

Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei 34. Acarina: Oribatei

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In the course of his collectings in Mongolia in 1963 and 1964, Dr. Z. KASZAB paid special attention to the Oribatid mites. Aside of his other captures, he collected Oribatids partly by the use of MOCZARSKI extractors partly by a special BERLESE funnel constructed for application on sandy substrates. Although a part of the soils studied, especially the sandy ones, present extraordinary difficulties for the extraction of Oribatids, and though there live but a relatively small number of these mites in arid sites, it was still possible to show a considerable number of Oribatid species as well in the first (MAHUNKA, 1964) as in the second (the present) paper. The list of the species is not complete, because we reserved some problematic forms, whose systematic allocation could as yet not be clarified, for publication at a later date. According to the our investigations, we know now 33 Oribatid mites from the territory of Mongolia. Prior to KASZAB's explorations, the Oribatid fauna of the area under discussion was wholly unknown.

The present paper lists 25 species, 11 of which are new to science, and a new genus had also to be established. Since the Oribatid fauna of temperate Asia is wellnigh unknown, it is exceedingly difficult to make zoogeographical statements either for the new species or the range of the already known forms. In our opinion, a thorough faunistical and systematical exploration must precede any zoogeographical assessment. For this very reason, we submit the list and number of locality of the collected species without any comment, inserting our remarks of a comprehensive nature at the head of the specific list.

More than half of the collected species, to wit, the eleven new species herein described, as well as *Liacarus mongolicus* and *Passalozetes kaszabi* described by MAHUNKA, should, at the present state of our knowledge, be regarded as Mongolian endemisms. It is very probable however, that at least a part of them have a much more extensive range. One species, *Proteremaeus jonasi* PIFFL, 1964, was hitherto known only from Asia (Karakorum). The distribution of another taxon, *Psammodolus hungaricus* (SELLNICK, 1925), is extremely interesting. This species was known up to now only from some points in the sandy areas of Hungary. It seems probable that it shall be found in every, similarly sandy sites between Hungary and Mongolia. Some other species, e.g., *Scutovertex minutus* (C. L. KOCH, 1836), *Punctoribates punctum* (C. L. KOCH, 1840) *Zygoribatula frisiae* (OUDEMANS, 1900), and *Liochthonius hystri-cinus* (FORSSLUND, 1942), were securely known only from Europe. Another species, *Scutozetes lanceolatus* (HAMMER, 1952), was known from the Nearctic Region only, to wit, Canada; indeed, Mongolia is now the first known Palearctic occurrence of the genus itself. *Camisia horrida* (HERM., 1804), *Heminothrus thori* (BERLESE 1913), and *Propelops canadensis* (HAMMER, 1952), range in the Holarctic Region, whereas *Cosmochthonius plumatus* BERLESE, 1910, and *Camisia segnis* (HERMANN, 1804), occur aside of the Holarctic Region, also in South America. These, as generally some of the primitive Oribatei, show an almost cosmopolitan distribution.

Of the new species, the two *Pedrocortesia* species deserve especial mention. This genus was hitherto known only from South Africa and South America, hence their occurrence in Mongolia is rather striking.

Among both the known and the new species, there are mainly representatives of genera, which inhabit open, grassy areas, or those with a very sparse vegetation. Such are the *Scutovertex*, *Passalozetes*, and *Zygoribatula* species, the *Psammodolus* taxa, and probably the majority belonging to the genus *Pedrocortesia*.

Species already known from the Mongolian fauna

1. *Liochthonius hystericinus* (FORSSLUND, 1942)

Locality: „Nr. 288. Central aimak: 126 km N von Ulan-Baator, am Wege, 1100 m, 9. VII. 1964” — Sifted litter lying under birch trees, material extracted by MOCZARSKI-WINKLER apparatus.

2. *Cosmochthonius plumatus* BERLESE, 1910

Locality: „Nr. 164. Südgobi aimak Gurban Sajchan ul, 30 km S von somon Bulgan, 1700 m, 19. VI. 1964” — From dry litter at base of *Caragana* plant.

3. *Camisia horrida* (HERMANN, 1804)

Locality: „Nr. 247. Archangaj aimak: Koschoo zajdam am Chogschin-Orchon, 35 km N von somon Lun, 1490 m, 2. VII. 1964” — Complete sifting and extraction by Berlese funnel of *Milvus* nest.

4. *Camisia segnis* (HERMANN, 1804)

Locality: „Nr. 167. Uburchangaj aimak: Arc Bogd ul, cca 20 km S von somon Chovd, 1760 m, 21. VI. 1964,, — Extraction of vegetable debris accumulated between roost and twigs of *Caragana* and *Prunus*, by BERLESE apparatus. — „Nr. 288. Central aimak, 126 km N von Ulan-Baator, am Wege, 1100 m, 9. VII. 1964” — Sifted birch litter under birch trees, extracted by MOCZARSKY-WINKLER apparatus.

5. *Heminothrus thori* (BERLESE, 1913)

Locality: „Nr. 269. Central aimak: SO von somon Bajanzogt, 1600 m, 4. VII. 1964.” — Sifted litter of birch woods, material extracted by MOCZARSKI-WINKLER apparatus.

6. *Liacarus mongolicus* MAHUNKA, 1964

Locality: „Nr. 269. Central aimak: SO von somon Bajanzogt, 1600 m, 4. VII. 1964” — Sifted litter of birch woods.

7. *Proteremaeus jonasi* PIFFL, 1964

Locality: „Nr. 154. Südgobi aimak: Gurban Sajchan ul, 39 km S von somon Bulgan, 1700 m, 19. VI. 1964” — From dry vegetable debris under *Caragana* — „Nr. 167. Uburchangaj aimak: Arc Bogd ul, cca 20 km S von somon Chovd, 1760 m, 21. VI. 1964” — Extraction of vegetable litter accumulated between roots and twigs of *Caragana* and *Prunus*. — „Nr. 178. Uburchangaj aimak: Baga Bogd ul, zwischen somon Bogd und somon Braunbajan-ulaan, 1900 m, 22. VI. 1964” — Sifted and extracted nest of raptorial bird. „Nr. 247. Archangaj aimak: Koschoo zajdam am Chogschin-Orchon, 5 km N von somon Lun, 1490 m, 2. VII. 1964” — Sifted and extracted nest of *Milvus* species.

8. *Scutovertex minutus* (C. L. KOCH, 1836)

Locality: „Nr. 220. Uburchangaj aimak: Changaj Gebirge, Ongijn gol, 10 km ONO von Arbajcher, 1800 m, 29. VI. 1964”.

9. *Passalozetes kaszabi* MAHUNKA, 1964 (Fig. 15).*

Locality: „Nr. 220. uburchangaj aimak: Changaj Gebirge, Ongijn gol, 10 km ONO von Arbajcher, 1800 m, 29. VI. 1964”.

10. *Scutozetes lanceolatus* HAMMER, 1952 (Figs. 1, 2)

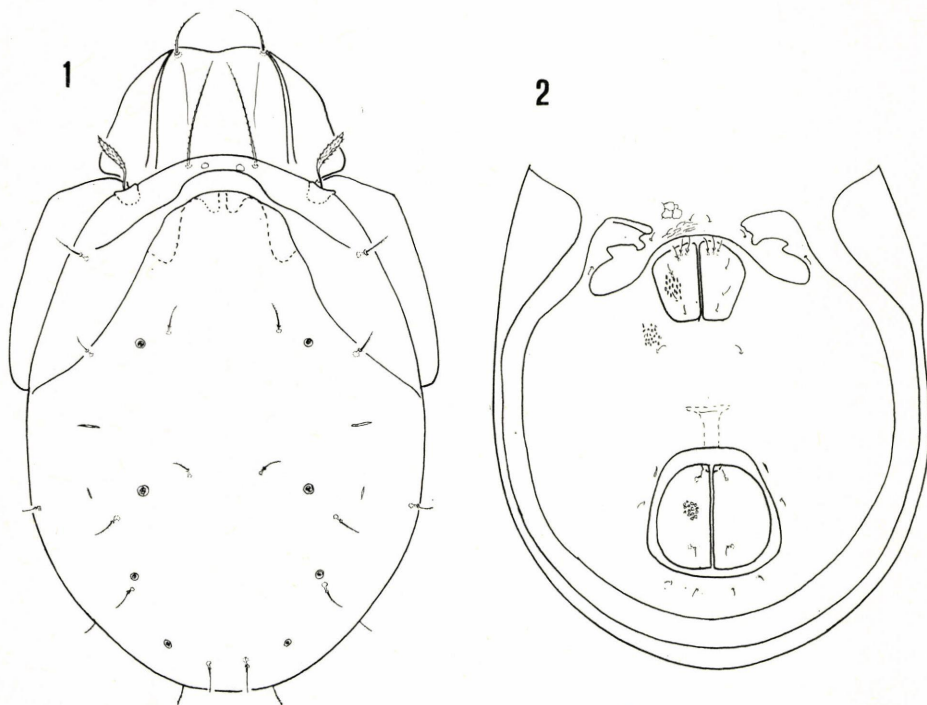
HAMMER's description can be completed on the basis of the Mongolian specimens as follows:

436—470×284—318 μ . Sensillus fusiform, short, apex pointed, finely ciliate. Interlamellar hairs arising about as far from each other as from bothridium, long, ciliate. Lamellae fused into a wide scale, not excised anteriorly and completely covering also rostrum. Lamellar hairs short, ciliate. Rostral hairs invisible from above. Leg tridactylous.

Notogaster oviform, pteromorphae movable, connected anteriorly of dorsose-jugal suture by a relatively wide bridge. 10 pairs of notogastral hairs with hardly discernible ciliation. 4 pairs of areae porosae (?), resembling sacculi, without typical punctulation under magnification.

Ventral side: 6 pairs of genital, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs, arranged as on Fig. 2. Hypostoma punctate. Genital and ventral plates coarsely granulated, as on Fig. 2.

*The indication of the structures on the figures of *P. kaszabi* and *P. gobiensis* were by the fault of the press obliterated. These are now restituted on figs. 15 and 15a.



Figs. 1—2: *Scutozetes lanceolatus* HAMMER, 1952, dorsal side (1), ventral side (2)

Locality: „Nr. 154. Südgobi aimak: Gurban Sajchan ul, 30 km S von somon Bulgan, 1700 m, 19. VI. 1964” — From dry vegetable litter at base of *Caragana*. — „Nr. 167. Uburchangaj aimak: Arc Bogd ul, cca 20 km S von somon Chovd, 1760 m, 21. VI. 1964” — Extraction of vegetable litter accumulated between roots and twigs of *Caragana* and *Prunus*. — „Nr. 272. Central aimak: Ulan-Baator, Nucht in Bogdo ul, 12 km SO vom Zentrum, 1500 m, 6. VII. 1964” — 5 soil traps with ethylenglycol, on a barren hillside.

11. *Propelops canadensis* (HAMMER, 1952)

Locality: „Nr. 288. Central aimak: 126 km N von Ulan-Baator, am Wege, 1100 m, 9. VII. 1964” — Sifted and extracted litter under birch trees.

12. *Punctoribates punctum* (C. L. KOCH, 1840)

Locality: „Nr. 722. Central aimak: Ulan-Baator, Nucht in Bogdo ul, 12 km SO vom Zentrum, 1500 m, 6. VII. 1964” — 5 ethylenglycol soil traps, on barren hillside.

13. *Psammogalumna hungaricus* (SELLNICK, 1925)

Locality: „Nr. 247. Archangaj aimak: Koschoo zajdam am Chogschin-Orchon, 35 km N vom somon Lun, 1490 m, 2. VII. 1964” — Complete extraction of *Milvus* nest.

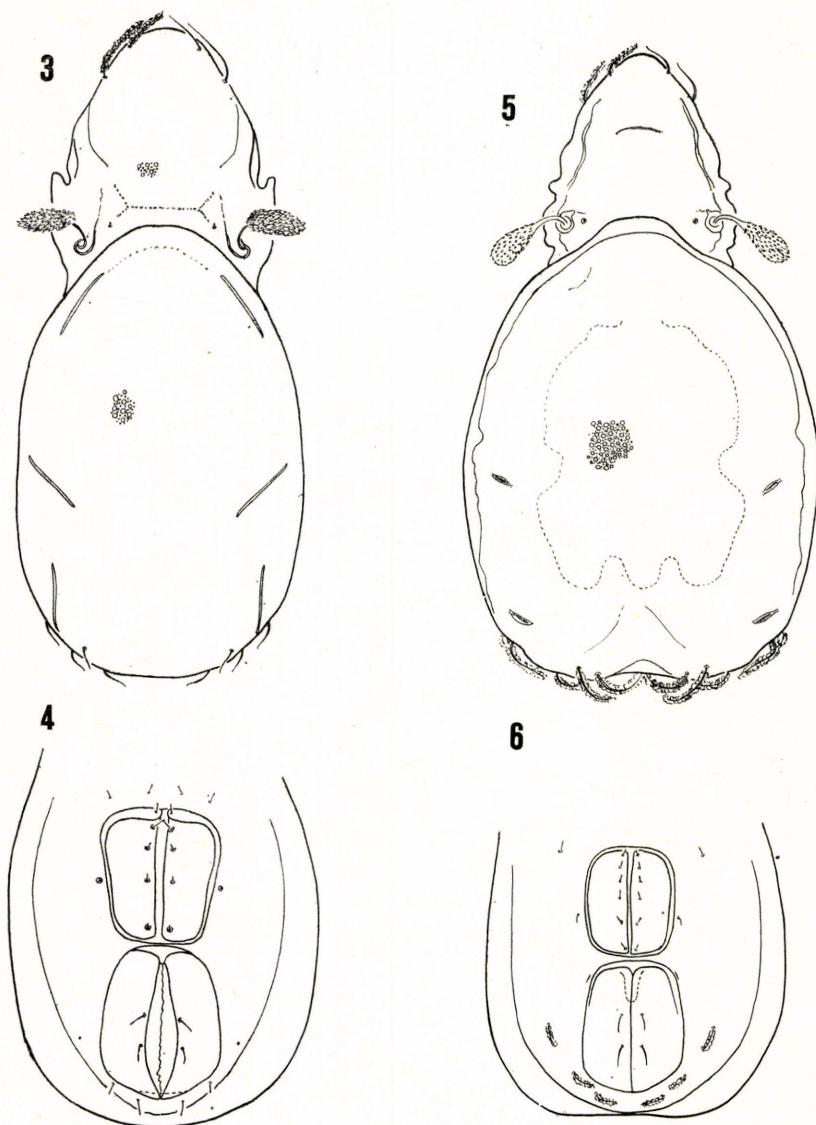
14. *Zygoribatula frisiae* (OUDEMANS, 1900)

Locality: „Nr. 272. Central aimak: Ulan Baator, Nucht in Bogdo ul, 12 km SO vom Zentrum, 1500 m, 6. VII. 1964” — 5 soil traps with ethylenglycol, on barren hillside.

Species new for science

Pedrocortesia fissurata sp. n. (Figs. 3, 4)

260—278×117—125 μ . Pedicel of sensillus very thin, head abruptly dilated, ornamented with aciculi. Interlamellar hairs minute. Lamellar and rostral hairs spaced far apart, long, covered with cerotegument granules. Rostrum wide. Prodorsum without definite sculpture, covered with coarsely granulated cerotegument.



Figs. 3—4: *Pedrocortesia fissurata* sp. n., dorsal side (3), ventral side (4) — Figs. 5—6: *Pedrocortesia inaequalis* sp. n., dorsal side (5), ventral side (6)

Notogaster elongately oval, dorsosejugal suture arcuate anteriorad. Pori *ia*, *im*, and *ip* very long. 4 pairs of notogastral hairs on posterior part of notogaster. Notogaster covered with cerotegument granules.

Ventral side: Genital and anal plates almost touching, very large, 4 pairs of genital, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs present. Ventral plate without sculpture, covered with cerotegument granules.

Type material: Holotype and 7 Paratypes.

Locality: „Nr. 167. Uburchangaj aimak: Arc Bogd ul, cca 20 km S von somon Chovd, 1760 m, 21. VI. 1964” — Extraction of vegetable debris accumulated between roots and twigs of *Caragana* and *Prunus*.

***Pedrocortesia inaequalis* sp. n. (Figs. 5, 6)**

333—377 × 151—186 μ . Sensillus incrassate, apically rounded, covered with aciculi. Interlamellar hairs minute. Lamellar and rostral hairs spaced rather far apart from each other, moderately long, covered with cerotegument granules. Rostrum wide, rounded. Prodorsum without definite sculpture, covered with coarsely granulated cerotegument.

Notogaster widely oviform, dorsosejugal suture in middle abruptly projecting anteriorad. Notogaster posteriorly wide and almost straightly truncate, or medially bluntly excised. Surface of notogaster with flat protuberances, as shown on Fig. 5, hence apparently undulating. 5 pairs of posteromarginally situated notogastral hairs, covered with cerotegument granules.

Ventral side: 6 pairs of genital, 1 pair of aggenital (these very short), 3 pairs of adanal, and 2 pairs (exceptionally on one side with 3 pairs) of anal hairs; these latter slightly longer, and adanal hairs covered with cerotegument granules. Anal and genital plates large, almost touching. Soft portion between ventral and notogastral plates with parallel lines ornamented with small granules.

Type material: Holotype and 8 Paratypes.

Locality: „Nr. 167. Uburchangaj aimak: Arc Bogd ul, cca 20 km S von somon Chovd, 1760 m, 21. VI. 1964” — Extraction of vegetable litter accumulated between roots and twigs of *Caragana* and *Prunus*.

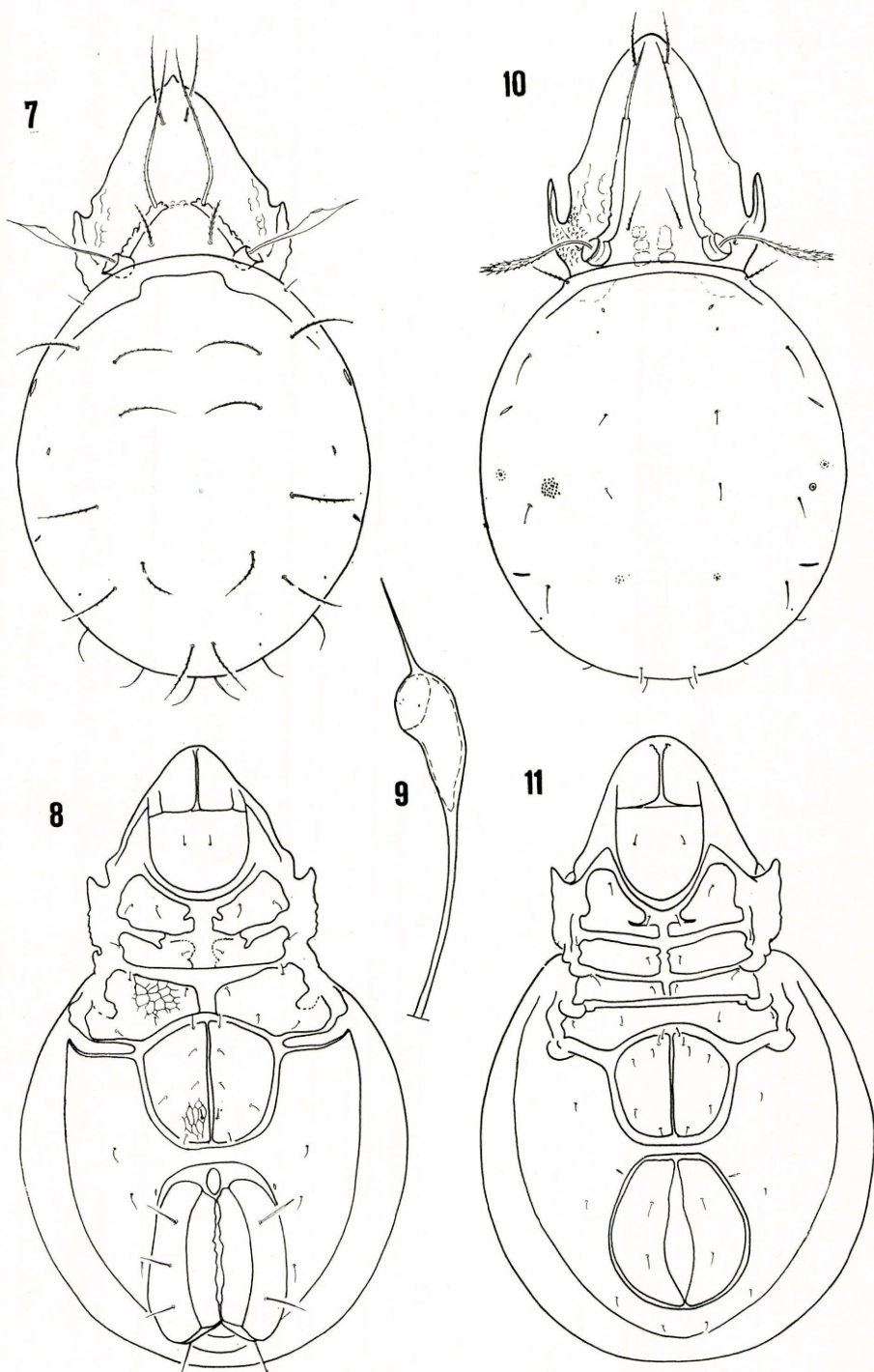
Remarks: The two new species described above have been assigned with some reservations to the genus *Pedrocortesia* HAMMER, 1958. The number of undescribed species in our possession, belonging to the family Plateremaeidae, is rather high, and the splitting of the family, on the basis of a greater number of described forms, could more properly be done in the future than today. We deem it therefore more advisable to describe the two above species on the basis of merely artificial features (crispins on legs, bacilliform praetarsus, notogastral hairs reduced to 4 or 5 pairs, and 2 pairs of anal hairs), and as members of the genus *Pedrocortesia*. Differences between the two taxa are considerable, and it is not impossible that, due to future investigations, they will have to be relegated to distinct genera.

The most striking artificial features of the two species might be keyed as follows:

- 1 (2) Pores *ia*, *im*, and *ip* of notogaster very long. 5 pairs of genital hairs present. 260—278 μ
***P. fissurata* sp. n.**
- 2 (1) Pores *ia*, *mi*, *ip*, of notogaster normal. 6 pairs of genital hairs present. 333—529 μ
***P. inaequalis* sp. n.**

***Banksinoma insignis* sp. n. (Figs. 7—9)**

318 × 200 μ . Sensillus fusiform, apically mucronate, terminating in a hair 67.5 μ long. In a lateral view and under a strong magnification, incrassate portion showing a cavity, terminating in a great, round opening below apical hair. Interlamellar hairs ciliate, exostigmatal hairs minute. Lamellar hairs arising on end of costulae, very long, extending beyond rostrum, with sporadic, short cilia. Rostral hairs about half as long as lamellar hairs, originating near each other, with very short, scattered cilia. Cos-



Figs. 7—9: *Banksinoma insignis* sp. n., dorsal side (7), ventral side (8), sensillus (9) — Figs. 10—11: *Oribella mongolica* sp. n., dorsal side (10), ventral side (11)

tulae strongly convergent, short, not reaching half length of prodorsum, external margins rounded, with irregular dentation. Some minute tubercles between apices of costulae. Rostrum with pointed apex.

Notogaster widely ovate, smooth. 11 pairs of notogastral hairs present; first (humeral) pair very small, smooth, 3 other pairs (of a posteromarginal position) slightly longer, also smooth, 7 other pairs again longer and finely ciliate.

Ventral side: 3 pairs of epimeral plates. Number of discernible epimeral hairs 2-2-4. Genital and anal plates large, nearly touching. 6 pairs of genital, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs present. Left side with 3 pairs of anal hairs. First pair of adanal and anal hairs considerably longer than other ventral hairs. Genital plate connected with margin of ventral plate by a double chitinous line, as shown on Fig. 8.

By reason of its peculiar sensillus, the new species can be easily distinguished from all known taxa of the genus.

Type material: Holotype.

Locality: „Nr. 288. Central aimak, 126 km N von Ulan-Baator, am Wege, 1100 m, 9. VII. 1964” — Extracted from birch litter lying under birch trees.

Oribella mongolica sp. n. (Figs. 10, 11)

$355 \times 213 \mu$. Sensillus slightly fusiform, apically bior trifurcate, incrassate portion with spinelets and cilia. Interlamellar hairs short, with minute cilia. Lamellar hairs rather long, situated on end of costulae, with sparse, short cilia. Rostral hairs arising rather near each other, and shorter than lamellar hairs. Costulae hardly convergent, rather thick. Interlamellar region with 3 pairs of areoles. Exostigmatal region tuberculated. Rostrum rounded. Legs tridactylous.

Notogaster widely ovate. Dorsosejugal suture almost straight, with an obtuse humeral corner each, bearing hair *ta*. 10 pairs of notogastral hairs present, hairs *ta* slightly longer and ciliate, others minute. Notogaster finely granulate.

Ventral side: 4 pairs of epimeral plates, plate 4 not separated medially. Epimeral hairs: 2-2-2-2 (The number of hairs could not be established with entire certainty on the single specimen). Number of genital hairs on one genital plate 5, but 6 on other one. 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs, all extremely small.

The new species is closely allied to *Oribella cavatica* KUNST, 1962, to be distinguished from it by the following features:

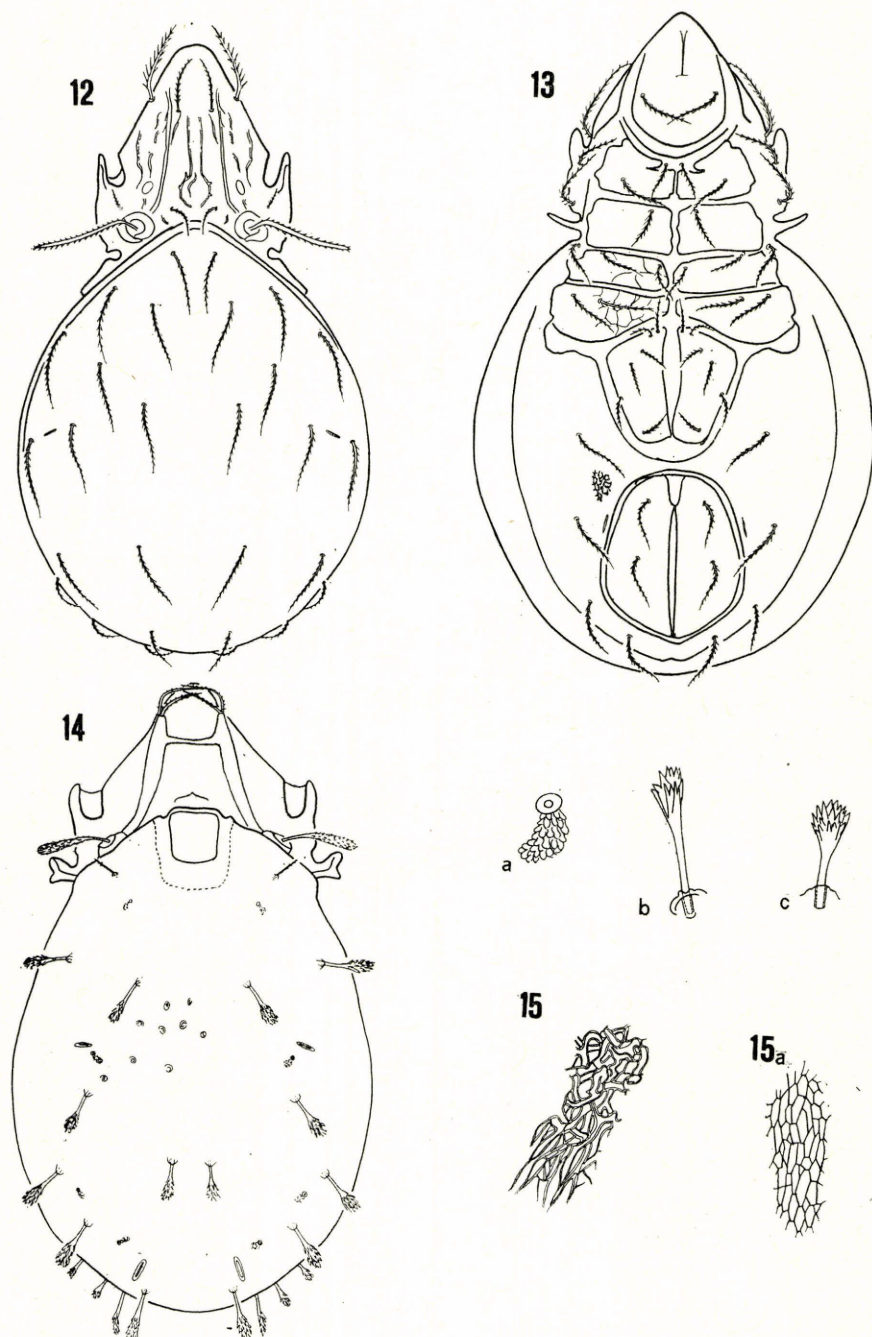
1. Chitinous frames of genital and anal plates meeting; genital and anal plates adjacent. (In *O. cavatica*, a rather wide, free interspace between frames of genital and anal plates);
2. Humeral hair considerably longer and thicker than two extremely small centrodorsal pairs of hairs. (In *O. cavatica*, above pairs of hairs of equal length);
3. Cilia of sensillus rather long. (In *O. cavatica*, cilia of sensillus extremely small).

Type material: Holotype.

Locality: „Nr. 288. Central aimak, 126 km N von Ulan-Baator, am Wege, 1100 m, 9. VII. 1964” — Extraction of birch litter lying under birch trees.

Gobiella gen. n.

Fam. Thyrisomidae. 4 pairs of epimeral plates. 14 pairs of notogastral hairs. 6 pairs of genital hairs. Prodorsum with two longitudinal thin costulae, and several longitudinal, partly interrupted, chitinous lines. Legs monodactyle.



Figs. 12—13: *Gobiella kaszabi* gen. n., sp. n., dorsal side (12), ventral side (13) — Fig. 14, a, b, c; *Scutovertex glandulosus* sp. n., dorsal side (14), sacculi (a), dorsal hairs b, c) — Fig. 15: *Passalozetes kaszabi* MAHUNKA, 1964, structure of dorsal side — Fig. 15, a: *Passalozetes gobiensis* MAHUNKA, 1964, structure of dorsal side

Type-species: *Gobiella kaszabi* sp. n.

The number of the notogastral hairs and the sculpture of the prodorsum sharply differentiates the new genus from the two known genera of the family Thyrisomidae.

***Gobiella kaszabi* sp. n. (Figs. 12, 13)**

305—352×176—220 μ . Colouration light brown. Sensillus bacilliform, rather long, with short cilia. Interlamellar hairs, exostigmatal and lamellar hairs ciliate, thin. Rostral hairs longer than preceding ones, with bigger cilia; hairs originating relatively caudad, not much more anteriorly than insertion of lamellar hairs. From bothrydium toward rostrum, a thin costula each, almost parallel and terminating before insertion of lamellar hairs. Lamellar hairs arising between costulae. Also between costulae and slightly anteriorly of interlamellar hairs, an irregularly circular chitinous line, open anteriorly and terminating in two parallel lines decurrent to lamellar hairs. Some short, interrupted chitinous lines also externally of costulae. This chitinous sculpture rather varying. Rostrum wide, rounded. Legs monodactyle.

Notogaster ovate; dorsosejugal suture medially — anteriorly of interlamellar hairs — with a rounded, obtuse apex. Dorsum granulated, covered with thin cerotegument. Ventral plate granulated as shown on Fig. 13.

Ventral side; 4 pairs of epimeral plates. Epimeral hairs: 3-1-3-2. Genital and anal plates large, almost meeting. Genital plates meeting with epimeral plate 4. 6 pairs of ciliate genital hairs. 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs, all rather long and ciliate.

Type material: Holotype and 14 Paratypes.

Locality: „Nr. 212. Uburchangaj aimak: Changaj Gebirge, 21 km 0 von somon Narijn-teel, 2080 m, 27. VI. 1964” — Extraction of two *Microtus* nests on alpine steppe.

***Scutovertex glandulosus* sp. n. (Figs. 14 a, b, c)**

539—593×318—352 μ . Sensillus slightly dilating, apically rounded, with dense aciculi. Interlamellar hairs indiscernible. Lamellar and rostral hairs inclinate, ciliate. Lamellae slightly convergent, connected by a thin translamella, cuspides rather long, tapering. Prodorsum wide, rostrum rounded.

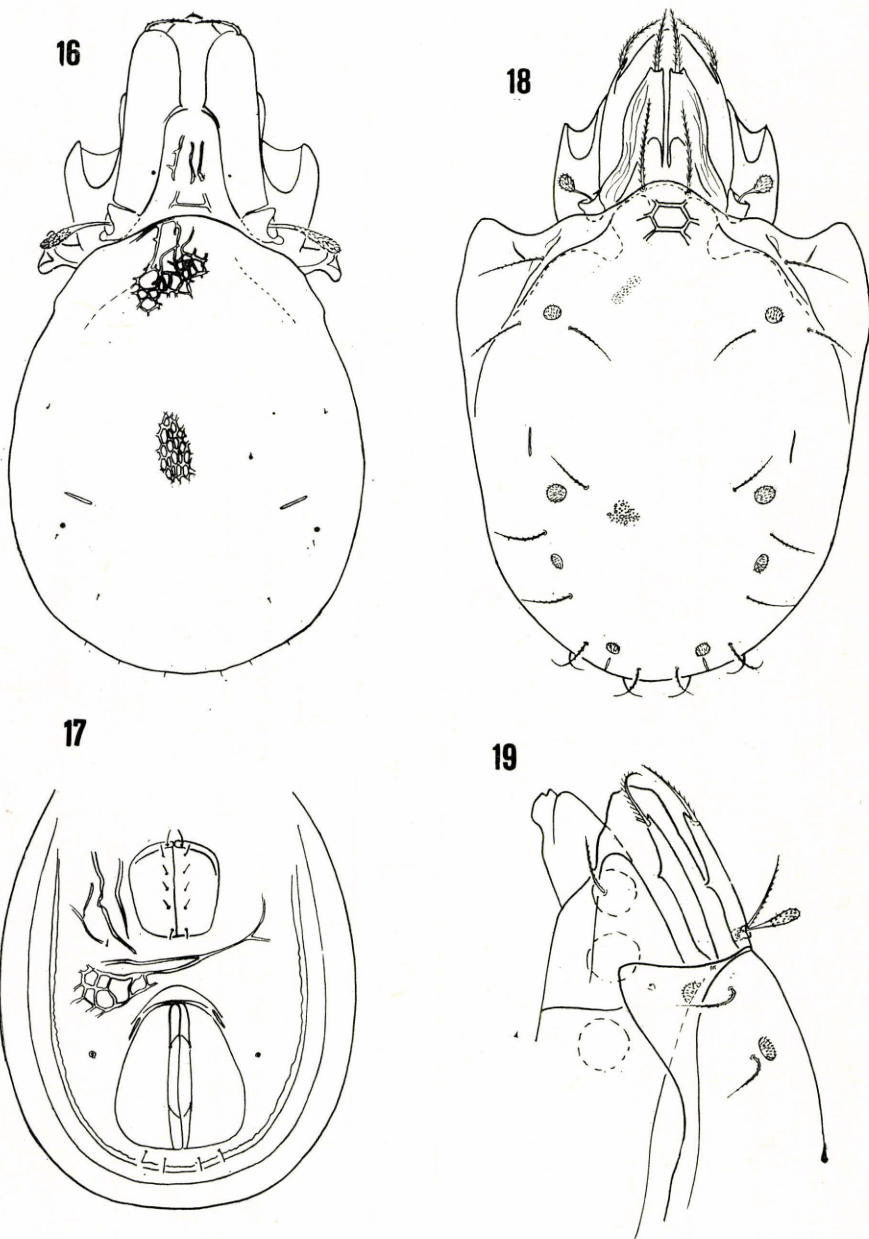
Legs tridactylous. Notogaster elongately ovate, with an obtuse humeral projection. Surface with irregularly scattered foveolae, surrounded by chitinous rings. Colouration deep brown. 11 pairs of notogastral hairs. Humeral hair setiform, short, apically ciliate, other hairs apically dilating, ornamented with spinelets. Posteromarginal hairs slightly smaller than others. Notogastral hairs diversely shaped, different types shown on Fig. 14 a. b. c. 4 pairs of sacculi present, especially well visible on paler specimens. Sacculi open in annuliform pori, and continue within hysterosoma in a glandular, grape-like structures (Fig. 14a). Pori *im* and *ip* rather large.

Ventral side: 6 pairs of genital, 3 pairs of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs present: hairs an_1 and an_2 shaped as notogastral hairs, all other ventral hairs setiform, anal hairs finely ciliate, others smooth. Ventral plate with an irregular, rough sculpture.

Of the species described hitherto, the new taxon could. be linked up solely with *Scutovertex sculptus* MICHAËL, 1879, but the shape of the notogastral hairs, the sculpture of the notogaster, and the characteristic structure of the sacculi distinguishes it sufficiently also from its above congener.

Type material: Holotype and 7 Paratypes.

Locality: „Nr. 154. Südgobi aimak: Gurban Sajchan ul, 30 km S von somon Bulgan, 1700 m, 19. VI. 1964” — From dry vegetable litter at base of *Caragana* plant.



Figs. 16—17: *Scutovertex* (?) *laticuspsis* sp. n., dorsal side (16), ventral side (17) — Figs. 18—19: *Anoribatella* (?) *deserticola* sp. n., dorsal side (18), prodorsum in lateral view (19) —

Scutovertex laticuspis sp. n. (Figs. 16,17)

460—529×242—284 μ . Sensillus slightly dilating, densely ciliate, apically rounded. Alveoli of interlamellar hairs on inner margin of lamellae. Lamellae wide, decurrent along margins of prodorsum, almost parallel, extending nearly to apex of rostrum. Cuspides very long and wide, apices rounded, bearing lamellar hair externally. Lamellar hairs inclinate, ciliate. Intercuspidal area of prodorsum narrower than breadth of cuspides. Interlamellar region with some rough chitinous wrinkles. Rostrum rounded. Pedotectum 1 large. Rostral hairs indiscernible from above. Legs tridactylous.

Notogaster ovate, deep brown, with a rough retiform structure, precluding exact establishment of number of notogastral hairs, areae porosae or sacculi. At least 7 pairs of notogastral hairs discernible, as shown on Fig. 17. Behind porus *im* (indicated by an arrow on Fig. 16), a small porus visible, possibly representing an area porosa. Notogaster with an irregularly polygonal retiform structure, consisting of longitudinal fields (or cells?). In place of lenticulus, a reticulation bordered by irregular, rough wrinkles, which, however cannot be regarded as a true lenticulus.

Ventral side: 6 pairs of genital hairs, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs. Hairs *an*₁ and *an*₂ situated postanally, anal hairs of a submarginal position. Ventral plate roughly rugose, with an irregular polygonal net-structure.

We have relegated this striking species with some reservations to the genus *Scutovertex*. Owing to the shape of the lamellae and the absence of the lenticulus, it differs from most species of this genus. Since, however, we were unable to establish securely the eventual presence of the areae porosae and the number of the notogastral hairs, we have adapted this provisional solution.

Type material: Holotype and 4 Paratypes.

Locality: „Nr. 154. Südgobi aimak: Gurban Sajchan ul, 30 km S von somon Bulgan, 1700 m, 19. VI. 1964” — Extracted from dry vegetable litter under *Caragana* plant.

Anoribatella (?) deserticola sp. n. (Figs. 18, 19)

378×240 μ . Sensillus short, apically sphaerically incrassate, ciliate. Interlamellar hairs reaching about half length of prodorsum, proclinate, ciliate. Lamellar and rostral hairs rather short, ciliate. External margins of lamellae flat, recumbent S-shaped, convergent, basal sections of inner margins also convergent, apical sections parallel and closely adjacent to one another. Cuspides terminating preapically. Rostrum rounded. Leg tridactylous.

Dorsosejugal suture with three flat arches. In front of notogaster, at site corresponding to lenticulus, a hexagonal pattern (characteristical of all known species of the genus). Apices of pteromorphae rounded from above. In a lateral view, pteromorphae almost triangular, separated from notogaster by a sharp line. 10 pairs of well discernible, curved, notogastral hairs; two posteromarginal pairs slightly shorter than others and smooth: other hairs finely and sparsely ciliate. 4 pairs of rather large areae porosae. Notogaster with sculpture as shown on Fig. 18.

Ventral side: 6 pairs of genital, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs. Genital plate finely lineated. Anal plate punctate. Ventral plate foveolate.

The new species essentially differs from its two known congeners by its true areae porosae. Even on this basis, we have been unable to relegate it safely to the genus

Anachipteria, since the shape of the lamellae, the polygonal area on the front of the notogaster, etc., connect it with the species *Anoribatella ornata* (SCHUSTER, 1958), and *Anoribatella kittenbergeri* (BALOGH, 1959). These two latter species have, however, differently shaped lamellae.

Type material: Holotype.

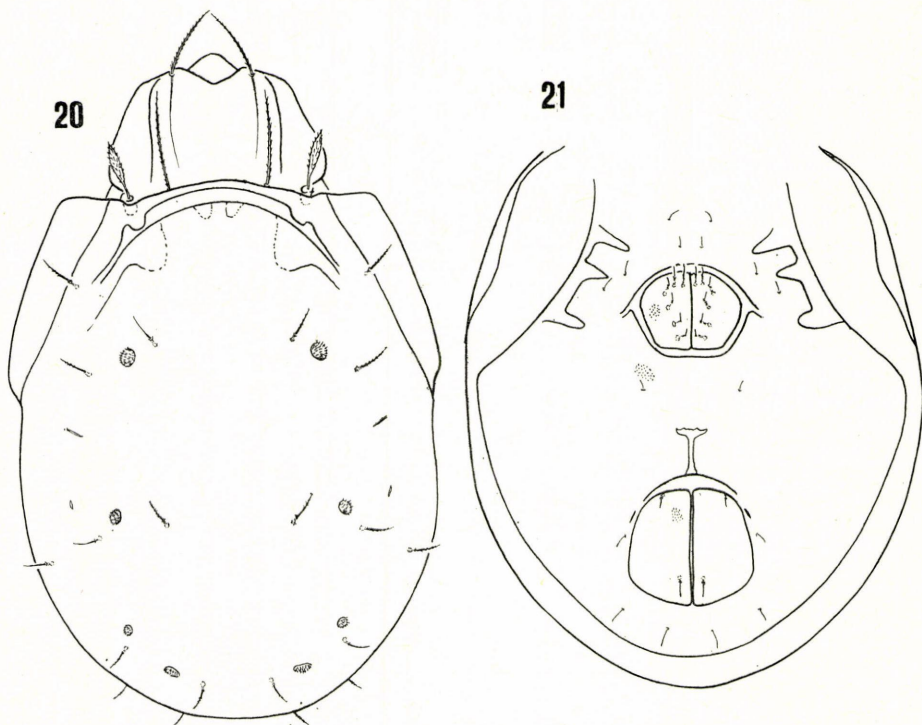
Locality: „Nr. 247. Archangaj aimak: Koschoo zajdam am Chogschin-Orchon, 35 km N von somon Lun, 1490 m, 2. VII. 1964” — Complete extraction of *Milvus* nest.

***Lepidozetes dashidorzsi* sp. n. (Figs. 20, 21)**

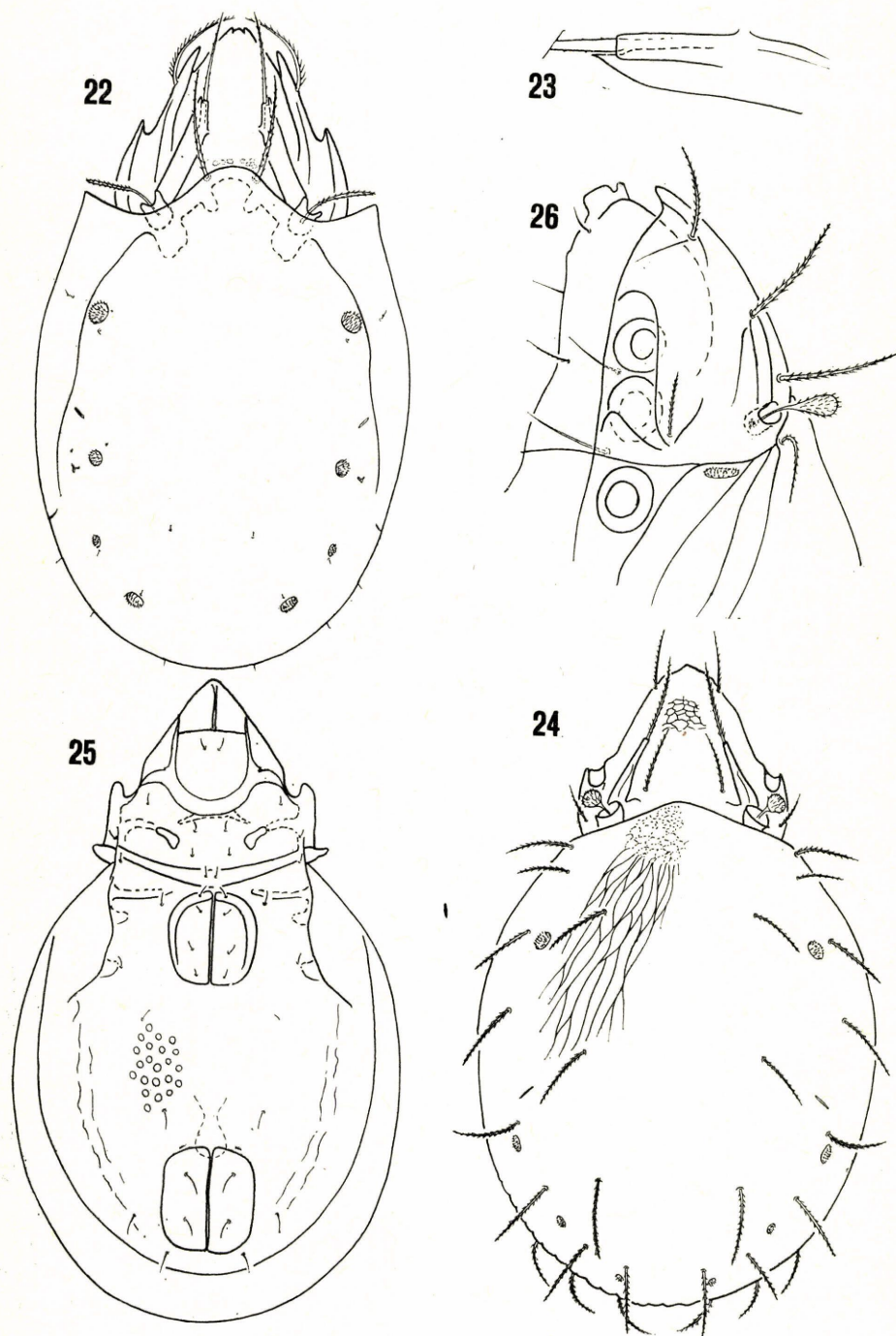
519—568 × 348—392 μ . Sensillus fusiform, short, apically pointed, finely ciliate. Interlamellar hairs removed at greater distances from each other than from bothridium, long, ciliate. Lamellae fused into a broad scale, covering entire prodorsum excepting rostrum; medially excised anteriorly of rostrum, hence rostrum well discernible. Lamellar hairs originating on two apices of lamellar scale, ciliate. Rostral hairs indiscernible from above. Leg tridactylous.

Notogaster oviform, pteromorphae movable, connected by a narrow chitinous bridge anteriorly on dorsosejugal suture. 10 pairs of rather short, ciliate notogastral hairs. 3 pairs of areae porosae, displaying a typical punctulation.

Ventral side: 6 pairs of genital, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs, arranged as shown on Fig. 21. Hypostoma rugose. Genital and ventral plates with an extremely fine punctulation.



Figs. 20—21: *Lepidozetes dashidorzsi* sp. n., dorsal side (20), ventral side (21)



Figs. 22—23: *Ceratozetes heterocuspis* sp. n., dorsal side 22, apex of cuspis (23) — Figs. 24—26: *Oribatula elegantissima* sp. n., dorsal side (24), ventral side (25), prodorsum in lateral view (26).

Of the known *Lepidozetes* species, only *Lepidozetes latipilosus* HAMMER, 1952, (Canada), has long interlamellar hairs. However, its sensillus, pteromorphae, and rostrum are differently constructed.

Type material: Holotype and 7 Paratypes.

Locality: „Nr. 154. Südgobi aimak: Gurban Sajchan ul, 30 km S von somon Bulgan, 1700 m, 19. VI. 1964” — Extracted from dry vegetable litter at base of *Caragana* plant. — „Nr. 167. Uburchangaj aimak: Arc Bogd ul, cca 20 km S von somon Chovd, 1760 m, 21. VI. 1964” — Extracted from dry litter accumulated between roots and twigs of *Caragana* and *Prunus*. — „Nr. 272. Central aimak: Ulan-Baator, Nucht in Bogdo ul, 12 km SO vom Zentrum, 1500 m, 6. VII. 1964” — 5 ethylenglycol soil traps, on barren hillside.

Ceratozetes heterocuspis sp. n. (Figs. 22, 23)

485—515 × 294—338 μ . Sensillus filiform, with fine cilia, thickening hardly perceptibly. Lamellar hairs arising on dorsosejugal suture; both interlamellar and lamellar, as well as rostral hairs long, ciliate. Lamellae convergent, translamella absent. Cuspis rather long, of peculiar shape (shown on Fig. 23), immediately distinguishing the new taxon from all known *Ceratozetes* taxa. Lamellar hair originating on inner end of cuspis, separated by a longitudinal line from external portion. External section of cuspis pointed, extending beyond point of insertion of lamellar hair.

Dorsosejugal suture arched anteriorad. 10 pairs of extremely short notogastral hairs, represented largely by alveoli only. 4 pairs of areae porosae; pair 1 largest (A_1), pair 3 smallest (A_3).

Ventral side: No special feature. 6 pairs of genital, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs. Hairs Ad_1 and Ad_2 in a postanal position.

Type material: Holotype and 1 Paratype.

Locality: „Nr. 154. Südgobi aimak: Gurban Sajchan ul, 30 km S von somon Bulgan, 1700 m, 19. VI. 1964” — Extracted from dry vegetable litter at base of *Caragana* plant.

Oribatula elegantissima sp. n. (Figs 24—26)

406—466 × 258—314 μ . Sensillus very short; thin, short stalked, with a spherical, finely ciliated head. All prodorsal hairs rather long and ciliate. Lamellae attenuating anteriorad, lamellar hair situated on apex. A highly indistinct, arcuate line occasionally discernible, corresponding to translamella. Anteriorly of this line, rostral region with an irregular, indistinct retiform structure. Apex of rostrum hardly projecting. Legs tridactylous.

Dorsosejugal suture medially with an obtuse projection. 14 pairs of notogastral hairs present, all rather long and ciliate. 4 pairs of areae porosae, gradually diminishing posteriorad. Notogaster with sharply conspicuous longitudinal lines, decurrent (as shown on Fig. 24) rather obliquely, anastomosing in several places, and constituting a reticulation composed of elongate cells. A similar sculpture is shown by some *Zygoribatula* species.

Ventral side: 4 pair of genital, 1 pair of aggenital, 3 pairs of adanal, and 2 pairs of anal hairs. Pori Ad_3 and iad in a preanal position. Ventral plate large, with scattered round foveolae.

The linear structure of the notogaster differentiates the new species from all known *Oribatula* species. A similar sculpture is displayed by certain *Zygoribatula* species (e. g. *Zygoribatula connexa* BERLESE, 1904).

Type material: Holotype and 2 Paratypes.

Locality: „Nr. 247. Archangaj aimak: Koschoo zajdam am Chogschin-Orchon, 35 km N von somon Lun, 1490 m, 2. VII. 1964” — Complete extraction of *Milvus* nest. — „Nr. 272. Central aimak: Ulan-Baator, Nucht in Bogdo ul, 12 km SO vom Zentrum, 1500 m, 6. VII. 1964” — 5 ethylenglycol soil traps, on barren hillside.

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