensillus setiform, without enlarged head.
23 (26) Sensillus smooth, without barbs.
24 (25) Notogastral setae remarkably shorter than sensillus. Three pairs of anal setae ... *japonica* AOKI, 1970 (pp. 397-398, figs. 2-3). Japan.
25 (24) Notogastral setae approximately as long as sensillus. Two pairs of anal setae ... ... *longisetosus* CALUGAR et VASILIU, 1977 (pp. 247-248, figs. 1-4). Cuba.
26 (23) Sensillus barbed.
27 (28) Nine pairs of notogastral setae. Eight pairs of ventral setae ... ... *cubana* CALUGAR et VASILIU, 1977 (pp. 248-251, figs. 5-8). Cuba.
28 (27) Eight pairs of notogastral setae. Seven pairs of ventral setae ... ... *leviseta* HAMMER, 1979 (pp. 6-7, fig. 2). Java.

TYPES.

Holotypes and paratypes of the new species are preserved at the Instituto Español de Entomología (Spanish Entomological Institute), c/ J. Gutiérrez Abascal, 2. Madrid-6. Spain.

Bibliography.

AOKI, J.-I., 1970.—The Oribatid mites of the Islands of Tsushima.—*Bull. Nat. Sci. Mus. Tokyo,* **13**: 395-442, figs. 1-107.

BALOGH, J., 1958.—Oribatides nouvelles de l'Afrique tropicale.—*Rev. Zool. Bot. Afr.,* **58**: 1-34.

BALOGH, J., 1959.—Oribates (Acari) nouveaux d'Angola et du Congo Belge (1e Sér.).—*Publ. Cult. Comp. Diamantes Angola,* **48**: 93-103, figs. 1-53.

BALOGH, J., 1960 a.—Oribates (Acari) nouveaux d'Angola et du Congo Belge (2eme série).—*Publ. Cult. Comp. Diamantes Angola,* **51**: 15-40, figs. 1-89.

BALOGH, J., 1960 b.—Descriptions complémentaires d'Oribates (Acari) d'Angola et du Congo Belge (1e série).—*Publ. Cult. Comp. Diamantes Angola,* **51**: 89-105, figs. 1-40.

BALOGH, J., 1962.—Acari, Oribates. Resultats scientifiques des Missions Zoologiques de l'I. R. S. A. C. en Afrique Orientale (P. BASILEWSKY et N. LELEUP, 1957).—*Ann. Mus. Afriq. Centr.,* **110**: 90-131, figs. 1-80.

BALOGH, J., 1964.—Oribates (Acari) nouveaux d'Angola et du Congo.—*Publ. Cult. Comp. Diamantes Angola,* **68**: 35-47, figs. 1-22.

BALOGH, J., 1970 a.—New Oribatids (Acari) from New Guinea.—*Acta Zool. Hung.,* **16**: 291-344, figs. 1-99.

BALOGH, J., 1970 b.—New Oribatids (Acari) from Ceylon. The scientific results of the Hungarian soil zoological expeditions.—*Opusc. Zool. Budapest,* **10**: 33-67, figs. 1-58.

BALOGH, J. & MAHUNKA, S., 1974.—Oribatid species (Acari) from Malaysian soils.—*Acta Zool. Hung.,* **20**: 243-264, figs. 1-13.

BECK, L., 1964.—Beiträge zur Kenntnis der neotropischen Oribatidenfauna.—4. *Haplozetes* und *Peloribates.—Senck. biol.,* **45**: 161-183, figs. 1-60.

BERLESE, A., 1904.—Acari nuovi, Manipulus III.—*Redia,* **2**: 10-32, plates I-II, figs. 1-52.

BERLESE, A., 1913.—Acari nuovi, Manipoli VII-VIII.—*Redia,* **9**: 77-111, plates I-VII.

CALUGAR, M. & VASILIU, N., 1977.—Contribution à la connaissance des Oribates hypogés de Cuba. In: *Résultats des expéditions biospéologiques Cubano-Roumaines à Cuba.*—Editura Acad. Rep. Soc. Rom., pp. 247-256.

CORPUZ-RAROS, L. A., 1979.—Philippine Oribatei (Acarina). 1.—Preliminary list of species and descriptions of forty new species.—*The Philipp. Agricult.*, **62**: 1-82, figs. 1-40.

ELS, A. J., 1965.—Studies on the South African Oribatei inferiores (Acarina). Part. I: Description of *Mesoplophora africana* BALOGH, 1958.—*Navors. Nas. Museum, Bloemfontein*, **2**: 29-32, figs. 1-3.

GRANDJEAN, F., 1933.—Oribates de l'Afrique du Nord (1e série).—*Bull. Soc. Hist. natur. Afr. Nord*, **24**: 308-323, figs. 1-7.

HAMMER, M., 1979.—Investigations on the Oribatid Fauna of Java.—*Biol. Skr. Dansk. Vid. Selsk.*, **22** (**9**): 1-79 + plates I-XLVII (figs. 1-111).

MAHUNKA, S., 1973.—Neue und interessante Milben aus dem Genfer Museum XI. Neue und wenig bekannte Oribatiden aus Rhodesien.—*Arch. Sciences, Genéve*, **26**: 205-225, figs. 1-43.

MAHUNKA, S., 1977.—Neue und interessante Milben aus dem Genfer Museum XXXI. A remarkable sample of archaic soil mites from Kenya (Acari, Oribatida).—*Rev. Suisse Zool.*, **84**: 463-479, figs. 1-42.

MAHUNKA, S., 1978.—Neue und interessante Milben aus dem Genfer Museum XXVII. A first survey of the Oribatid (Acari) fauna of Mauritius, Réunion and Seychelles I.—*Rev. Suisse Zool.*, **85**: 177-236, figs. 1-134.

MAHUNKA, S., 1979.—Neue und interessante Milben aus dem Genfer Museum XLI. Vierter Beitrag zur Kenntnis der Oribatiden-Fauna Griechenlands (Acari, Oribatida).—*Rev. Suisse Zool.*, **86**: 541-571, figs. 1-58.

MAHUNA, S., 1980.—Data to the knowledge of mites preserved in the "Berlese Collection" (Acari: Tarsonemina, Oribatida) II.—*Folia Ent. Hung.*, **41**: 105-121, figs. 1-32.

NIEDBALA, W., 1981.—*Mesoplophora subtilis* sp. n. du Perou (Acari, Oribatida, Mesoplophoridae).—*Polsk. Pismo Entom., Wroclaw*, **51**: 511-517, figs. 1-24.

PÉREZ-ÍÑIGO, C., 1969.—Resultados de la expedición PERIS-ÁLVAREZ a la isla de Annobón - (13): Oribatid mites (1st series) (Acari, Oribatei).—*Eos*, Madrid, **44**: 405-423, figs. 1-24.

PÉREZ-ÍÑIGO, C., 1981.—Resultados de la expedición PERIS-ÁLVAREZ a la isla de Annobón - (13) Oribatid mites (2nd series).—*Eos*, Madrid, **57**: 201-212, figs. 1-18.

PÉREZ-ÍÑIGO, C., 1983.—Resultados de la expedición PERIS-ÁLVAREZ a la isla de Annobón - (13) Oribatid mites (3rd series).—*Eos*, Madrid, **58**: 223-236, figs. 1-14.

SCHUSTER, R., 1962.—Neue *Mesoplophora*-Vorkommen in der Neotropis (Arach., Acari, Oribatei).—*Senck. biol.*, **43**: 489-495, figs. 1-7.

SELLNICK, M., 1928.—Formenkreis Hornmilben, Oribátei. In: *Die Tierwelt Mitteleuropas*, **III** (**4**), **IX**: 1-42, figs. 1-91.

WALZL, M. G., 1973.—*Mesoplophora graeca* nov. spec.—*Acarologia*, **15**: 534-539, figs. 1-3.

Dirección del autor:

CARLOS PÉREZ-ÍÑIGO.
Instituto Español de Entomología.
C/ José Gutiérrez Abascal, 2.
Madrid-6.