

## FURTHER NOTES, ADDITIONS AND REDESCRIPTIONS OF THE ORIBATID SPECIES PRESERVED IN THE BERLESE COLLECTION (ACARI, ORIBATIDA) I.

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Discussion of 25 Oribatid species preserved in the BERLESE Collection (Florence). Among them the statement of the up-to-date systematic position of 2 species, 9 new combinations, 1 new status and for 2 species the establishment of new genera (*Ovobates* gen. n. in the family Oribatulidae and *Italobates* gen. n. in the family Haplozetidae) are also given. With 27 original figures.

Key words: Acari, Oribatida, BERLESE Collection, taxonomy

### INTRODUCTION

In my previous works (MAHUNKA, 1991, 1992) I outlined the reasons and the goals why I think it necessary to study the Oribatida specimens of the BERLESE Collection, and to give as much information on them as much the circumstances allow.

In this year I again had the opportunity to work in the BERLESE Collection within the frame of the agreement signed between the Hungarian Academy of Sciences and the CNR (Italy) and partly supported by OTKA (The Hungarian National Scientific Research Foundation, No. 3165). I enjoyed the help of Dr. M. CASTAGNOLI for which I should like to express my most heartfelt thanks.

Subsequently I discuss 25 species. Several of them are well known, many scholars studied these species thus their ranking is quite certain. However, specimens preserved in the BERLESE Collection have not been revised, at least as far as I know. I restated 25 species and established new combinations in 9 cases, while for 2 species I erected new genera.

In the present contribution I follow my work referred to above (MAHUNKA 1992) as well as those of NORTON & KETHLEY (1986) and/or MARSHALL, REEVES & NORTON (1987).

**Table 1.** Original and current combinations of the studied species

Protoribates (Scheloribates) incisura	= <i>Italobates incisura</i>
Micreremaeus subnitidus	= <i>Ovobates subnitidus</i>
Oribatula navicula	= ? <i>Heteroleius navicula</i>
Oribatula amlyptera	= <i>Oribatula amblyptera</i>
Oribatula exilis var. caliptera	= <i>Oribatula caliptera</i>
Oribatula tibialis var. sardoa	= <i>Oribatula tibialis sardoa</i>
Oribatula venusta	= <i>Oribatula venusta</i>
Oribatula caudata BERLESE, 1910	= <i>Sellnickia caudata</i> (MICHAEL, 1908)
Oribatula (Zygoribatula) angulata	= <i>Zygoribatula angulata</i>
Oribatula (Zygoribatula) arcuatissima	= <i>Zygoribatula arcuatissima</i>
Oribatula connexa	= <i>Zygoribatula connexa</i>
Oribatula (Zygoribatula) exarata	= <i>Zygoribatula exarata</i>
Oribatula (Zygoribatula) excavata	= <i>Zygoribatula excavata</i>
Oribatula (Zygoribatula) lineola	= <i>Zygoribatula exilis</i> (NICOLET, 1855)
Oribatula (Zygoribatula) socia	= <i>Zygoribatula socia</i>
Oribatula (Hemileius) proximus	= <i>Hemileius proximus</i>
Oribatula (Hemileius) scrobina	= <i>Hemileius scrobina</i>
Oribatula (Hemileius) sternalis	= <i>Hemileius sternalis</i>
Oribatula tibialis var. sricula	= <i>Siculobata sricula</i>
Oribatula (Hemileius) sricula var. platensis	= <i>Siculobata platensis</i>
Podoribates elamellatus	= <i>Rykella elamellata</i>
Podoribates latissimus	= <i>Annobonozetes latissimus</i>
Peloribates depilatus	= <i>Africoribates depilatus</i>
Peloribates glabratus	= <i>Africoribates glabratus</i>
Peloribates conspicuus	= ? <i>Ramsayellus conspicuus</i>

## COMMENTS ON THE SURVEYED TAXA

### 1. New genera based on "BERLESE's species".

#### *Italobates* gen. n.

Diagnosis: Family Haplozetidae. Rostrum rounded. Lamellae strong, their distal part curved inwards like the short part of a translamella, cuspis absent, lamellar setae arising on the curved part. Prelamella present. Sensillus reclinate, setiform. Pteromorphae movable, but the junction between the notogaster and the pteromorpha is not visible anteriorly. Fourteen pairs of notogastral setae, 4 pairs of sacculi, one pair opening of the gland and the lyrifissures *iad* observable on the notogaster. Anogenital setal formula: 6 – 3 – 2 – 3. Lyrifissures *iad* in adanal position. All legs tridactylous.

Type species: *Protoribates* (*Schelorbates*) *incisura* BERLESE, 1916.

Remarks: On the basis of the anogenital setal complex the new taxon belongs to the relationships of the genera *Pilobates* BALOGH, 1960 and *Pilobatella* BALOGH et MAHUNKA, 1967. However, both genera have only one claw and the genus *Pilobatella* bears only ten pairs of notogastral setae.

***Italobates incisura* (BERLESE, 1916) comb. n.**  
(Figs 1-2)

*Protoribates* (*Scheloribates*) *incisura* BERLESE, 1916: 312. – *Protoribates* (*Scheloribates*) *incisura*: CASTAGNOLI & PEGAZZANO 1985: 194.

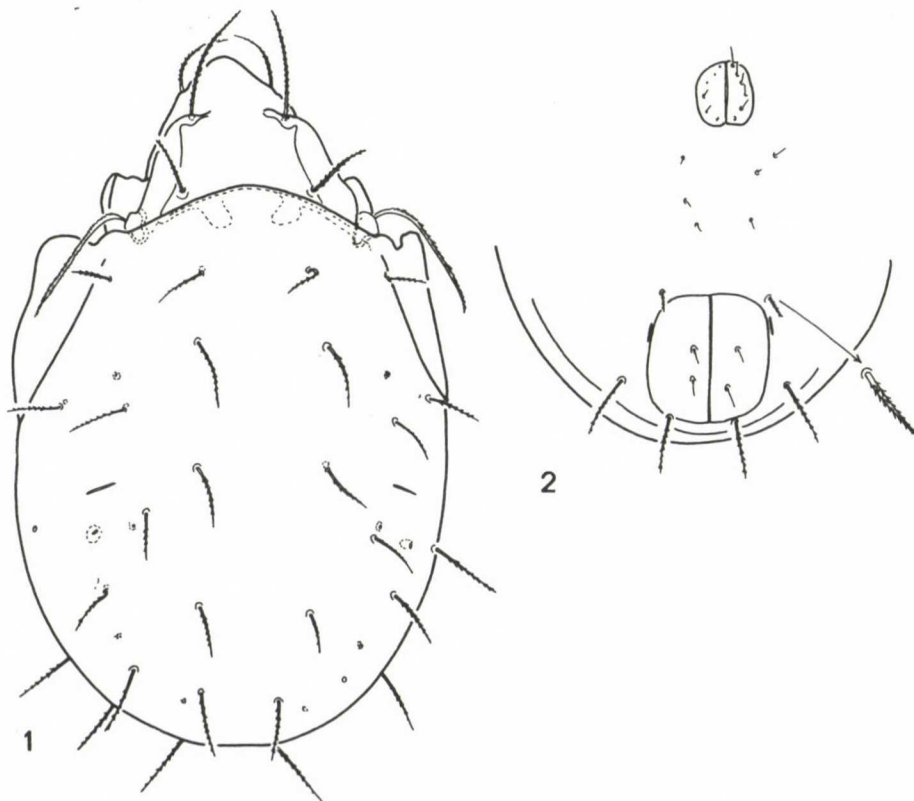
There are three slides (183/23, 183/24, 24bis) in the collection, one of them labelled "tipico". I follow BERLESE'S designation and regard the specimen in slide 183/23 as lectotype. Of course, on the basis of the number of slides the other two obviously belong to the type series.

Measurements: Length of body: 647  $\mu\text{m}$ , width of body: 398  $\mu\text{m}$ .

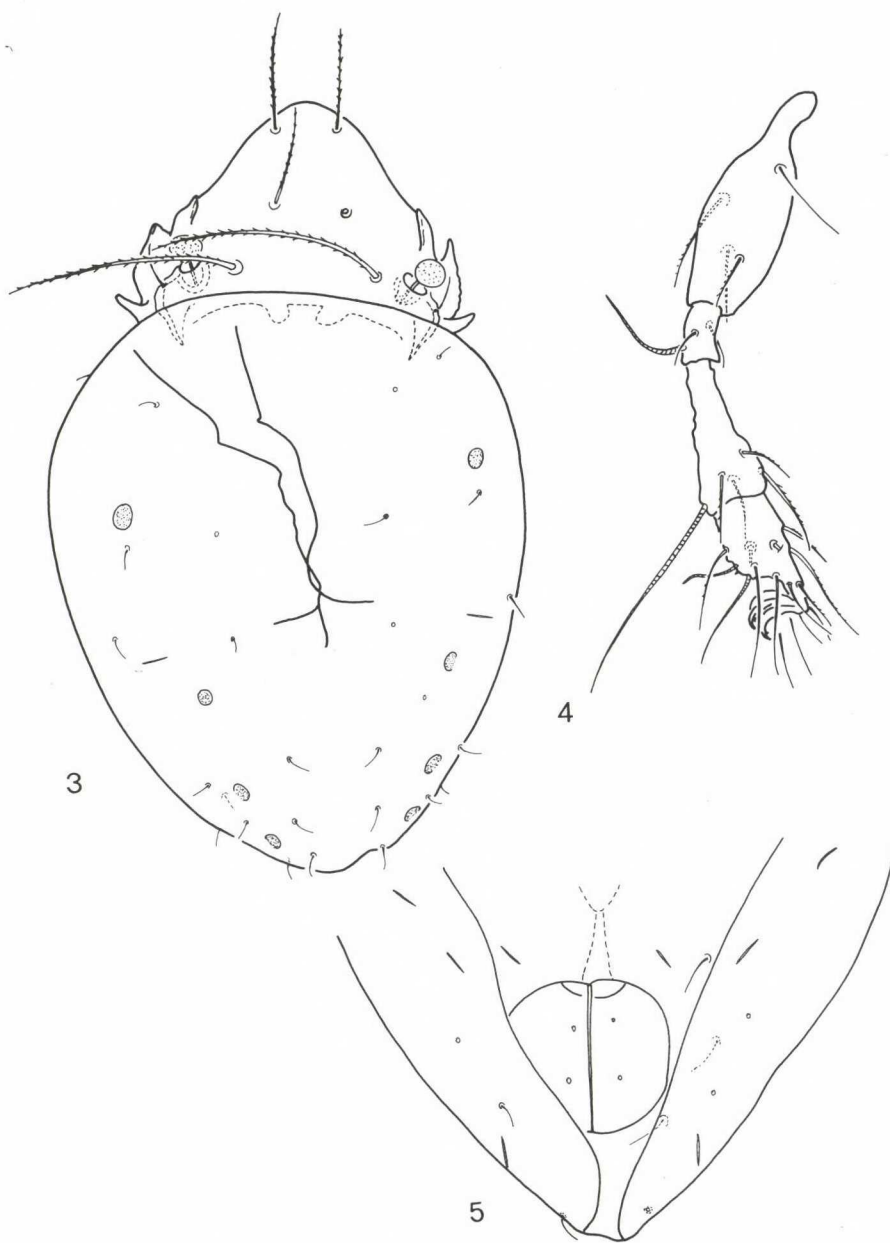
Prodorsum: Anterior part of lamellae characteristically dilated at the basis of the insertion of the lamellar setae. Among the prodorsal setae *le* longer than the others, *in* the shortest, all distinctly ciliate. Sensillus long, characteristically reclinate, its cilia arranged in two longitudinal rows.

Notogaster: Dorsosejugal suture convex. Anterior margin of pteromorphae with incisure. All notogastral setae rigid and ciliate, setae in the anterior part slightly shorter than the those in posteromarginal position. All 4 pairs of sacculi very small, hardly observable (Fig. 1).

Ventral regions: Genital setae minute, they arise in a longitudinal, curved row. These and the aggenital setae minute. Setae *ad*<sub>1</sub> and *ad*<sub>2</sub> much longer than *ad*<sub>3</sub> (Fig. 2), but all three pairs ciliate like the notogastral setae. Anal setae short and simple. Lyrifissures *iad* in adanal, setae *ad*<sub>3</sub> in pre-anal position.



**Figs 1-2.** *Italobates incisura* (BERLESE, 1916) – 1: dorsal aspect, 2: anogenital region



**Figs 3-5.** *Ovobates subnitidus* (BERLESE, 1913) – 2: dorsal aspect, 4: leg I, 5: anal region



**Ovobates** gen. n.

Diagnosis: Family Oribatulidae. Rostrum rounded. Prodorsum without lamella and prelamella, a short lateral crest runs from the bothridium posteriorly, exobothridial seta arising on it. Bothridium open dorsally, not covered by a humeral tectum. Sensillus short, with capitate head. Dorsosejugal suture slightly convex, the humeral region rounded, pteromorpha absent. Four pairs of well developed areae porosae and 14 pairs of short and fine notogastral setae present. Epimeral setal formula: 3-1-2-2(!), anogenital setal formula: 4-1-2-3. Lyrifissures *iad* in preanal position. All legs tridactylous, claws large, equal in size. Tarsi shortened, legs setation reduced(!).

Type species: *Micreremaeus subnitidus* BERLESE, 1913.

Remarks: The relation of this taxon is rather problematic. It is well characterized by the above mentioned characters, and some of them well correlated with the characters of the *Eporibatula* complex. However on the basis of the reduced legs setation, and firstly of the form of leg I the new taxon is distinguishable from the heretofore known related genera.

**Ovobates subnitidus** (BERLESE, 1913) comb. n.

(Figs 3-7)

*Micreremus subnitidus* BERLESE, 1913: 97. – *Micreremus subnitidus*: CASTAGNOLI & PE-  
GAZZANO 1985: 402.

A good series of slides of this species is present in the collection. All slides contain the same species, but two of them (145/1 and 145/2) enclose an other oribatid species. Excepting one slide (144/50) all bear the designation "tipico". I designate the specimen in slide 150/1 as lectotype, the drawings were made partly after it.

Measurements. – Length of body: 390-414 µm, width of body: 234-242 µm.

Prodorsum: Inner surface completely smooth. All prodorsal setae well visible, setae *ro*, *le* and *in* arising on the prodorsal surface. Their basal part slightly lighter than their other parts. All setae well ciliated, setae *in* much stronger and longer than the others (Fig. 3) Exobothridial setae arising on the basal crest in the exobothridial region. This region granulated. Sensillus short, its head distinctly spiculate.

Notogaster: Humeral region rounded, smooth. All 14 pairs of notogastral setae nearly equal in length and thickness. Among the form and size of porose area no characteristic difference exists. Lyrifissures *ih*, *ips* and *ip* present in normal position (Fig. 5).

Ventral regions (Fig. 6): Epimeral borders and apodemes are weakly developed, hardly observable. Epimeral setae conspicuously long, setae *1b*, *3b* longer than the others, setae *1c* much shorter than *1a*. Setae in the anogenital region also short and well observable.

Legs: All claws of legs large, lateral claws with strong tooth ventrally. Tarsus of leg I (Fig. 4) shortened, *w*<sub>2</sub> of tibia I absent. Some dorsal wrinkles observable on tarsus IV (Fig. 7). Legs setal formulae:

I: 1-4-2+1-4+1(!)-13+2(?) - 3

III: 2-3-1+1-3+1-10-3

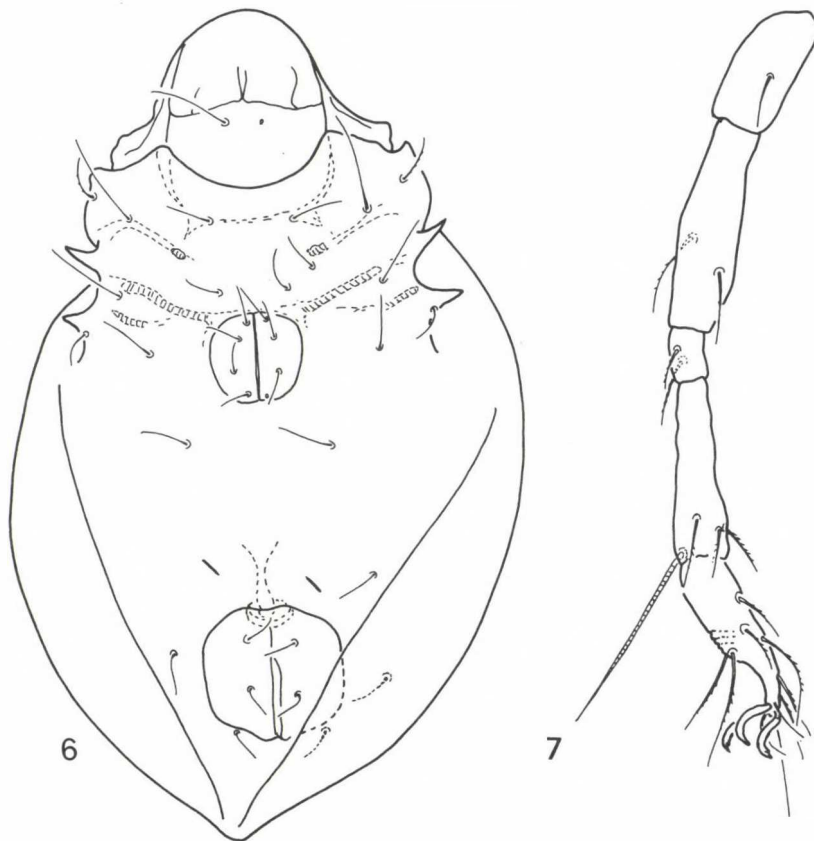
IV: 1-2-2-3+1-10-3

2. BERLESE's "*Oribatula*" species.

In the beginning the genus *Oribatula* BERLESE, 1895 was used by the author in very broad, later in much narrower sense. He divided himself the genus into some subgenera, today appear as valid genera.

Among the species, described by BERLESE, which was listed under the name *Oribatula* by CASTAGNOLI & PEGAZZANO (1985), *O. florens* BERLESE, 1908 was taken out earlier by NORTON & KETHLEY (1989) who established a new genus *Floribates* on this species.

*Oribatula caudata* BERLESE, 1910 and *O. navicula* BERLESE, 1913 do not belong to this genus, so today only *O. amblyptera*, *O. caliptera*, *O. sardoa* and *O. venusta* might be ranged to this genus. To distinguish these species from one another and from the *O. tibialis* (NICOLET, 1855) is very problematic and further investigations are necessary.



**Figs 6-7.** *Ovobates subnitidus* (BERLESE, 1913) – 6: ventral aspect, 7: leg IV

**?*Heteroleius navicula* (BERLESE, 1913) comb. n.**

*Oribatula navicula* BERLESE, 1913: 89. – *Oribatula navicula*: CASTAGNOLI & PEGAZZANO 1985: 269.

There are three slides in the collection, one of which (145/28) was designated by BERLESE as "tipico" and in this case I follow BERLESE's interpretation and consider it the holotype of this specimen. The position of this species is uncertain, it is sure that it does not belong to the relationship of the genus *Oribatula*. On the basis of its habitus and chaetotaxy I place it provisionally in the genus *Heteroleius* Balogh et Mahunka 1966.

Complementary morphological characters: Lamella well developed, lamellar setae arising on its slightly dilated distal end. Sensillus very short, with capitate head. Dorsosejugal suture uncertain, probably absent. Pteromorphae absent and no humeral tectum present. Three pairs of genital setae present. All legs tridactylous.

***Oribatula amblyptera* BERLESE, 1916  
(Figs 8-9)**

*Oribatula amblyptera* BERLESE, 1916: 317. – *Oribatula amblyptera*: CASTAGNOLI & PEGAZZANO 1985: 12.

There are six slides in the collection. Only 180/2 labelled as "tipico", and respecting BERLESE's declaration I consider it lectotype. Among the other slides 180/3, and 180/4 (duplicated) and all four contain the same species. They belong to the type series. Slide 14/25 contains a specimen of an other species. The figures were made after slide 180/2.

Complementary morphological characters: Rostrum conical. Lamellar cusp reaching over the insertion of the lamellar setae anteriorly (Fig. 9). Dorsosejugal suture strongly arched anteriorly. Pteromorph only hardly projecting from the outline of the notogaster (Fig. 8). Notogastral setae normal. All four pairs of porose area small,  $Ap_2$  and  $Ap_3$  located conspicuously near to each other.

Length of body: 302  $\mu\text{m}$ , width of body: 195  $\mu\text{m}$ .

***Oribatula caliptera* BERLESE, 1902  
(Figs 10-11)**

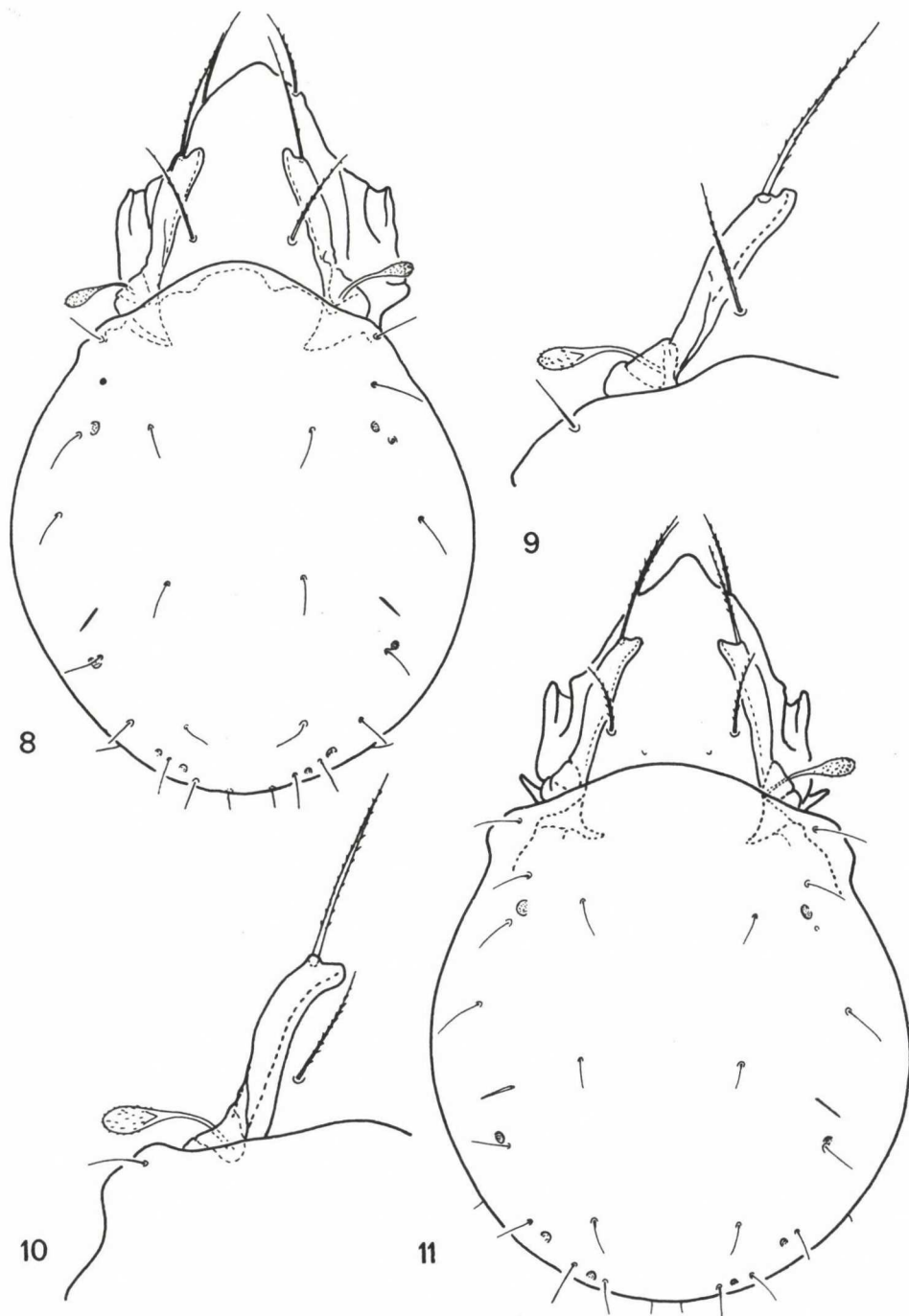
*Oribatula exillis* var. *caliptera* BERLESE, 1902: 698. – *Oribatula caliptera* CASTAGNOLI & PEGAZZANO 1985: 58. – *Oribatula caliptera*: F. BERNINI, A. M. AVANZATI & S. BERNINI 1987: 445.

There is a long series of this species in the collection, but only one slide (75/34) bearing "tipico". I have not seen all the slides enumerated in the CASTAGNOLI & PEGAZZANO's catalogue. The figure were made after slide 75/33.

Complementary morphological characters: Rostrum slightly elongated, nasiform. Lamellae blunt, their cusps directed medially, so this part seems to be truncate (Fig. 10). Well developed pteromorphae observable (Fig. 11) they are well protruding from the notogastral outline. Dorsosejugal suture normal, the notogastral setae very thin, hair-like. Four pairs of porose areas present, they are in normal position.

Length of body: 278-282  $\mu\text{m}$ , width of body: 174-184  $\mu\text{m}$ .

Remarks: These two species stand very near to each other, but on the basis of the characters mentioned in the complementary description they are distinguishable from each other. Both are well distinguishable from *O. tibialis* (NICOLET, 1855) by the measurements of the body.



**Figs 8-11.** *Oribatula amblyptera* BERLESE, 1916 – 8: dorsal aspect, – 9: lamellar region. – 10-11. *Oribatula caliptera* BERLESE, 1902 – 10: lamellar region, 11: dorsal aspect



***Oribatula tibialis sardoa* BERLESE, 1916**

*Oribatula tibialis* var. *sardoa*: BERLESE, 1916: 317. – *Oribatula tibialis* var. *sardoa* CASTAGNOLI & PEGAZZANO 1985: 369.

The collection contains a single slide (180/11) with two specimen! They are syntypes. This variety is probably identical with *O. tibialis*.

***Oribatula venusta* BERLESE, 1908**

(Fig. 12)

*Oribatula venusta* BERLESE, 1908: 8. – *Oribatula venusta*: CASTAGNOLI & PEGAZZANO 1985: 435.

A single specimen (17/22) from Norway is in the collection, labelled "tipico". It is considered to be the holotype by monotypy. This species is also very similar to *O. tibialis* (NICOLET, 1855), but some minor differences are observable.

Complementary morphological characters: Rostrum slightly narrowed, lamellae wide, running marginally, comparatively straight. Lamellar cusps slightly excavated (Fig. 12). Sensillus short, its head small. Small pteromorpha present, seta *c*<sub>2</sub> straight, spiniform, arising on it. The other notogastral setae curved, setiform.

Length of body: 562 µm, width of body: 367 µm.

***Sellnickia caudata* (MICHAEL, 1908)**

*Oribatula caudata* BERLESE, 1910: 383 syn. n. *Oribatula caudata*: CASTAGNOLI & PEGAZZANO 1985: 67. – *Notaspis caudata* MICHAEL 1908: 139. – *Sellnickia heveae* OUDEMANS, 1927: 268. – *Sellnickia caudata*: HAMMER 1966: 92. – *Sellnickia caudata*: LUXTON 1985: 66.

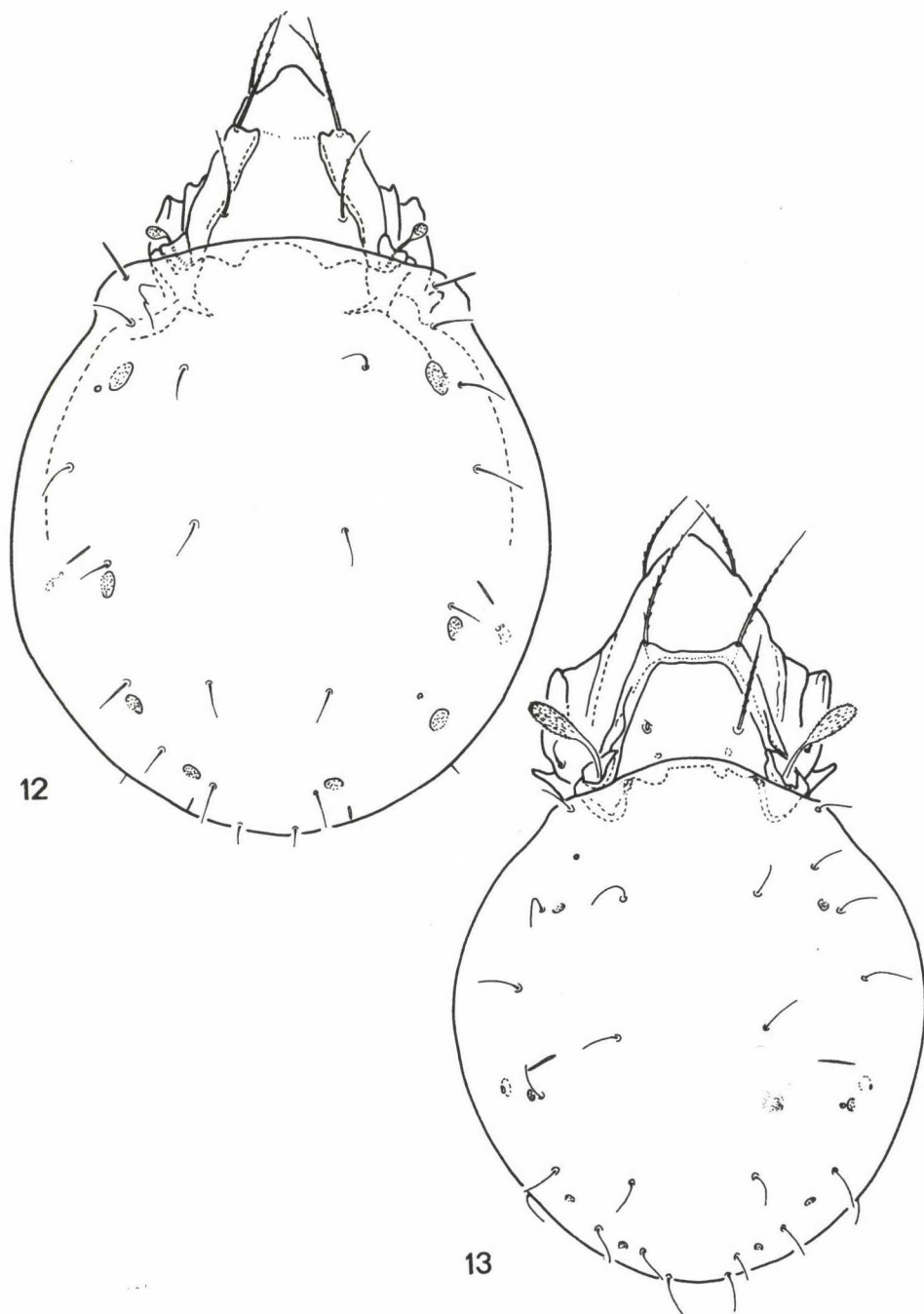
There is a long series of slides (101/1 – 101/13), all labelled "tipico". No doubt that this species is identical with MICHAEL's species therefore it is a junior subjective synonym and homonym of *Sellnickia caudata*.

***Zygoribatula angulata* (BERLESE, 1916)**

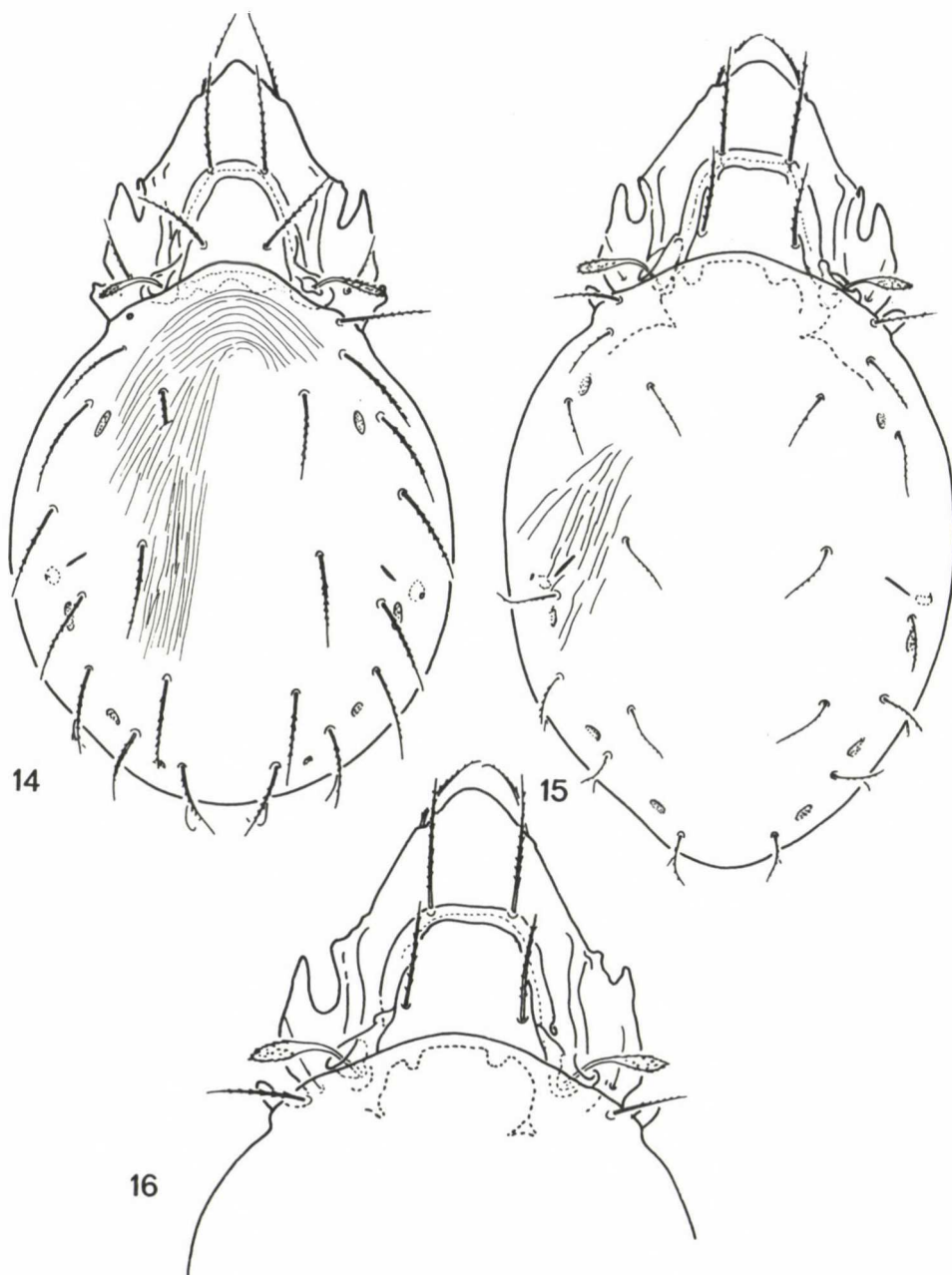
*Oribatula (Zygoribatula) angulata* BERLESE, 1916: 319. – *Zygoribatula* cf. *angulata*: BERNINI 1973: 458. – *Oribatula (Zygoribatula) angulata*: CASTAGNOLI & PEGAZZANO 1985: 18 – *Zygoribatula glabra* (MICHAEL, 1890) sensu F. BERNINI, A. M. AVANZATI & S. BERNINI 1987: 446, a questionable senior synonymy.

There is a good series of this species in the collection. Two of them (202/16 and 180/25) labelled "tipico". I examined now also slides 180/23 and 180/28. Some of them are in good condition. I designate the specimen in slide 202/16 as lectotype.

Complementary morphological characters: Wide spread lamellar composition (Fig. 12), translamella narrowed medially, lamellar cusps well observable. Sensillus large, directed outwards. All notogastral setae fine, short, smooth. Porose areas small, all rounded.



**Fig. 12-13.** 12: *Oribatula venusta* BERLESE, 1908 – dorsal aspect. – 13. *Zygoribatula angulata* BERLESE, 1916



**Fig. 14-16.** 14: *Zygoribatula arcuatissima* BERLESE, 1916 – dorsal aspect. – 15-16. *Zygoribatula connexa* BERLESE, 1904 – 15: dorsal aspect, 16: prodorsum

**Zygoribatula arcuatissima** (BERLESE, 1916)

(Fig. 14)

*Oribatula* (*Zygoribatula*) *arcuatissima* BERLESE, 1916: 320. – *Oribatula* (*Zygoribatula*) *arcuatissima*: CASTAGNOLI and PEGAZZANO 1985: 22. – *Zygoribatula arcuatissima*: F. BERNINI, A. M. AVANZATI & S. BERNINI 1987: 446.

A single specimen (180/31) is present in the collection. It is considered the holotype by monotypy.

Complementary morphological characters: Lamellar formation comparatively narrow, lamellae and translamella compose an unbroken arch, translamella not narrowed, lamellar cusps absent (Fig. 14). Sensillus conspicuously narrow and short. Notogastral surface ornamented by very fine scratches. All notogastral setae long, well ciliate, humeral setae directed forwards, all the other backwards. Porose areas comparatively large, *Aa* and *A<sub>1</sub>* larger than the others.

**Zygoribatula connexa** (BERLESE, 1904)

(Figs 15-16)

*Oribatula connexa* BERLESE, 1904: 273. – *Oribatula* (*Zygoribatula*) *connexa*: BERLESE 1916: 317. – *Oribatula* (*Zygoribatula*) *connexa*: CASTAGNOLI & PEGAZZANO 1985: 85.

Only a single specimen in slide 14/25 exists in the collection labelled "tipico". It is the holotype by monotypy.

Complementary morphological characters: On the basis of some important characters this species is similar to *Z. arcuatissima*, however the lamellar formation is much wide spread, lamellar cusps also absent (Figs 15-16). Head of sensillus wider than by the preceding species, notogastral ornamentation consisting of stronger but sparse scratches. Notogastral setae shorter, but similarly well pilose. All porose areas are smaller.

**Zygoribatula exarata** (BERLESE, 1916)

*Oribatula* (*Zygoribatula*) *exarata* BERLESE, 1916: 318. – *Zygoribatula exarata*: PÉREZ-IÑIGO 1974: 374. – *Oribatula* (*Zygoribatula*) *exarata*: CASTAGNOLI & PEGAZZANO 1985: 135.

The single specimen in slide 180/19 labelled "tipico" is the holotype by monotypy. The species is well known, widely distributed in Central Europe and in the Mediterranean Region.

**Zygoribatula excavata** (BERLESE, 1916)

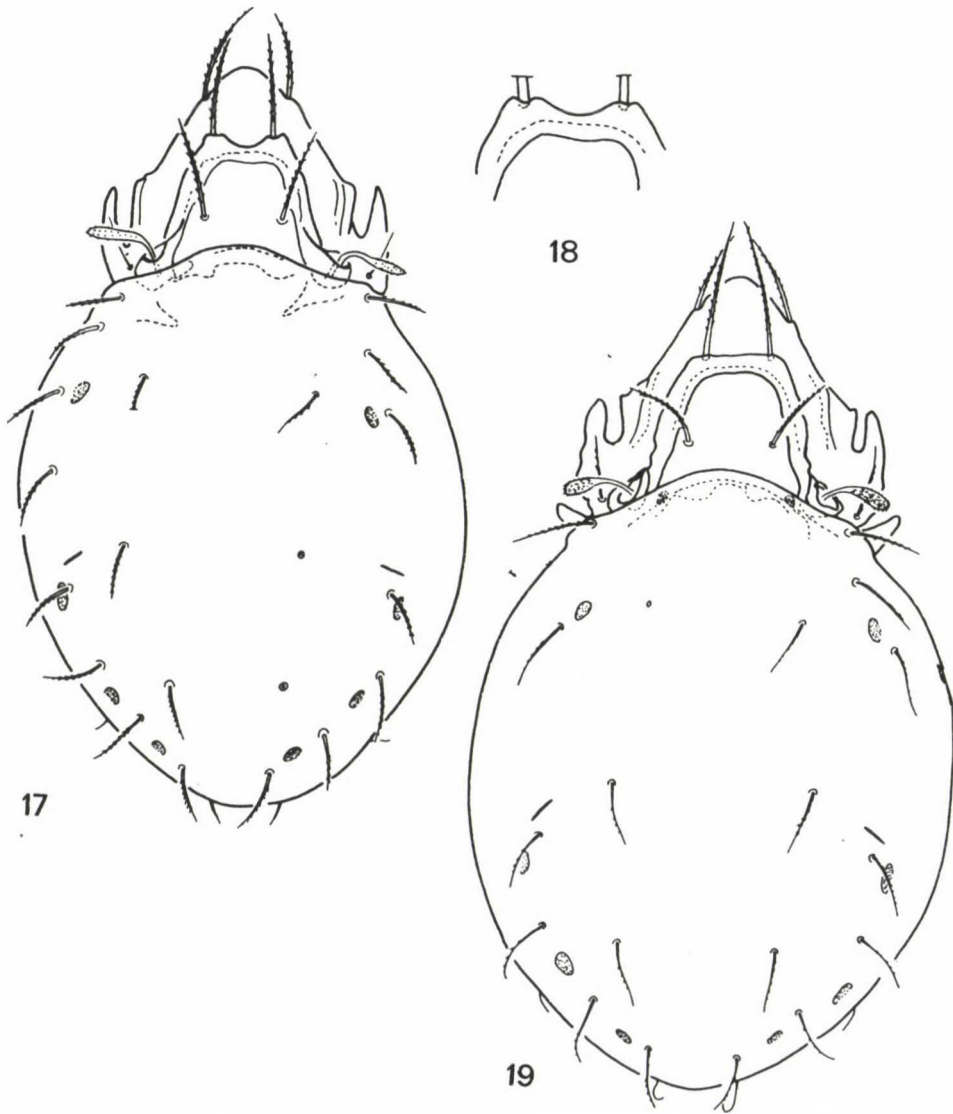
(Figs 17-18)

*Oribatula* (*Zygoribatula*) *excavata* BERLESE, 1916: 318. – *Oribatula* (*Zygoribatula*) *excavata*: CASTAGNOLI & PEGAZZANO 1985: 136. – *Oribatula* (*Zygoribatula*) *excavata*: F. BERNINI, A. M. AVANZATI & S. BERNINI 1987: 446.

There are three slides and two this time unexamined, tubes exist in the collection, two slides (180/21-22) are labelled "tipico". My drawing was made after the specimen embedded in slide 180/21, therefore I designate it as lectotype.

Complementary morphological characters: Translamella robust, but narrowed medially, so lamellar cusps well observable (Figs 17-18). Sensillus conspicuously narrow, directed outwards.





**Figs 17-19.** 17-18: *Zyoribatula excavata* BERLESE, 1916- dorsal aspect, 18: lamellar cusp. – 19: *Zyoribatula socia* BERLESE, 1916 – dorsal aspect



**Figs 20-23.** 20-21: *Hemileius scrobina* BERLESE, 1916 -20: dorsal aspect, 21: sculpture of the notogaster. - 22-23: *Rykella elamellata* (BERLESE, 1916) - 22: anterior part of the body, 23: posterior part of the body

Notogastral setae well developed, distinctly pilose. Humeral setae slightly erect and shorter than the others.

### ***Zygoribatula lineola* (BERLESE, 1916) syn. n.**

*Oribatula* (*Zygoribatula*) *lineola* BERLESE, 1916: 320. – *Oribatula* (*Zygoribatula*) *lineola*: CASTAGNOLI & PEGAZZANO 1985: 221. – *Notaspis exilis* NICOLET, 1855: 448, sen. syn. – *Zygoribatula exilis*: WUNDERLE, BECK & WOAS 1990: 20.

There is a long series of slides, I have seen slides 180/32, 180/33, 180/33bis, among them only one (180/32) was labelled "tipico". I respect BERLESE's opinion and I choose it lectotype. But the species is unambiguously synonym to be of *Zygoribatula exilis* (NICOLET, 1855).

### ***Zygoribatula socia* (BERLESE, 1916)**

(Fig. 19)

*Oribatula* (*Zygoribatula*) *socia* BERLESE, 1916: 319. – *Oribatula* (*Zygoribatula*) *socia*: CASTAGNOLI & PEGAZZANO 1985: 386.

There are four slides in the collection, only one (180/30) is labelled "tipico". It is not sure, whether the other specimens (75/20, 75/21, 75/21bis) belongs to the type series. BERLESE's designation is unambiguous, I follow him, and consider this specimen as lectotype.

Complementary morphological characters: Lamellar fomation robust, lamellae are continuous with the translamella, but the formation angular anteriorly. Translamella not narrowed medially, so the lamellar cusps not separated (Fig. 19). Head of the sensillus comparatively large, finely ciliate. Notogastral setae well ciliate, humeral one belongs to the same type. Porose area large.

### ***Hemileius proximus* (BERLESE, 1916)**

*Oribatula* (*Hemileius*) *proxima* BERLESE, 1916: 324. – *Oribatula* (*Hemileius*) *proxima*: CASTAGNOLI & PEGAZZANO 1985: 334.

The collection contains a long series of slides of this species, but I was able to study only one slide (180/10), labelled "tipico". It contains many specimens, so I consider them to be syntypes. I have superficially studied them, so I noted only that it is characterisable by the slightly convex dorsosejugal suture and a small humeral squama. Lamellar cusp observable. Sensillus elongate.

### ***Hemileius scrobina* (BERLESE, 1916)**

(Figs 20-21)

*Oribatula* (*Hemileius*) *scrobina* BERLESE, 1916: 323. – *Oribatula* (*Hemileius*) *scrobina*: CASTAGNOLI & PEGAZZANO 1985: 371. – *Hemileius* cf. *scrobina*: F. BERNINI, A.M. AVANZATI & S. BERNINI 1987: 448.

I have seen three slides (58/34, 180/47, 180/47fil) the collection, though Castagnoli & Pegazzano listed one more (74/10). One of them labelled "tipico". I follow the BERLESE's designation and I regard this specimen to be lectotype.

Complementary morphological characters: Rostrum conical. Lamellae with small, short cusp, lamellar seta arising on it. Prelamella present. Sensillus directed laterally, slightly reclinate, its head finely spiculate. Notogaster typically hemileioid (Fig. 20), without pteromorphae, obovoid. Its surface covered by short, digitiform pustules (Fig. 21). Ten pairs of equally long, fine notogastral setae and four pairs of small sacculi present.

### ***Hemileius sternalis* (BERLESE, 1916) comb. n.**

*Oribatula (Hemileius) sternalis* BERLESE, 1916: 323. – *Oribatula (Hemileius) sternalis*: CASTAGNOLI & PEGAZZANO 1985: 397.

Only a single specimen exists in the collection in slide 180/46, labelled "tipico", therefore, it is the holotype by monotypy.

This species unambiguously belongs to the genus *Hemileius* BERLESE, 1908, but I did not study it thoroughly now. Its rostrum is conspicuously protruding, nasiform.

### ***Siculobata sicula* (BERLESE, 1892)**

*Oribatula tibialis* var. *sicula* BERLESE, 1892: XLIV, 1. – *Oribatula (Hemileius) sicula*: BERLESE 1916: 322. – *Siculobata sicula*: GRANDJEAN 1953: 117.

This species is well known, it is widely distributed (?). It is only one specimen mounted on slide 40/45 in the collection labelled "tipico". I consider it as the holotype by monotypy, because there is some other material in alcohol designated also "tipico" but definitely originates from a later date. Unfortunately the mounted specimen is in a very bad condition, very hard to study or to identify.

### ***Siculobata platensis* (BERLESE, 1916) stat. et comb. n.**

*Oribatula (Hemileius) sicula* var. *platensis* BERLESE, 1916: 322. – *Oribatula (Hemileius) sicula* var. *platensis*: CASTAGNOLI & PEGAZZANO 1985: 326.

There are two slides from La Plata in the collection, one of them (180/43) is labelled "tipico" but it contains 3 specimens. I consider them as syntypes.

Complementary morphological characters: Lamella, prelamella present. Sensillus short, with capitate head. Dorsosejugal suture straight, pteromorpha absent. Ten pairs of notogastral setae and 4 pairs of sacculi present. Anogenital setal formula: 4 – 1 – 2 – 3. All legs tridactylous.

There is no doubt that this species belongs to the genus *Siculobata* GRANDJEAN, 1953.

## **3. TWO BERLESE'S PODORIBATES SPECIES**

### ***Rykella elamellata* (BERLESE, 1916) comb. n.**

(Figs 22-23)

*Podoribates elamellatus* BERLESE, 1916: 59. – *Podoribates elamellatus*: CASTAGNOLI & PEGAZZANO 1985: 123.



A single specimen (164/46) in good condition is present in the collection. It is considered to be the holotype by monotypy. There is no doubt that it belongs to the genus *Rykella* BALOGH, 1962. It is probably identical with the type species of this genus (*R. insignis* BALOGH, 1962). Specimens of the latter species was not available for me, therefore, further comparative investigations are necessary.

Complementary morphological characters: Rostrum elongated nasiform. Well developed lamella and translamella present, lamella without sharp cusp (Fig. 22). Lamellar setae arising on its outer corner. Lamellar and interlamellar setae nearly equal in length, rostral setae slightly shorter than the preceding ones. Sensillus setiform. Approximately 25 pairs of porose area (Fig. 23) and six pairs of genital setae may be observable.

Length of body: 749  $\mu\text{m}$ , width of body: 670  $\mu\text{m}$ .

#### ***Annobonozetes latissimus* (BERLESE, 1916) comb. n.**

(Fig. 24)

*Podoribates latissimus* BERLESE, 1916: 59. – *Podoribates latissimus*: CASTAGNOLI & PEGAZZANO 1985: 216.

There are two slides (164/44, 164/45) in the collection, but only one (164/45) is labelled "tipico". The other slide contains also an *Annobonozetes* species, but on the basis of the position and size of the sacculi ( $S_1$  and  $S_2$ ) I am not sure whether both belong to the same species. Therefore, I follow BERLESE and consider the specimen in slide 164/45 the lectotype of this species. The type of the heretofore monotypic genus (*A. sphaericus* PÉREZ-IÑIGO, 1983) is characterised by the interrupted translamella and the absence of lamellar cusps, but I think this species unambiguously belongs to this genus, so *Podoribates latissimus* BERLESE, 1916 = *Annobonozetes latissimus* (BERLESE, 1916) comb. n.

Complementary morphological characters: Rostrum triangular in dorsal aspect. Lamellae and translamella well developed, lamellar setae arising from the short lamellar cusps. Interlamellar setae very long, nearly twice longer than the rostral ones. Sensillus short, with small, oval head. Ten pairs of setal alveoli and four pairs of sacculi present, two sacculi ( $S_1$  and  $S_2$ ) located very near to each other. Four pairs of genital setae observable, all legs tridactylous.

Length of body: 1170  $\mu\text{m}$ , width of body: 1014  $\mu\text{m}$ .

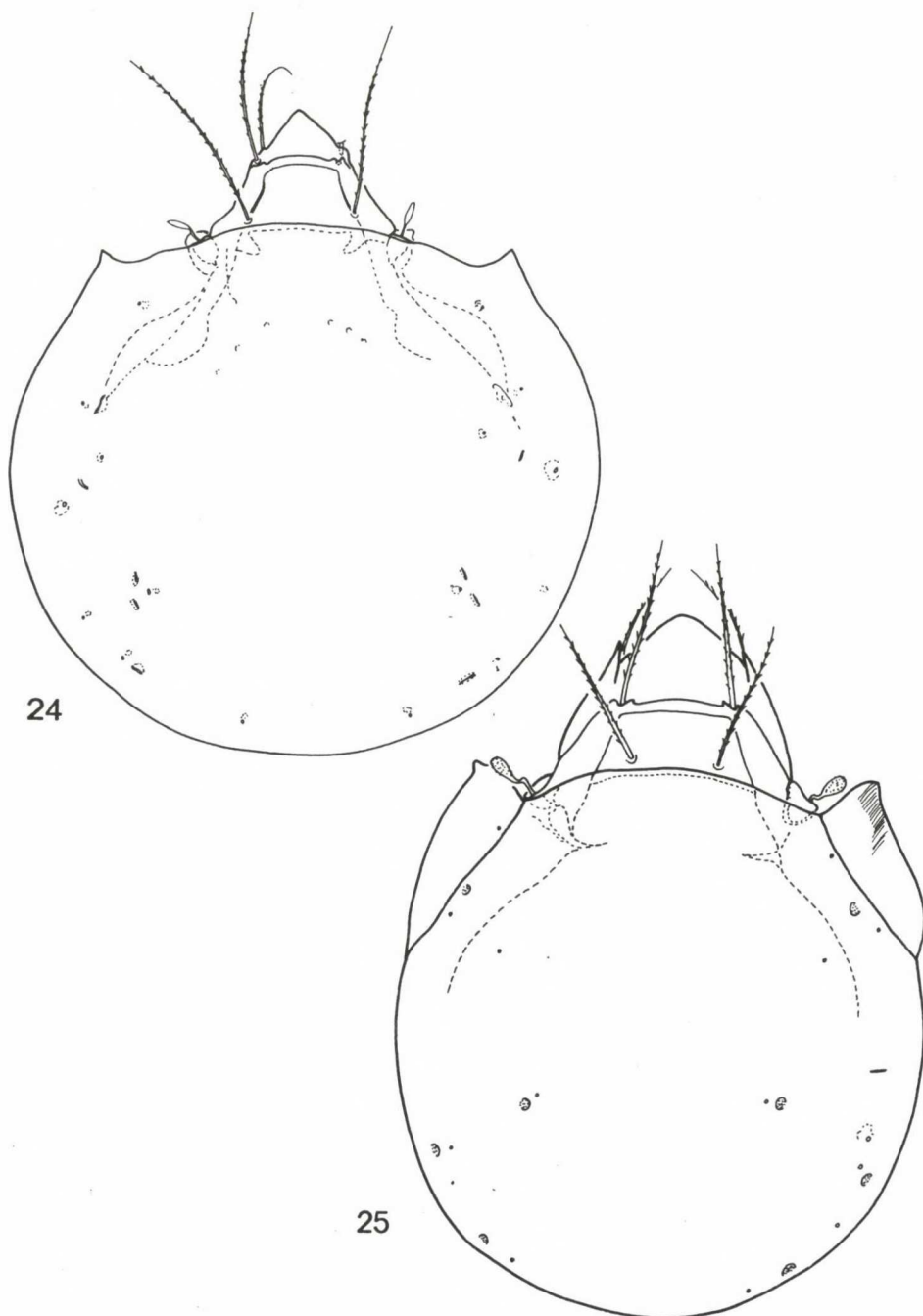
#### **4. BERLESE'S "PELORIBATES" SPECIES**

In their catalogue CASTAGNOLI & PEGAZZANO listed 7 *Peloribates* species, but only four were described by BERLESE. *P. histricinus* BERLESE, 1910 (= *P. hubbardi* BANKS, 1904) was discussed by NORTON & KETHLEY (1989). None of the other three species (see below) belongs to the genus *Peloribates* (BERLESE, 1908) in the modern sense.

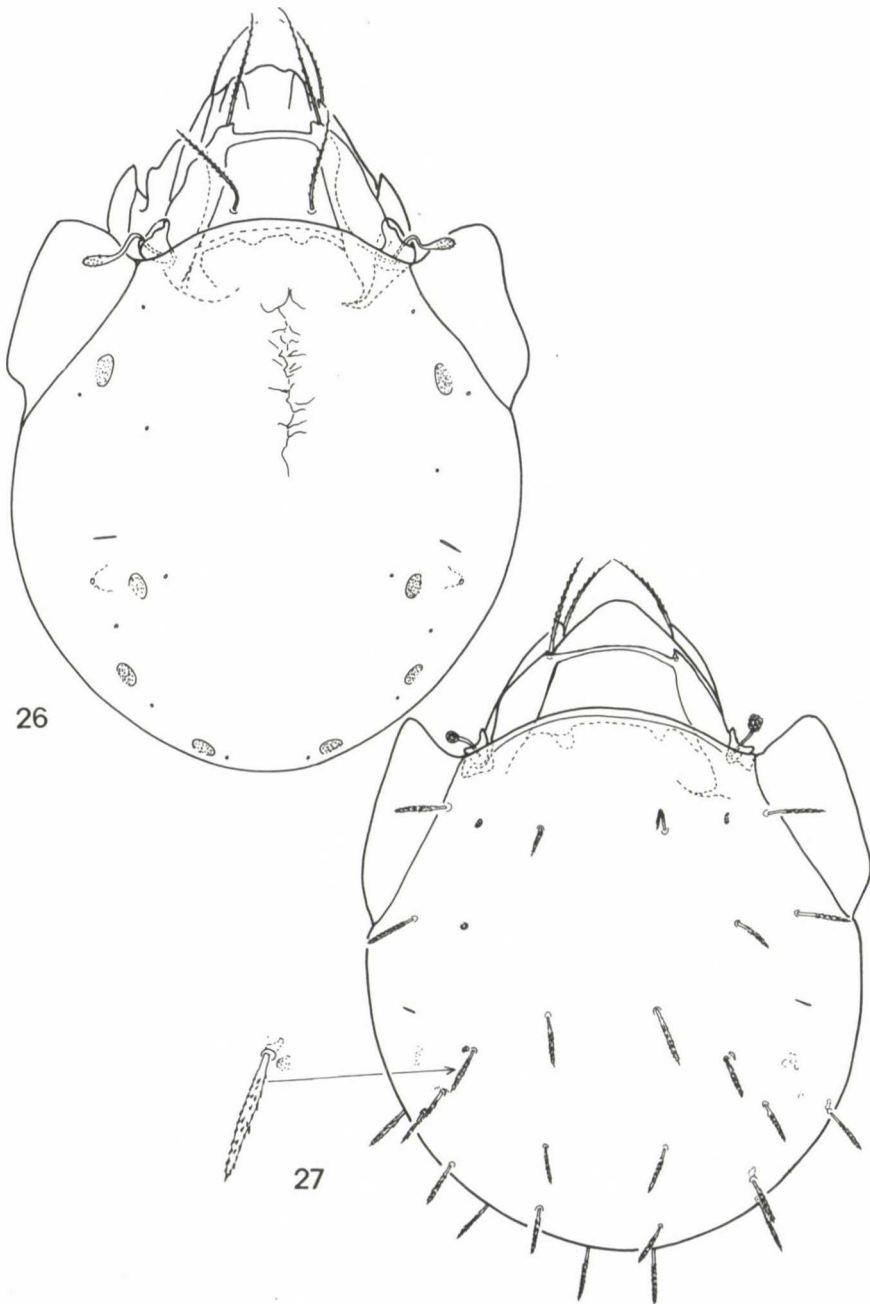
#### ***Africoribates depilatus* (BERLESE, 1910) comb. n.**

(Fig. 25)

*Peloribates depilatus* BERLESE, 1910: 385. – *Peloribates depilatus*: CASTAGNOLI & PEGAZZANO 1985: 112.



**Figs 24-25.** 24: *Annobonozetes latissimus* (BERLESE, 1916) – dorsal aspect. – 25: *Africoribates depilatus* (BERLESE, 1910) – dorsal aspect



**Figs 26-27.** 26: *Africoribates glabratus* (BERLESE, 1908) – dorsal aspect. – 27: *Ramsayellus conspicuus* (BERLESE, 1916) – dorsal aspect

A single specimen (107/50) from South Africa is present in the collection. It is considered the holotype by monotypy. It may unambiguously be ranged into the genus *Africoribates*.

Complementary morphological characters: Rostrum unified. Lamellae and translamella well developed, lamellar cusps clearly observable, with sharp apices. Sensillus comparatively short, its peduncle arched. Notogaster with ten pairs of alveoli and four pairs small porose areas (Fig. 25). Anogenital setal formula: 6 – 1 – 2 – 3.

Length of body: 570 µm, width of body: 421 µm.

### ***Africoribates glabratus* (BERLESE, 1908) comb. n.**

(Fig. 26)

*Peloribates glabratus* BERLESE, 1908: 3. – *Peloribates glabratus*: CASTAGNOLI & PEGAZZANO 1985: 164.

There are seven slides in the collection, two of them (74/46, 74/48) labelled "tipico". I designate as lectotype the specimen in slide 74/46. The figure (Fig. 26) was made after the slide 74/47.

Complementary morphological characters: Rostrum waved, a pair of longitudinal crests run backwards from the rostrum. Lamellar cusps long, well protruding over the translamella. Sensillus comparatively long, directed outwards. Notogaster displaying a longitudinal figure medially. All four pairs of porose areas large, no essential difference among them.

Length of body: 421 µm, width of body: 296 µm.

### **?*Ramsayellus conspicuus* (BERLESE, 1916) comb. n.**

(Fig. 27)

*Peloribates conspicuus* BERLESE, 1916: 60. – *Peloribates conspicuus* CASTAGNOLI & PEGAZZANO 1985: 86.

The collection contains two slide (164/34, 164/35), one first is labelled "tipico". I consider it – agreeing with BERLESE – as lectotype of this species. The drawing (Fig. 27) was made after the other slide (164/35).

Complementary morphological characters: Rostrum unified, rounded. Lamellae wide, lamellar cusp not separated, only short outer apex observable. Translamella arched anteriorly, before lamellar cusps. Sensillus very short, its head clavate. Notogaster with 13 pairs of short, rigid, mostly straight setae. Some of them slightly dilating. I was able to observable only two pairs of very small porose areas (?), *Ap*<sub>1</sub> located very near to the insertion of seta *dp*. Six pairs of genital setae observable, all legs tridactylous.

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