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# Description of a new genus – *Hammeriella* gen. n. – from South America and a new family – Hammeriellidae fam. n. (Acari, Oribatei).

Adilson D. Paschoal [1]

## ABSTRACT

**Hammeriella** *gen. n. and, Hammeriellidae fam. n. (Acari, Oribatei) from South America are described.* **Hammeriella** *is also recorded from "Tierra del Fuego" (Chile) and from Argentina.* The type species of **Hammeriella, Pedrocortesia grandis** *Hammer, is fully redescribed and the cogeneric species,* **Pedrocortesia australis** *Hammer, is diagnosed in comparison with the type species, both being transferred to* **Hammeriella.** *The redescriptions were made from syntypes deposited in the Zoologisk Museum of Copenhagen, sent on loan for this study.*

## Hammeriellidae fam n.

**Type genus:** *Hammeriella* gen. n.

**Characteristics** – Eupheredermes, i.e., nymphs retain exuviae of previous instars; adults with or without exuviae loosely held on body dorsum. Tracheal system sub-normal, i.e., trachea I absent. Pycnonotics, i.e., without areae porosae on notogaster. Body and legs covered by cerotegument presenting microtubercles, forming polygonal reticula on legs. Notogastral, prodorsal and ventral cuticle foveate or reticulate. **Apo le** absent; **apo ro, apo ex** with or without opposed mammillate saliences. Prodorsum with no transversal furrow on tooth **p** region. **le** lateral, dorso-lateral or dorsal, anterior and away from **ro**, set on tubercle; **ro** lateral; **ex** lateral, short, lanceolate; bothridium dorso-lateral, being not leaned against notogaster; **ss** club-shaped, the head globose, covered by black spines. Notogaster centro-dorsal setae absent; with five pairs of notogastral setae; **ps** ventral; **ps1** outside **hl** setae generally; integument shallowly invaginated between **ps1** setae; **ps2, ps3** close together, posterior to **r2** and at a lower level than **ps1** or anterior to **ro** and at a higher level than **ps1**, or yet only **ps3** anterior to **r2**; **h1** terminal, close to its homologous seta; **r2 (1p)** dorsal to lateral, close to or at notogastral posterior margin, at a short distance from **ip**. Dorsal lyrifissures from median to large size; **ip** oblique, well developed. Notogaster flat, rounded or ovate. Notogastral tectum present between **bng** and **lambda** lines. Large

[1] ESALQ-USP, Caixa Postal, 9 - 13.400 Piracicaba - SP.

species, ranging from 700 to 1000$\mu$. **Apo** I complete, with no long curved bar pointing backward; other apodemata incomplete, with strong apodematic bonds in the shape of transversal bars; **apo IV** resembling a hat over genitalia. Epimeral chaetotaxy 3 : 1 : 3 : 3; epimeral setae of equal size. Genital aperture almost square; anal aperture pyriform to almost cylindrical; genital and anal apertures contiguos, partially joint or not joint at all, provided with reticula or foveae; **apo ag, apo ad** present. With seven pairs of genital setae on a sole longitudinal row close to inner margin; **ag** medianly set or postero-lateral to genitalia; three pairs of anal setae on a longitudinal row; three pairs of adanal setae; **ad3** further away from the sagital plane than the others; **ad1** posterior to postero-lateral to anal plate. Tectopedia absent; pedotectal tooth **p** present; lateral carenae present; acetabula I, II integument and cotyloid forming a blunt structure. Leg articulations on proximal sockets, i.e., sockets on proximal ends of tarsi, tibiae, genua; femoral and trochanteral tracheae present; Ts I, II distal apophyses present; Tb I apophysis short or median, covering proximal end of tarsus only; Tr and Fe-Tr articulation outside acetabula; femora proximal orientation after the articulation with trochantera almost straight; tarsi pedicels extremely short; three equally strong claws, the medial one slightly larger than the laterals; Ts I famulus enclosed; tarsi **(it)**, **(tc)** strong, spiny, on tubercles or not; **ft"** Ts I very close to **omega**, anterior and close to **ft'**; **pv"** Ts I anterior, away from **pv'**; **pl"** Ts I at the same height; **v"A** Ts I anterior to **v'A**; omega 1 Ts I paraxial, slender and longer than **omega** 2; **d** Tb I anterior or posterior to **1'**; **fi1** Tb I long, antiaxial; **fi2** short, paraxial; **d** Ge I close to **sigma**; Fe I, II with **d** long, **1'**, **1"** distal, **2v"** posterior to **d**; **ft"**Ts II, III anterior to **ft'**, not very close to it; **pl'** Ts II, III present; **pl"** TS II present, at the level of **pl'**; pv" Ts II posterior to **pv'**; **omega** 1 close to **omega** 2 on Ts II; **fi** Tb II distal, close to or away from **d**; **sigma** Ge II, III close to **d**; **v'** Ge II present or absent; **pl" Ts III, IV absent**; ft' Ts II present; **pv'** Ts III anterior to **pv"**; **fi** Tb III close to **d**; Fe III with **d**, **1'**, **v'**; **ft"** Ts IV present; **ft'** absent, **(it)** present, **pl'** present or absent; Fe IV with **d**, **v'** distal, close together. Leg chaetotaxy: Ts. 19(2) – 17(2) – 16 – 15 or 14; Tb. 4(2) – 5(1) – 4(1) – 4(1); Ge. 4(1) – 4(1) or 3(1) – 3(1) or 2(1) – 3 or 2; Fe. 5 – 5 – 3 – 2; Tr. 1 – 1 – 2 – 1.

*Hammeriella* **gen. n.**

**Type species**: *Pedrocortesia grandis* Hammer, 1961.

**Diagnosis** – *Hammeriella* is close to *Andesperuviella* Paschoal (Paschoal 1979, 1987, 1989) from which it differs mainly by the following features: legs with no cuticular reticula; adults bearing exuviae; **apo c** present; **le** dorsal, on strong tubercle; bothridium dorso-lateral, close to notogaster; **ss** short, club-shaped, head globose, black; **r2 (1p)** dorsal, not on tubercle, close to notogastral margin; notogaster rounded; **apo II, apo sj** with no anterior projections; anal and genital apertures contiguous, parcially joint; anal aperture almost cilindrical; **apo**

**pad, apo pag** absent; **g1** at proximal end of genital plate; **ag** medio-lateral; **ad1** postero-lateral; without femoral crests; tarsi **(it)**, **(tc)** on strong apophyses; **fi** Tb II not too close to **d**; **v'** Ge II present; **v'** Ge III, IV absent; **p1'** Ts IV absent.

**Description** – Body of clarified specimens covered by microtubercle forming cerotegument; legs covered by a thick layer of polygonal reticulum with no microtubercles or by a thick irregular mass with microtubercles. Notogastral, prodorsal and ventral cuticle foveate or reticulate. Exuviae held by adults on dorsal body. **Apo le** absent; **apo ro** with a transversal nervure; **apo ro, apo ex** with mammillate protuberances opposed one to the other; other apodemata also present. Prodorsum with no deep furrow at **p** level. **le** dorsal, on strong tubercle, away from **ro**; **ro** lateral; **ex** short, below **apo ex**; **in** short, lanceolate; bothridium dorso-lateral, close to notogaster; **ss** short, club-shaped, head globose, black, covered by short dark spines. **ps1** further away from its homologous seta than **h1**; integument invaginated between **ps1** setae; **ps2, ps3** close together lower than **ps1**; **ps3** posterior or anterior to **r2**; **h1** terminal, close to its homologous seta crossing it, or not, at the sagital plane; **r2 (1p)** dorsal, well at distal margin of notogaster or very close to it, posterior but very close to **ip**; r3 **(1m)** absent. Dorsal lyrifissures from median to large size; **ip** well developed, subterminal, oblique. Notogaster flat, rounded. Large size mites, ranging from 750 to 1000$\mu$. Epimeral apodemata with strong undulated apodematic bonds; **apo** IV as a hat over genitalia. Epimeral chaetotaxy 3 : 1 : 3 : 3. Genital and anal apertures contiguous, partially joint, the contours still visible at the contact area; anal aperture almost cylindrical; genitalia proximal margin at the level of coxae IV; anal and genital plates foveae; **apo ag, apo ad** present. Genitoanal chaetotaxy 7 – 1 – 3 – 3; genital setae on a sole longitudinal row close to inner margin of genitalia; **g1** – **g2, g6** – **g7** at a greater distance than the other pairs; **ag** lateral, at a height equivalent to the half of genitalia, away from it; anal setae on a sole longitudinal row; **ad1** postero-lateral to anal plate. Tb I apophysis short; tarsi pedicels extremely short, bearing three equally strong claws, the medial one a little larger than the others; Ts I famulus enclosed; tarsi **(it)**, **(tc)** on strong apohyses, short, thick, presenting short spines all over their surface **(u)**, **(a)**, **s** well developed, with ventral spines only; **d** Tb I posterior or at the level of **1'**; **fi** Tb II not very close to **d**; **v'** Ge II present; **v'** Ge III absent; **v'** Ge III, IV absent; **p1'** Ts absent; other chaetotaxy features as presented in the family characteristics. Leg chaetotaxy: Ts. 19(2) – 17(2) – 16 – 14; Tb. 4(2) – 5(1) – 4(1) – 4(1); Ge. 4(1) – 4(1) – 2(1) – 2; Fe. 5 – 5 – 3 – 2; Tr. 1 – 1 – 2 – 1.

**Discussion** – I have named this genus in honour of Dr. Marie Hammer who have contributed a great deal for the understanding of the South American oribatid fauna, particularly that of the Andes Mountains.

*Hammeriella grandis* (Hammer, 1961) **comb. n.**

*Pedrocortesia grandis* Hammer, 1961: 34, fig. 26.

**Types** – Male lectotype nº 405, collected by Marie Hammer from humid

moss grown on an Incan wall, in an eucaliptus woodland, Cusco, Peru, February 4, 1955; two paralectotypes, one male one female, nº 687 with no collecting data; two dissected paralectotypes nº 398 and 400 collected by Marie Hammer from humid moss under stones, on a slope, Bisracuche, Peru, on February 2, 1955. Depository: Zoologisk Museum, Copenhagen, Denmark.

**Diagnosis** – *H. grandis* is close to *Hammeriella australis* (Hammer) n. comb., from which it differs mainly by the following characteristics: notogastral foveae larger, closer together; rare small notogastral microtubercles on central and lateral notogaster; with no reticulum on prodorsum; leg reticula polygonal with no visible microtubercles; genitoanal region with less noticeable cuticular thickenings; epimeral region foveate; **ps1** exuviae setae flat, clavate, pilose; bothridium not leaned against notogaster; **ss** shorter, the head narrower; **ip** terminal, well at notogastral margin; **r2** dorsal, close to the margin; **h1** very close to its homologous seta, crossing it at the sagital plane; **ps1** closer to its homologous seta than to **h1**; **ps2**, **ps3** on small apophyses, posterior to **r2**; larger species 905$\mu$ (male), 960$\mu$(female); anal plate inner margin poorly sclerotized; **ag** lateral to genitalia, away from it; **ft'** Ts I close to **ft"**; **d** Tb I posterior to **1'**; Ge III, IV with two tactile setae (**v'** absent).

**Description** – **Integument** – Cuticle granular, covered by a thin layer of cerotegument with small microtubercles. Notogastral microtubercles around and on foveae. Prodorsum and ventral body with no free microtubercles. Leg cerotegument a compact high mass forming well delimited polygonal reticula with no microtubercles. Central notogaster foveate, foveae of median size; foveae close together on lateral and distal notogaster, forming a reticular pattern. Prodorsum not reticulate, with areas of strong sclerotization delimiting semicircular foveae on anterior and median portions. Laterally on metapodosome and ventrally on genitoanal region foveae are large, not very close one to the other, not always circular. Genitoanal region with some undulated cuticular thickenings; anal and genital plates foveate, with cuticular thickenings; genital plate foveae close together forming reticula; anal plate foveae not so close, semicircular. Epimeral foveae also semicircular. Four layer exuvia held by adults; tritonymph exuvia bearing two distal, clavate and pilose **ps1** setae, not set on tubercle, plus two **h1** and two **r2** setae of similar fashion. **Prodorsum** – **Apo le** absent; **apo ro** a short bar with only a thin transversal membrane linking the homologous parts; **apo ro** apodematic extension turned backward forming a loop, which delimits the plates of previous apodeme; **apo c** formed by two well sclerotized foveate plates, which precede two well developed parallel transversal bars of dentate and undulate borders; **apo ex** a short bar originated on bothridium, presenting a mammillate protuberance pointed to similar structure of **apo c**; **apo in** a poorly sclerotized arch linking the **apo ex** mammillate protuberances, being joint to **apo bo** transversal bar by an Y-shaped extension; **apo bo** a well sclerotized bar linking bothridia, bearing **in**. Prodorsal furrow shallow, transversal. **le** dorsal, anterior to **ro**, smooth, thick, on strong tubercle, bent to the sagital plane, tip touching its homologous seta; **ro** lateral, smooth, thick, set on **apo ro**; **ex** short, smooth, on moderate tubercle below **apo ex**; **in** short, lanceolate, upturned, on strong tubercle; bothridium dorso-

lateral, the opening obliquely turned upward and backward, close but not leaned against notogaster; distance between bothridia 178.7μ(M), 206.2μ(F); **ss** clavate, short, the head globose not covered by dark short spines; **ss** length 82.1μ(M,F). Prodorsum length 288.7μ(M), 302.5μ(F); width 316.3μ(M), 343.7μ(F). **Notogaster** – Body flat, rounded. Notogastral tectum present between **bng, lambda** lines. Five pairs of lyrifissures; **ia** almost parallel to the margin; **im** perpendicular or oblique to notogastral margin; **ip** well developed, larger than **im**, being subterminal, oblique; **ih, ips** as long as **im**. latero-abdominal gland posterior to **im**, not too close to it. Five pairs of notogastral setae; **r2 (1p)** dorsal, very close to **ip** on distal margin, being curved, short, thick, with very short spines, bifurcate distally, set on strong tubercle; **h1** distal, very close to its homologous seta, crossing it at the sagital plane, being short, thick, with short spines, bifurcate distally, set on tubercle; **ps1** a little further away from its homologous seta than to **h1**, set on tubercle, similar to the previous setae; integument shallowly invaginated between **ps1**; **ps2, ps3** on small apophyses close together and to **ps1**, being posterior to **r2**. Notogaster length 618.7μ(M), 660μ(F); width 550μ(M), 591.3μ(F); length/width 1.12 (M, F). **Epimeral region** – Mentum **a, m, h** normal. Labio-genal apodeme well sclerotized; mentotectum broad. **Apo** I complete, well developed on coxal region, presenting a transversal bar linking the homologous parts; **apo** II incomplete, strong on coxal region, linked to the homologous part by a transversal bar of undulating margins, delimiting epimeral furrow II; **apo sj** incomplete, similar to the previous apodeme; **sj** furrow well delimited; **apo** III long, incomplete, not linked to the homologous part; **apo** IV short, incomplete, with a curved transversal bar resembling a hat over genitalia, separating epimeres III - IV. Epimeral chaetotaxy 3 : 1 : 3 : 3; epimeral setae equally short. **Genitoanal region** – Genital and anal apertures contiguous, partially joint, the contours still visible at the contact area; genital aperture almost square; anal aperture almost cylindrical; genitalia proximal margin at the level of coxae IV; genital opening length 185.6μ(M), 199.4μ(F); width 105μ(M), 178.7μ(F); anal aperture length 220μ (M), 233.7μ(F); width 171.9μ(F). Genital and anal inner margins weakly sclerotized; outer margins narrow, well sclerotized; **apo ag, apo ad** as wide bars of undulated contours. Genital and anal plates foveate. Genitoanal chaetotaxy 7 – 1 – 3 – 3; genital setae short, on a sole longitudinal row, almost equidistant except for **g1, g7**; anal setae also on a sole longitudinal row, being short, spiny, straight; **ag** lateral to genitalia, not on **apo ag**, at a height equivalent to the half of the plate, away from it; **ad** setae not on tubercles; **ad3** furthest apart from the anal plate, at half of the plate; **ad2** equally distant from **ad1, ad3**; **ad1** postero-lateral to the plate, being the closest. **Lateral features** – Tectopedia absent; with a pedotectal tooth **p** very similar to a true pedotectum when seen from above, being not auriculiform however. Lateral carenae present. Sejugal apophysis absent. Acetabula I, II integument and cotyloid form a blunt structure. **Legs** – Ts-Tb, Tb-Ge, Ge-Fe articulations on proximal sockets, i.e., sockets on proximal ends of tarsi, tibiae, genua. Femoral and trochanteral tracheae present, with large stigmata at the segment bases. Ts I, II with distal apophysis; Ts I famulus enclosed. Trochanter and Fe-Tr articulation of all legs outside acetabula; femora orientation straight after articulation with trochantera; tarsi pedicels extremely short; three equally strong claws, the medial one

slightly longer; proral setae normal, except in Ts I; **(it)**, **(tc)**, short, thick, with short spines all over their surface, on strong apophyses; **(u)**, **(a)**, s almost as developed as **(it)**, **(tc)**, with ventral spines only; other setae longer and less stronger set on small apophyses. **Ts I – ft"** dorsal, very close to **omega**; **ft'** dorso-lateral, close to **ft"**, slightly behind **(a)**; **pv"** distal, lateral, anterior to **pv'**, away from it; **p1'**, **p1"** proximal, almost at the same level; **v"A** anterior to **v'A**, both posterior to **pv'**; **(p)** reduced to eupathidia; **omega** 1 paraxial, less developed than **omega** 2, **omega** 2 antiaxial, longer than **omega** 1, both on a dorsal, antiaxial apophysis of tarsus; famulus enclosed; Ts length 144.4$\mu$(M), 151.3$\mu$(F). **Tb I – d'** posterior to **1'**; **v'**, **v"** at the same transversal plane; tibial apophysis short covering proximal end of tarsus only, being dorsal, antiaxial; **fi2** short, antiaxial, behind **fi1**; Tb length 152$\mu$(M), 165$\mu$(F). **Ge I – 1'**, **1"**, **v'** proximal; **d** dorsal, at half of the segment, close to **sigma**; **sigma** slender; setaceous; Ge length 68.7$\mu$(M, F). **Fe I – d** long; **1'**, **1"** at distal end, almost at the same transversal plane; **two v"** posterior to d; Fe. length 233.7$\mu$(M), 247.5$\mu$(F). **Tr. I** – one sole seta present; Tr length 41.2$\mu$(M, F). **Ts. II – ft"** anterior to **ft'**, not very close to it; **p1'** present, at the same level of **p1"**; **pv'** anterior to **pv"** close to it; **omega 1**, **omega 2** close together; **omega 1** paraxial, a little larger than **omega 2**; Ts length 123.7$\mu$(M), 137$\mu$(F). **Tb. II – d** dorsal, distal, not very close to **fi**; **1'** anterior to **1"**; **1"** at half of the segment; **(v)** anterior to **l'**; **fi** antiaxial, short, on small salience at distal tibia; Tb length 112.8$\mu$(M), 123.7$\mu$(F). **Ge II – d** long, at half of the segment; **1'**, **1"** at the same transversal plane; **v'** present; **sigma** short, antiaxial, close to **d**; **Ge length** 68.7$\mu$(M, F); **Fe. II – d** long; **1'**, **1"** distal, almost at the same transversal plane; two **v"**, one distal, one proximal; Fe length 206$\mu$(M, F). **Tr. II** – one seta, ventral; Tr. length 41$\mu$(M, F). **Ts. III III – ft'** present, posterior to **ft"**, away from it; **p1'** anterior to **ft'** posterior to **pv'**; **p1"** absent; **pv'** posterior to **ft'**, anterior to **pv"**; solenidia absent; Ts length 151.2$\mu$(M), 165$\mu$(F). **Tb. III – d** antiaxial, at distal end; **1'** distal, close to **(v)**; **v'**, **v"** almost at the same transversal plane; **fi** short, antiaxial, close to **d**; Tb length 137.5$\mu$(M), 151.2$\mu$(F); **Ge III – d** antiaxial, close to **d**, at distal margin; **l'** almost at the level of **d**; **v'** absent; Ge length 55$\mu$(M, F). **Fe III – d** well developed; **1'** at the same direction of **d**; **v'** posterior to **d**, **1'**; Fe length 165$\mu$(M), 178.7$\mu$(F). **Tr. III** – two setae, **1'**, **v'**; Tr length 118.2$\mu$(M), 123.7$\mu$(F). **Ts. IV – ft'** absent; **(it)** present; **p1"**, **p1'** absent; **pv'** anterior to **pv"**; solenidia absent; Ts length 165$\mu$(M), 178.7$\mu$(F). **Tb. IV** – as in Tb III; Tb. length 158.2$\mu$(M), 165$\mu$(F). **Ge IV** – as in Ge III; solenidia absent; Ge length 68.7$\mu$(M, F). **Fe IV – d** long; **v'** posterior, close to **d**; Fe length 178.7$\mu$(M), 192.5$\mu$(F). **Tr. IV** – one sole seta, ventral; Tr length 110$\mu$(M), 116.9$\mu$(F); **Leg chaetotaxy** – Ts. 19(2) – 17 (2) – 16 – 14; Tb. 4(2) – 5(1) – 4(1) – 4(1); Ge. 4(1) – 4(1) – 2(1) – 2; Fe. 5 – 5 – 3 – 2; Tr. 1 – 1 – 2 – 1.

**Geographical distribution and habitat** – Cusco, Khenko, Pisac and Bisracuche, Peruvian Andes, in mosses and liverwort.

**Discussion** – In describing *P. grandis*, Hammer (1961) did not designate the holotype nor the type locality. In 1979 four slides containing syntypes of *P. grandis*, from Hammer's collection, were sent on loan by Dr. Henrik Enghoff, the Zoologisk Museum, Copenhagen, for this revision work. The redescription of this species, now considered type of the new genus *Hammeriella*, was based

on these four specimens one of which, numbered 405 from Cusco, was designated lectotype.

*Hammeriella australis* (Hammer, 1962) **comb. n.**

*Pedrocortesia australis* Hammer, 1962: 24, fig. 14

**Types** – Female lectotype nº 1002, collected by Marie Hammer, on lichens and mosses from "Tierra del Fuego", Chile, in 1957/58; one paralectotype same as above. One female, slide nº 1160, collected by Hammer in Puerto Blest, Argentina, in 1955, substrate not mentioned; one male, slide nº 1148, collected by Hammer in Llao-Llao, Argentina, in 1958, substrate also not mentioned. Depository: Zoologisk Museum, Copenhagen, Denmark.

**Diagnosis** – *H. australis* is close to *H. grandis* (Hammer, 1961) from which it differs mainly by the following characteristics; Notogastral foveae smaller, not so close one to the other; with numerous microtubercles of small size on central notogaster and of large size close to the margins; prodorsum reticulate medianly, with large rounded microtubercles; genitoanal cuticle with strong lateral reticulum and transversal, oblique and longitudinal cuticular thickenings, intercalated by large and irregular foveae at central portion, close to the apertures; with abundant rounded microtubercles forming no reticulum on legs; **ps1** exuvial setae elongated; bothridium almost leaned against notogaster; **ss** a little larger, the head slightly broad; prodorsum length 233$\mu$ (M), 240.6$\mu$ (F); width 302.5$\mu$ (M, F); **ip** terminal, well at notogastral margin; **r2 (1p)** at distal notogaster, not bifurcated, closer to **h1**; **h1** not so close to its homologous seta, not crossing it at sagital plane, **ps1** closer to its homologous seta than **h1**; **ps3** anterior to **r2**; **ps2** posterior to **r2**; notogaster length 563.7$\mu$ (M), 605$\mu$ (F); width 495$\mu$ (M), 562.2$\mu$ (F); length/width 1.13 (M), 1.12 (F); anal plate inner margin well sclerotized; **ag** latero-posterior, at a short distance from genitalia; Ts I **ft'** further away from **ft"**; Tb I **d** aligned with **1'**; Ge IIIwith three setae (**v'** present) and one solenidium; Ge IV with three setae, v' also present.

**Geographical distribution and habitat** – Tierra del Fuego, Chile, on lichens and mosses (Hammer, 1962); Puerto Blest, Llao-Llao, Argentina, substrate not mentioned (Hammer, unpublished).

**Discussion** – Hammer (1962) described *P. australis* from two adults and four nymphs collected from lichens and mosses in Tierra del Fuego, Chile; she fail, however, to designate the holotype. In 1979, the two adult syntypes from Chile, plus one male and one female from Argentina, labeled *P. australis* by Hammer, were sent on loan from the Zoologisk Museum for this study. As a result of the comparative investigation *P. australis* is recognised as a distinc species from *P. grandis* both being transferred to the new genus *Hammeriella.* The designation of the lectotype and paralectotypes are also made. The specimens from Argentina are confirmed to be *H. australis.*

## REFERENCES

HAMMER, M. 1961. Investigations on the oribatid fauna of the Andes Mountains. II – Peru. **Biol. Skr. Dan. Vid. Selsk. 13**(1):1-157.

HAMMER, M. 1962. Investigations on the oribatid fauna of the Andes Mountains. III – Chile. **Biol. Skr. Dan. Vid. Selsk. 13**(2):1-97.

PASCHOAL, A.D. 1979. **Revisão da família Plateremaeidae e recaracterização da superfamília Gymnodamaeoidea (Acari: Oribatei).** Tese Livre-Docência, USP, E.S.A. "Luiz de Queiroz", 373 pp.

PASCHOAL, A.D. 1987. A revision of the Plateremaeidae (Acari: Oribatei). **Revta bras. Zool. 3**(6):327-356.