

Review of *Indotritia* (Acari, Oribatida, Oribotritiidae) with a world checklist, a key to all known species, and a description of a new species from China

Dong LIU^{1,2}

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¹ College of Earth Sciences, Jilin University, Changchun 130061, P. R. China.

² Key Laboratory of Wetland Ecology and Environment, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences, Changchun 130102, P. R. China. liudong@iga.ac.cn

ABSTRACT — The oribatid mite genus *Indotritia* Jacot, 1929 (Oribotritiidae) is reviewed. A new species of *Indotritia* (*Indotritia*) collected from litter in Tumen, China, *Indotritia* (*Indotritia*) *tumenensis* n. sp., is described and illustrated. Two species, *Indotritia* (*Indotritia*) *javensis* (Sellnick, 1923) and *Indotritia* (*Indotritia*) *undulata* Bayoumi & Mahunka, 1979, are redescribed according to Chinese specimens. *Indotritia* (*I.*) *javensis* shows a jumping ability according to personal observations. A comprehensive checklist and keys to known species of this genus of the world and for each biogeographic region are provided to facilitate determination and future taxonomic studies.

KEYWORDS — Soil mites; ptyctimous mites; *Zeaotritia*; *Afrotritia*; jumping ability

INTRODUCTION

Jacot (1929) proposed *Indotritia* as a sub-genus of *Euphthiracarus* Ewing, 1917 with *Tritia krakatauensis* Sellnick, 1924 as type species. Jacot (1930) promoted this sub-genus to generic level. Later, Walker (1964) placed *Indotritia* in the family Oribotritiidae and pointed out that Jacot did not check the type specimens of *T. krakatauensis* prior to proposing the genus and misinterpreted Sellnick's descriptions and drawings (Sellnick 1923, 1924, 1925). Märkel (1964) also considered that Jacot's conception of *Indotritia* was partly erroneous and redefined the generic characters. Pérez-Íñigo (1986) proposed the sub-genus *Indotritia* (*Macarotritia*) which was mentioned by Mahunka (1988) as not belonging to *In-*

dotritia, since all of its characters are identical with those of the genus *Austrotritia*. Mahunka (1988) considered that the genus *Indotritia* contains three subgenera: *Indotritia* (*Indotritia*), *Indotritia* (*Afrotritia*) and *Indotritia* (*Zeaotritia*). Then Mahunka (1990b) treated the sub-genus *Macarotritia* as a junior synonym of the genus *Austrotritia* Sellnick, 1959.

A total of 34 valid *Indotritia* species have been reported until now and the genus shows a cosmopolitan distribution. While studying the oribatid collections of Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences (NIGA) and National Zoological Museum of China, Institute of Zoology, Chinese Academy of Sciences (ZM-CAS), three species of *Indotritia* were identified, including a new species. Based on these Chinese spec-

imens, specific remarks on morphological features and divergences are provided. More importantly, a comprehensive world checklist of *Indotritia* species and a key to all known species are provided.

MATERIALS AND METHODS

Measurements (given in μm) and descriptions are based on specimens mounted in temporary cavity slides that were studied using a light microscope equipped with a drawing attachment. Terminology generally follows Niedbała (2000, 2011). Holotype and paratypes are deposited in NIGA. Other specimens are deposited in ZMCAS.

TAXONOMY

Indotritia Jacot, 1929

Euphthiracarus (*Indotritia*) Jacot, 1929, p. 213.

Indotritia: Jacot, 1930, p. 242.

Indotritia: Sellnick, 1959, p. 147; Märkel, 1964, p. 24; 1968, p. 731; Walker, 1964, p. 34; Aoki, 1980, p. 59; Marshall et al., 1987, p. 65; Balogh & Balogh, 1987, p. 8; Balogh & Mahunka, 1987, p. 172; Balogh & Balogh, 1988, p. 32; Mahunka, 1990b, p. 50; Niedbała, 2000, p. 108; 2001a, p. 297; 2001b, p. 85; 2002a, p. 42; 2003, p. 275; 2004a, p. 35; 2006a, p. 13; 2011, p. 60; Subías, 2004, p. 43.

Indotritia (*Indotritia*) Jacot, 1929: Mahunka, 1988, p. 354; Balogh & Balogh, 1992, p. 26; Niedbała, 1998a, p. 35; 2001b, p. 85; Subías, 2004, p. 43.

Indotritia (*Afrotritia*) Mahunka, 1988, p. 354; Mahunka, 1990b, p. 53; Balogh & Balogh, 1992, p. 26; Niedbała, 1998a, p. 34; 2001b, p. 86; Subías, 2004, p. 43.

Indotritia (*Zeaotritia*) Mahunka, 1988, p. 354; Niedbała, 2000, p. 337; Subías, 2004, p. 43.

Zeaotritia Mahunka, 1988: Balogh & Balogh, 1992, p. 26.

Type species: *Indotritia krakatauensis* Sellnick, 1923.

Diagnosis — Median carina absent; one or two pairs of lateral carinae present; bothridial squamae situated above bothridia; sensilli usually setiform, smooth; interlamellar setae arising posterolaterally,

rostral setae in anterior median position; posterior median apodeme absent. Notogaster with 14 pairs of setae; a terminal sinus present; vestigial setae f_1 situated anterior or ventral to h_1 setae; openings of opisthonotal glands (*gla*) and lyrifissures: *ia*, *im*, *ip*, *ih*, *ips*. Ventral region: setae *h* of infracapitular mentum usually very long, considerably longer than distance between them; palps five-segmented, but its genua and femora not hinged, palpal setal formula: 0-2-0-2-9(1); genito-aggenital scissures incomplete, these plates are fused anteriorly; internal transversal apodeme present; ano-genital cleft present or absent, if present, mostly short; genital plates with an extension anteriorly; eight or nine pairs of genital setae present. Legs heterotridactylous, with normal chaetome; solenidia on tarsi II with coupled setae; solenidia on genua IV present; setae *d* on tibiae IV reduced and coupled with the solenidia (updated from Niedbała 2011).

Remarks — The concept of higher taxa in the Euphthiracaroidae is related to the fusion of the genital and aggenital plates, and anal and adanal plates, so I think the separation of these plates is a sufficient argument to divide *Indotritia* into three sub-genera: *Indotritia* (*Indotritia*), *Indotritia* (*Afrotritia*) and *Indotritia* (*Zeaotritia*).

Distribution — Cosmopolitan.

Key to sub-genus of *Indotritia*

1. Ano-genital cleft absent; anal plates without setae *Indotritia* (*Zeaotritia*)
— Ano-genital cleft present; anal plate with setae 2
2. Ano-adanal suture partly reduced, posterior part of anal and adanal plates fused.
..... *Indotritia* (*Afrotritia*)
— Ano-adanal suture well developed, anal and adanal plates separated *Indotritia* (*Indotritia*)

Description of a new species from China

Indotritia (*Indotritia*) *tumenensis* n. sp. (Figure 1)

Diagnosis — Prodorsum with one pair of long lateral carinae; sensilli club-like, with slightly obtuse

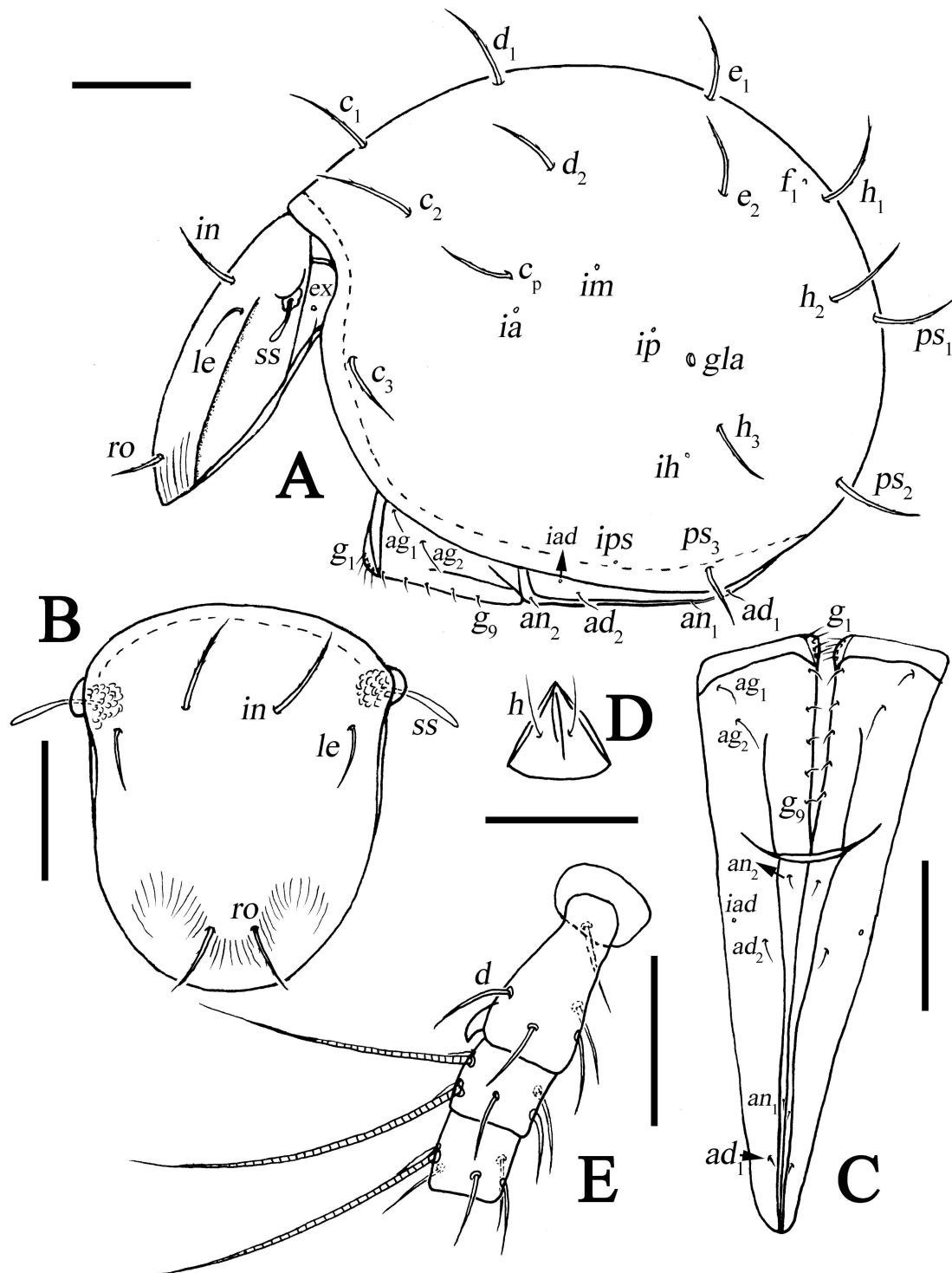


FIGURE 1: *Indotritia (Indotritia) tumenensis* n. sp.: A – lateral view of body (legs removed); B – prodorsum, dorsal view; C – ventral plate; D – mentum of infracapitulum; E – trochanter, femur, genu and tibia of leg I. Scale bars: A – C, E = 100 µm; D = 50 µm.

apex; interlamellar, rostral and notogastral setae robust, erect and sparsely covered with small spines; lamellar setae procumbent and thinner; exobothridial setae vestigial; vestigial setae f_1 situated anterior to setae h_1 ; ano-genital cleft short; formula of genital setae 5:4; $ag_2 > ag_1$; two pairs of anal and two pairs of adanal setae; lyrifissures iad situated laterally between setae ad_2 and an_2 ; femur I with strong triangular spine in anterodorsal end.

Description — Measurement of holotype: prodorsum: length 275, width 208, height 95, setae: ss 55, ro 52, in 75, le 46; notogaster: length 545, width 350, height 440; c_1 87, d_1 90, e_1 85, h_1 90, ps_1 88 genito-aggenital plate 152×90 , ano-adanal plate 260×65 . Range of variations for measurements of paratypes: prodorsum: length 270 – 295, width 205 – 215, height 92 – 100; notogaster: length 555 – 575, width 360 – 365, height 450 – 465.

Integument — Colour brown. Integument finely dotted, anterior part of prodorsum with longitudinal striations.

Prodorsum — One pair of long and strong lateral carinae present; sensilli (ss) rough and club-like, with slightly obtuse apex; interlamellar setae (in) strongly erect, robust, sparsely covered with small spines; rostral setae (ro) semi-erect, sparsely covered with small spines, slightly thinner than interlamellar setae; lamellar setae (le) smooth, procumbent, much thinner than rostral and interlamellar setae; exobothridial setae (ex) vestigial; comparative lengths: $in > ss > ro > le$, $in/in/ro-ro \approx 2.1$.

Notogaster — Notogastral setae relatively short ($c_1/c_1-d_1 \approx 0.6$), curved, robust, sparsely covered with small spines; setae c_1 and c_2 remote from anterior border, setae c_3 near the border; vestigial setae f_1 situated anterior to setae h_1 .

Ventral region — Suture between genital and aggenital plates reaching the level of setae g_7 ; nine pairs of genital setae (g) present, among which four pairs in progenital position; two pairs of aggenital setae (ag), setae ag_2 longer than ag_1 ; ano-genital cleft short; two pairs of short anal setae (an) and two pairs of adanal setae (ad) present; lyrifissures iad situated laterally between setae ad_2 and an_2 .

Legs — Setal counts for leg segments: I: 1-4-5(2)-5(1)-22(3); II: 1-4-4(1)-3(1)-19(2), III: 3-2-3(1)-3(1)-14,

IV: 3-2-2(1)-3(1)-11; femur I with strong triangular spine in anterodorsal end.

Material examined — Holotype: 1 adult (NIGA, in alcohol), China: Jilin Province, Yabian, Tumen, from litter near border of China and North Korea, 4 Apr. 2015, leg. Dong Liu and Yuting Huang. Paratypes: 3 adults (NIGA, in alcohol), same data as holotype.

Etymology — The new specific name "*tumenensis*" refers to the type locality Tumen in Jilin Province, China.

Remarks — This new species is distinguished from all congeneric species with two pairs of anal and two pairs of adanal setae and by the shape of sensilli (swollen and club-like versus thin and setiform in other species).

In this genus, only three species, *I. (I.) lanceolata*, *I. (I.) nunomurai* and *I. (I.) clavata*, have swollen sensilli. Compared with *I. (I.) lanceolata* and *I. (I.) nunomurai*, this new species differs by following combination of features:

- 1) sensilli with slightly obtuse apex (versus with sharp pointed apex in *I. (I.) lanceolata*, with thin and long apex in *I. (I.) nunomurai*);
- 2) one pair of prodorsal lateral carinae present (versus two pairs in *I. (I.) lanceolata* and *I. (I.) nunomurai*);
- 3) two pairs of anal setae (versus one pair);
- 4) two pairs of adanal setae (versus three pairs).

The new species is distinguished from *I. (I.) clavata* by

- 1) sensilli longer ($in > ss > ro > le$) and clublike (versus short ($ro > le = in > ss$) and fusiform in *I. (I.) clavata*);
- 2) exobothridial setae vestigial (versus not vestigial);
- 3) two pairs of anal and two pairs of adanal setae present (versus one pair of anal and three pairs of adanal setae);
- 4) formula of genital setae 5:4 (versus 4:5).

Redescriptions of species from China

Indotritia (Indotritia) javensis (Sellnick, 1923) (Figures 2 and 3)

Measurements — *Specimens from Hainan Province* (Figs. 2A – H): prodorsum: length 290 – 400, width 240 – 305, height 98 – 140, sensillus 125 – 165, setae:

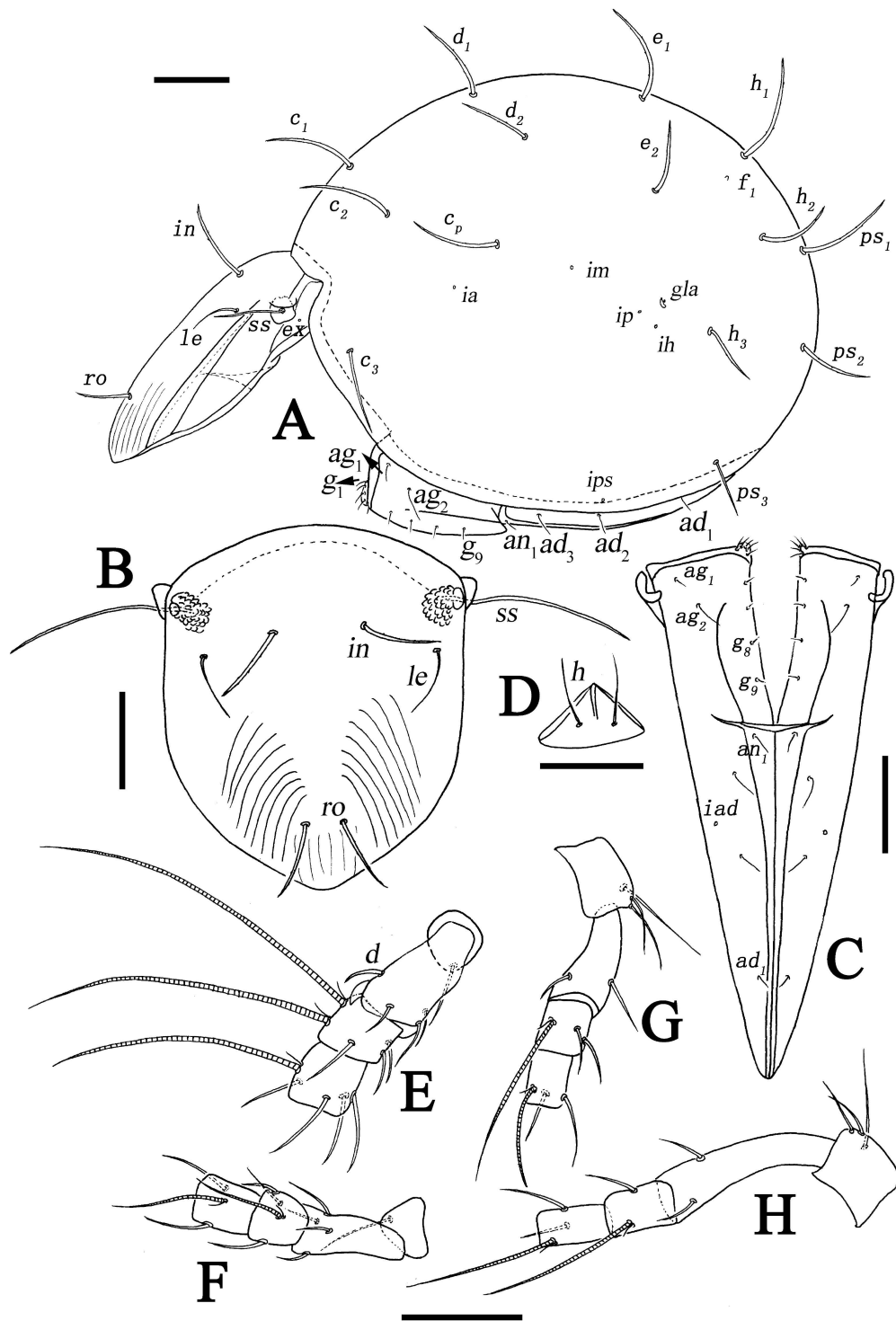


FIGURE 2: *Indotritia (Indotritia) javensis* (Sellnick, 1923) (specimen from Hainan Province): A – lateral view of body (legs removed); B – prodorsum, dorsal view; C – ventral plate; D – mentum of infracapitulum; E-H – trochanter, femur, genu and tibia: E, leg I; F, leg II; G, leg III; H, leg IV. Scale bars: A – C, E – H = 100 μ m; D = 50 μ m.

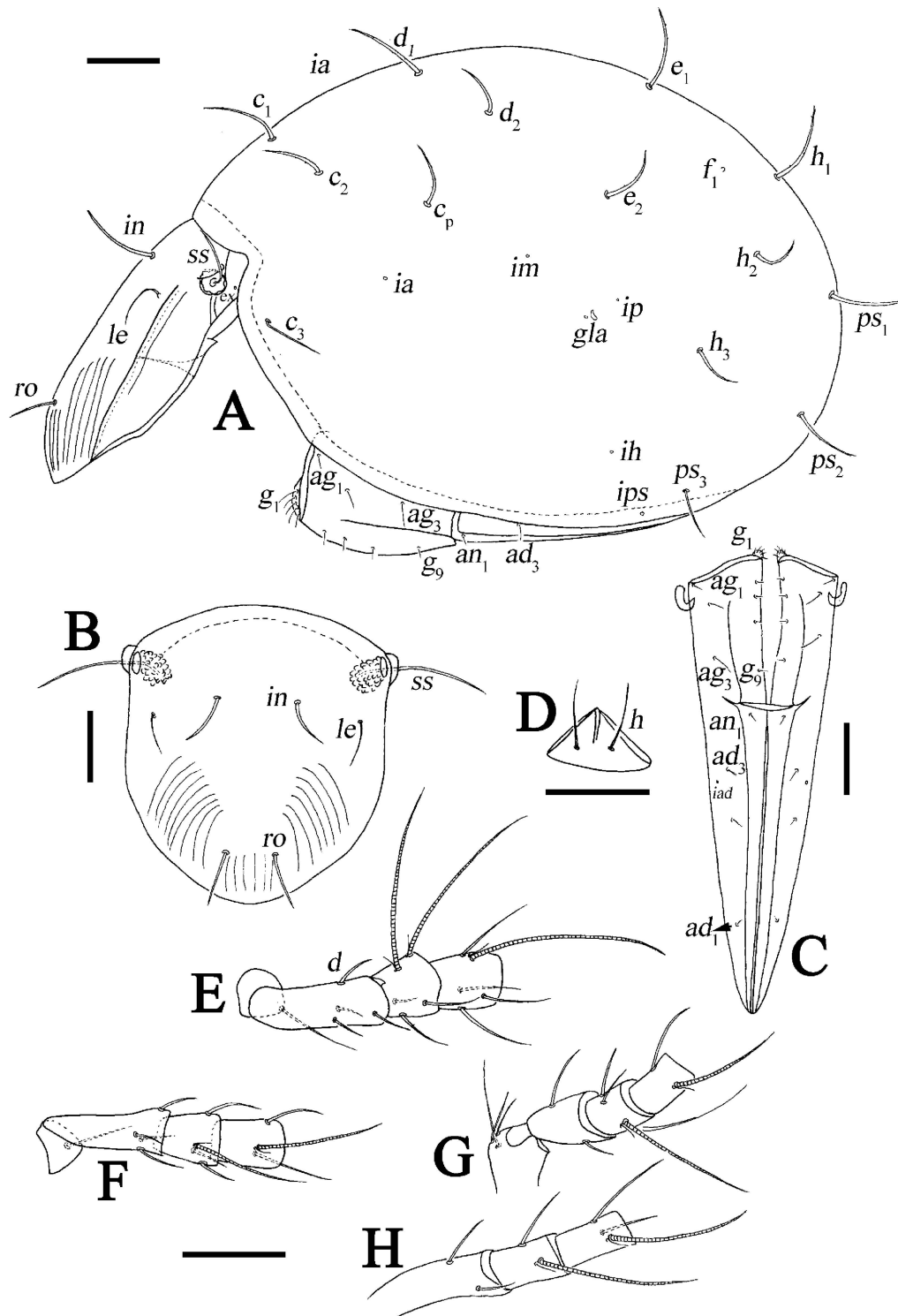


FIGURE 3: *Indotritia (Indotritia) javensis* (Sellnick, 1923) (specimen from Sichuan Province): A – lateral view of body (legs removed); B – prodorsum, dorsal view; C – ventral plate; D – mentum of infracapitulum; E-H – trochanter, femur, genu and tibia: E, leg I; F, leg II; G, leg III; H, leg IV. Scale bars: A – C, E – H = 100 μ m; D = 50 μ m.

ro 60, *in* 110, *le* 75, distance between setae: *ro* – *ro* 40, *in* – *in* 95, *le* – *le* 230; notogaster: length 498 – 710, width 385 – 590, height 405 – 600; setae: *c*₁ 125, *c*₂ 125, *c*₃ 125, *c*_p 125, *d*₁ 120, *d*₂ 120, *e*₁ 145, *e*₂ 140, *h*₁ 150, *h*₂ 125, *h*₃ 118, *ps*₁ 145, *ps*₂ 130, *ps*₃ 90; distance between setae: *c*₁ – *d*₁ 190, *d*₁ – *e*₁ 220, *e*₁ – *h*₁ 135, *h*₁ – *ps*₁ 138; ventral region: genito-aggenital plate 195 × 140, ano-adanal plate 370 × 105.

Measurements — *Specimens from Sichuan Province* (Figs. 3A – H): prodorsum: length 405 – 455, width 305 – 370, height 150 – 160, sensillus 140 – 160, setae: *ro* 65 – 80, *in* 93 – 110, *le* 60 – 80, distance between setae: *ro* – *ro* 60, *in* – *in* 110, *le* – *le* 280; notogaster: length 750 – 930, width 545 – 670, height 570 – 705; setae: *c*₁ 115, *c*₂ 115, *c*₃ 100, *c*_p 100, *d*₁ 110, *d*₂ 100, *e*₁ 115, *e*₂ 103, *h*₁ 110, *h*₂ 118, *h*₃ 100, *ps*₁ 110, *ps*₂ 110, *ps*₃ 75; distance between setae: *c*₁ – *d*₁ 200, *d*₁ – *e*₁ 340, *e*₁ – *h*₁ 220, *h*₁ – *ps*₁ 175; ventral region: genito-aggenital plate 160 × 200 – 160 × 250, ano-adanal plate 375 × 105 – 425 × 105.

Prodorsum with two divergent lateral carinae on each side (specimens from Sichuan Province with lower ones thinner, and much shorter, parallel to upper ones); sensilli long, setiform and smooth; interlamellar and rostral setae robust and covered with small spines; lamellar setae smooth and much thinner than rostral and interlamellar setae; exobothridial setae vestigial. Notogastral setae relatively short ($c_1/c_1 - d_1 \approx 0.7$), curved, robust, covered with small spines, except setae *c*₃ and *ps*₃ smooth and thin; setae *c*₁ and *c*₂ remote from anterior border, setae *c*₃ near the border; vestigial setae *f*₁ ventral or anterior to setae *h*₁. Suture between genital and aggenital plates reaching beyond the level of setae *g*₇; formula of genital setae 4:5; two or three pairs of aggenital setae, one pair of anal and three pairs of adanal setae present; lyri-fissures *iad* situated laterally between setae *ad*₂ and *ad*₃. $h > h - h$. Setation of legs: I: 1-4-5(2)-5(1)-22(3); II: 1-4-4(1)-3(1)-19(2), III: 3-2-3(1)-3(1)-14, IV: 3-2-2(1)-3(1)-11; femur I with distinct triangular spine in anterodorsal end.

Material examined — ZMCAS: CHINA: **Hainan Province**: 1 adult (in alcohol, H94040106), Ledong Li Autonomous County, Jianfengling National Forest Park (18°41'48.4"N, 108°47'18.0"E), from litter,

Apr., 1994, leg. Chong-Hui Liao; 1 adult (in alcohol, LD-07-68), at same locality as H94040106, main peak, from litter under arbor forest, 1357M, 8 Aug., 2007, leg. Dong Liu; 2 adults (in alcohol, LD-07-50), Changjiang Li Autonomous County, Bawangling National Nature Reserve (19°05'18.2"N, 109°11'18.4"E), from litter under *Dacrydium pierrei*, 1040M, 3 Aug., 2007, leg. Dong Liu; 1 adult (in alcohol, LD-07-105), Qiongzong Li and Miao Autonomous County, Limu Mt. (19°10'36.5"N, 109°44'12.2"E), Qumu, from litter under *Dacrydium pierrei*, 820M, 18 Aug., 2007, leg. Dong Liu; 2 adults (in alcohol, LD-07-112), Qiongzong Li and Miao Autonomous County, Limu Mt. (19°10'54.2"N, 109°45'6.5"E), from litter under deadwood, 946M, 19 Aug., 2007, leg. Dong Liu; 2 adults (in alcohol, LD-07-51), with same data as LD-07-50, from litter under pine forest. **Fujian Province**: 2 adults (in alcohol, W-89-33), Wuyi Mt., Guadun (27°44'52.25"N, 117°40'59.28"E), from deadwood, 30 Apr., 1989, leg. Hui-Fu Wang; 2 adults (in alcohol, W-89-70), Liancheng County, Quxi Town, Meihua Mt. (25°20'30.22"N, 116°49'19.25"E), from litter, 22 May, 1989, leg. Yun-Qi Cui; 2 adults (in alcohol, W-93-18), Fuzhou City (26°4'27.43"N, 119°17'47.68"E), from litter, 29 Mar., 1991, leg. Fu-Sheng Huang. **Sichuan Province**: 4 adults (in alcohol, CJ-01-3), Kangding, Paomashan Mt. (30°2'30.85"N, 101°57'37.70"E), 2500 m a.s.l., from moss, 8 Aug., 2001, leg. Jun Chen.

Remarks — This species, with a semi-cosmopolitan distribution, has many variable features. Within the Chinese specimens, no differences were observed between specimens from Fujian and Hainan Province, whereas differences in various features were observed between these latter specimens and those collected in the Sichuan province:

- 1) shape of notogaster (rounded in specimens from Hainan and Fujian versus oblong in specimens from Sichuan);
- 2) shape of prodorsal lateral carinae (lower carinae long and divergent in Hainan and Fujian versus much shorter and nearly parallel in Sichuan);
- 3) distance between rostral setae (shorter in Hainan and Fujian versus longer in Sichuan);
- 4) number of aggenital setae (two pairs in Hainan

and Fujian versus three pairs in Sichuan);
 5) position of lyrifissures *iad* (at the middle level between setae *ad*₂ and *ad*₃ in Hainan and Fujian versus closer to setae *ad*₃ in Sichuan);
 6) shape of anterodorsal spine on femur I (strong in Hainan and Fujian versus much smaller in Sichuan);
 7) different size of body size (smaller in Hainan and Fujian versus larger in Sichuan). Although these specimens differ in several morphological features, these differences are supposed to be included in intraspecific variation.

Biological notes — According to my observations, this species is able to jump when they are touched.

***Indotritia (Indotritia) undulata*
 Bayoumi & Mahunka, 1979 (Figure 4)**

Measurements — *Specimens from Jiangsu Province*: prodorsum: length 350 – 372, width 270 – 275, height 95 – 125, sensillus 125, setae: *ro* 75, *in* 90, *le* 80, distance between setae: *ro* – *ro* 35, *in* – *in* 90, *le* – *le* 230; notogaster: length 590 – 610, width 456 – 470, height 460 – 470; setae: *c*₁ 105, *c*₂ 96, *c*₃ 100, *c*_p 95, *d*₁ 102, *d*₂ 96, *e*₁ 112, *e*₂ 110, *h*₁ 110, *h*₂ 105, *h*₃ 95, *ps*₁ 100, *ps*₂ 105, *ps*₃ 80; distance between setae: *c*₁ – *d*₁ 145, *d*₁ – *e*₁ 200, *e*₁ – *h*₁ 135, *h*₁ – *ps*₁ 120; ventral region: genito-aggenital plate 170 × 122, anal and adanal plates 285 × 80.

Prodorsum with one pair of long lateral carinae; sensilli long, setiform, rigid and smooth; interlamellar and rostral setae robust and sparsely barbed; lamellar setae smooth, procumbent, much thinner than rostral and interlamellar setae; exobothridial setae vestigial; comparative length: *in* > *le* > *ro*. Notogastral setae relatively short (*c*₁/*c*₁–*d*₁ = 0.72), curved, robust, sparsely barbed, except setae *c*₃ and *ps*₃ smooth and thin; setae *c*₁ and *c*₂ remote from anterior border, setae *c*₃ near the border; vestigial setae *f*₁ anterior to setae *h*₁. Suture between genital and aggenital plates reaching between levels of setae *g*₈ and *g*₇; formula of genital setae 4:5; three pairs of aggenital setae, one pair of anal and three pairs of adanal setae present; lyrifissures *iad* situated laterally between setae *ad*₂ and *ad*₃. Setation of legs: I: 1-4-5(2)-5(1)-22(3); II: 1-4-4(1)-3(1)-19(2), III: 3-2-

3(1)-3(1)-14, IV: 3-2-2(1)-3(1)-11; femur I with strong triangular spine in anterodorsal end.

Material examined — ZMCAS: CHINA: Jiangxi Province: 1 adult (in alcohol, Yao-22), Lushan Mountain, Xiaotianchi. (28°41'1.15"N, 115°51'30.01"E), from litter, 2 Sep., 1983, leg. Wen-Bing Yao. Jiangsu Province: 1 adult (in alcohol, W-91-4), Nanjing City, Zhongshan Mountain (32°3'32.30"N, 118°50'49.50"E), from litter, 30 May, 1991, leg. Fu-Sheng Huang; 1 adult (in alcohol, W-91-5), with same data as W-91-4; 2 adults (in alcohol, W-89-42), Nanjing City (32°3'30.11"N, 118°47'47.28"E), eastern suburb, from litter of tea garden, 12 May, 1989, leg. Hui-Fu Wang.

Remarks — Specimens from Jiangxi were investigated and showed conformity with the specimens from Jiangsu. Differences in several features were observed between these specimens (Jiangxi and Jiangsu provinces) and the holotype from Nepal: 1) surface of notogaster finely dotted (versus discontinuous wavy on holotype); 2) *in* > *le* > *ro* (versus *le* > *in* > *ro* on holotype); 3) three pairs of aggenital setae present (versus two pairs on holotype); 4) genito-aggenital scissures shorter reaching between levels of setae *g*₇ and *g*₈ (versus between levels of setae *g*₆ and *g*₇ on holotype).

WORLD CHECKLIST OF THE GENUS

Indotritia JACOT, 1929

Indotritia (Indotritia) Jacot, 1929

Indotritia (Indotritia) africana Mahunka, 1984

Indotritia africana Mahunka, 1984a, p. 405, figs. 44 – 46.

Indotritia (Indotritia) africana Mahunka, 1984: Subías, 2004, p. 43.

Indotritia africana Mahunka, 1984: Balogh & Balogh, 2002, p. 44; Niedbala, 2006a, p. 13, fig. 5(J – X).

Distribution: South Africa.

Indotritia (Indotritia) allocotos Niedbala, 2004

Indotritia allocotos Niedbala, 2004a, p. 35, fig. 18(A – E).

Indotritia (Indotritia) allocotos Niedbala, 2004: Subías,

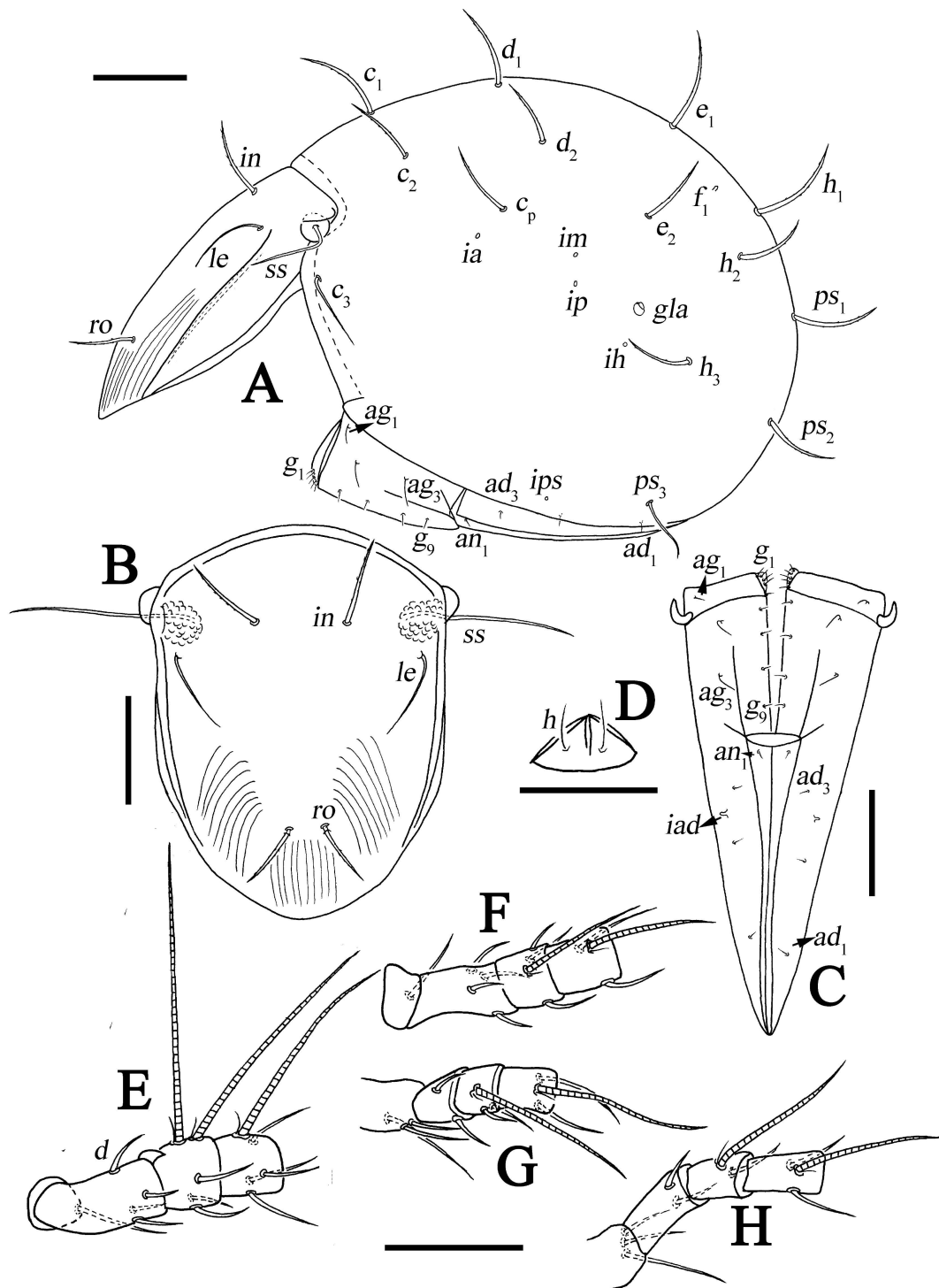


FIGURE 4: *Indotritia (Indotritia) undulata* Bayoumi & Mahunka, 1979 (specimen from Jiangsu Province): A, lateral view of body (legs removed); B, prodorsum, dorsal view; C, ventral plate; D, mentum of infracapitulum; E – H, trochanter, femur, genu and tibia: E, leg I; F, leg II; G, leg III; H, leg IV. Scale bars: A – C, E – H = 100 μ m; D = 50 μ m.

Liu D.

2004(2006), p. 48.

Distribution: Brazil.

***Indotritia (Indotritia) bellingeri*
Niedbała & Schatz, 1996**

Indotritia bellingeri Niedbała & Schatz, 1996, p. 248, figs. 34 – 49.

Indotritia (Indotritia) bellingeri Niedbała & Schatz, 1996: Subías, 2004, p. 43.

Indotritia bellingeri Niedbała & Schatz, 1996: Niedbała, 2001a, p. 297, figs. 51 – 56; 2003, p. 275, fig. 79 – 91; 2004a, p. 36, fig. 18(F – L); 2008a, p. 764; Niedbała & Ermilov, 2014, p. 255, fig. 2A; Niedbała & Starý, 2015, p. 129.

Distribution: Neotropical Region.

***Indotritia (Indotritia) breviseta* (Berlese, 1923)**

Tritia berlesei var. *breviseta* Berlese, 1923, p. 261.

Tritia berlesei var. *breviseta* Berlese, 1923: Castagnoli & Pegazzano, 1985, p. 52.

Oribotritia breviseta (Berlese, 1923): van der Hammen, 1959, p. 35; Mahunka, 1991, p. 36, figs. 13 – 14.

Indotritia (Indotritia) breviseta (Berlese, 1923): Niedbała, 1993, p. 43, figs. 14 – 16; 1998a, p. 35, figs. 38 – 40; 2001b, p. 91; Subías, 2004, p. 43.

Indotritia breviseta (Berlese, 1923): Balogh & Balogh, 2002, p. 43.

Distribution: Oriental region and Africa.

***Indotritia (Indotritia) clavata* Wallwork, 1977**

Indotritia clavata Wallwork, 1977, p. 196, fig. 80; Balogh & Balogh, 2002, p. 43.

Indotritia (Indotritia) clavata Wallwork, 1977: Niedbała, 1998a, p. 35, figs. 41 – 46; 2001b, p. 91; Subías, 2004, p. 43.

Distribution: St. Hélène.

***Indotritia (Indotritia) consimilis* Märkel, 1964**

Indotritia krakatauensis consimilis Märkel, 1964, p. 25, fig. 3(a – c).

Indotritia consimilis Märkel, 1964: Balogh & Mahunka, 1983, p. 172; Mahunka, 1990a, p. 750, figs. 32 – 38; Mahunka & Mahunka-Papp, 2004, p. 84; Niedbała, 2011, p. 61, figs. 48(A – H), 49(A – F);

2012a, p. 28.

Indotritia (Indotritia) consimilis Märkel, 1964: Subías, 2004, p. 43.

Distribution: Palaearctic Region.

***Indotritia (Indotritia) cypha* Niedbała, 2006**

Indotritia cypha Niedbała, 2006a, p. 14, fig. 6(A – D).

Indotritia (Indotritia) cypha Niedbała, 2006: Subías, 2004(2007), p. 34.

Distribution: South Africa.

***Indotritia (Indotritia) didyma* Niedbała, 2006**

Indotritia didyma Niedbała, 2006a, p. 14, fig. 6(E – J).

Indotritia (Indotritia) didyma Niedbała, 2006: Subías, 2004(2007), p. 34.

Distribution: South Africa.

***Indotritia (Indotritia) eksteeni* Niedbała, 2006**

Indotritia eksteeni Niedbała, 2006a, p. 15, fig. 6(K – R).

Indotritia (Indotritia) eksteeni Niedbała, 2006: Subías, 2004(2007), p. 34.

Distribution: South Africa.

***Indotritia (Indotritia) fusa* Niedbała, 2006**

Indotritia fusa Niedbała, 2006a, p. 15, fig. 6(S – Y).

Indotritia (Indotritia) fusa Niedbała, 2006: Subías, 2004(2007), p. 34.

Distribution: South Africa.

***Indotritia (Indotritia) jacoti* Niedbała, 2001**

? *Oribotritia glabrata* sensu Jacot 1933, p. 258, figs. 26 – 29.

Indotritia jacoti Niedbała, 2001a, p. 295, figs. 40 – 43; 2002a, p. 42, figs. 245 – 249.

Indotritia (Indotritia) jacoti Niedbała, 2001: Subías, 2004, p. 43.

Distribution: Neotropical and Nearctic Regions.

***Indotritia (Indotritia) javensis* (Sellnick, 1923)**

Tritia javensis Sellnick, 1923, p. 38, figs. 3, 14, 26; 1925, p. 459, figs. 1 – 4.

Indotritia javensis (Sellnick, 1923): Märkel, 1964, p. 30; Aoki, 1980, p. 60, figs. 22 – 23; Fujikawa et al., 1993, p. 24; Niedbała & Corpuz-Raros, 1998, p. 17, figs. 36 – 39; Niedbała, 2000, p. 110, figs. 303 – 324; 2004b, p. 399; 2006b, p. 119; 2011, p. 62, figs. 50(A – O), 51(A – F); 2012a, p. 28; 2012b, p. 187; Balogh & Balogh, 2002, p. 44; Liu & Chen, 2010, p. 2, figs. 1 – 8.

Indotritia (Indotritia) javensis (Sellnick, 1923): Mahunka, 1988, p. 356; Subías, 2004, p. 43.

Oribotritia mollis Aoki, 1959, p. 19, Abb. 14(A – C); Aoki 1980, p. 60.

Indotritia completa Mahunka, 1987a, p. 260, figs. 1 – 5; Niedbała, 2000, p. 110.

Distribution: Oriental, Australian, Palaearctic and Subantarctic Regions.

***Indotritia (Indotritia) krakatauensis*
(Sellnick, 1923)**

Tritia krakatauensis Sellnick, 1923, p. 39, fig. 4, 15, 27; 1925, p. 461

. *Euphthiracarus (Indotritia) krakatauensis* (Sellnick, 1923): Jacot, 1929, p. 213.

Indotritia (krakatauensis) krakatauensis (Sellnick, 1923): Märkel, 1964, p. 30.

Indotritia krakatauensis (Sellnick, 1923): Niedbała, 1998b, p. 449, figs. 27 – 43; 2000, p. 114, figs. 325 – 328; 2001a, p. 298, figs. 62 – 65; 2002a, p. 43, figs. 250 – 253; 2002b, p. 182; 2003, p. 276, figs. 92 – 94; 2004a, p. 37, fig. 18(M – O); 2006b, p. 119; 2008a, p. 764; 2012b, p. 187; Niedbała & Schatz, 1996, p. 249, figs. 50 – 66; Niedbała & Corpuz-Raros, 1998, p. 21, figs. 40 – 43; Balogh & Balogh, 2002, p. 44; Niedbała & Penttinen, 2007, p. 527.

Indotritia (Indotritia) krakatauensis (Sellnick, 1923): Niedbała, 1998a, p. 39, fig. 51; 2001b, p. 85; Subías, 2004, p. 43.

Indotritia (Zeaotritia) krakatauensis (Sellnick, 1923): Niedbała, 2000, p. 341, figs. 325 – 328.

Indotritia acanthophora Märkel, 1964, p. 27, figs. 4(a – h); Niedbała & Schatz, 1996, p. 249.

Indotritia acanthophora Märkel, 1964: Balogh, 1972, pl. 64, fig. 8; Balogh & Balogh, 1987, p. 8; Balogh &

Balogh, 1988, p. 32.

Indotritia heterotricha Mahunka, 1984b, p. 672, figs. 6 – 9; Niedbała, 1998a, p. 39.

Indotritia sellnicki Aoki, 1965, p. 137, Abb. 14 – 16; Niedbała & Schatz, 1996, p. 249.

Indotritia septentrionalis Mahunka, 1987b, p. 115, figs. 17 – 19; Niedbała, 1998a, p. 39.

Indotritia tropica Starý, 1993, p. 289, figs. 3(A – C), 4(A – B); Niedbała, 1998a, p. 39.

Distribution: Pantropical and subtropical distribution.

***Indotritia (Indotritia) lanceolata* (Aoki, 1988)**

Austrotritia lanceolata Aoki, 1988, p. 31, figs. 4 – 6; Subías, 2004, p. 42.

Indotritia lanceolata (Aoki, 1988): Niedbała, 2000, p. 116, figs. 329 – 335.

Indotritia lanceolata (Aoki, 1988): Niedbała, 2011, p. 62, figs. 51(G – J), 52(A – C); 2012a, p. 28.

Indotritia (Indotritia) lanceolata (Aoki, 1988): Subías, 2004(2012), p. 51.

Distribution: Japan.

***Indotritia (Indotritia) missouri* Niedbała, 2002**

Indotritia missouri Niedbała, 2002a, p. 43, figs. 260 – 263.

Indotritia (Indotritia) missouri Niedbała, 2002: Subías, 2004, p. 43.

Distribution: USA.

***Indotritia (Indotritia) montkoupensis*
Niedbała & Starý, 2014**

Indotritia montkoupensis Niedbała & Starý, 2014, p. 34, fig. 1(A – H).

Indotritia (Indotritia) montkoupensis Niedbała & Starý, 2014: Subías, 2004(2015), p. 52.

Distribution: Cameroon.

***Indotritia (Indotritia) nuda* Mahunka, 1988**

Indotritia nuda Mahunka, 1988, p. 354, figs. 24 – 27; Balogh & Balogh, 2002, p. 43.

Indotritia (Indotritia) nuda Mahunka, 1988: Niedbała, 1998a, p. 39, figs. 47 – 50; 2001b, p. 91; Subías, 2004, p. 43.

Indotritia usumbarensis Starý, 1993, p. 286, figs. 1(A

Liu D.

– C), 2(A – B); Niedbała, 1998a, p. 39.
Distribution: Tanzania.

***Indotritia (Indotritia) nunomurai*
Hirauchi & Aoki, 2011**

Indotritia nunomurai Hirauchi & Aoki, 2011, p. 103, figs. 1 – 10. *Indotritia (Indotritia) nunomurai* Hirauchi & Aoki, 2011: Subías, 2004(2012), p. 51.
Distribution: Japan.

***Indotritia (Indotritia) paraconsimilis*
Niedbała, 2012**

Indotritia paraconsimilis Niedbała, 2012 in Niedbała & Ermilov, 2012, p. 183, fig. 1(A – F).
Indotritia (Indotritia) paraconsimilis Niedbała, 2012: Subías, 2004(2013), p. 52.
Distribution: Ethiopia.

***Indotritia (Indotritia) partita* Niedbała, 2006**

Indotritia partita Niedbała, 2006a, p. 16, fig. 7(A – E).
Indotritia (Indotritia) partita Niedbała, 2006: Subías, 2004(2007), p. 34.
Distribution: South Africa.

***Indotritia (Indotritia) paulyi* Niedbała, 1998**

Indotritia (Indotritia) paulyi Niedbała, 1998a, p. 41, figs. 52 – 57; Balogh & Balogh, 2002, p. 44.
Indotritia (Indotritia) paulyi Niedbała, 1998: Niedbała, 2001b, p. 85; Subías, 2004, p. 43.
Distribution: Ethiopian Region.

***Indotritia (Indotritia) phymatha* Niedbała, 2006**

Indotritia phymatha Niedbała, 2006a, p. 16, fig. 7(E – L).
Indotritia (Indotritia) phymatha Niedbała, 2006: Subías, 2004(2007), p. 34.
Distribution: South Africa.

***Indotritia (Indotritia) propinqua* Niedbała, 1991**

Indotritia propinqua Niedbała, 1991, p. 205, figs. 1 – 14; Niedbała, 2000, p. 116, figs. 336 – 341; Balogh & Balogh, 2002, p. 43.
Indotritia (Indotritia) propinqua Niedbała, 1991: Subías, 2004, p. 43.
Distribution: Oriental Region.

***Indotritia (Indotritia) retusa*
Niedbała & Schatz, 1996**

Indotritia retusa Niedbała & Schatz, 1996, p. 251, figs. 67 – 74; Niedbała, 2001a, p. 299, figs. 66 – 71; 2002a, p. 44, figs. 254 – 259; 2004a, p. 38, fig. 19(A – H); 2006a, p. 17, fig. 7(M – R).
Indotritia (Indotritia) retusa Niedbała & Schatz, 1996: Subías, 2004, p. 43.
Distribution: Neotropical and Ethiopian Regions.

***Indotritia (Indotritia) tetradis* Niedbała, 2004**

Indotritia tetradis Niedbała, 2004, p. 38, fig. 19(I – N).
Indotritia (Indotritia) tetradis Niedbała, 2004: Subías, 2004(2006), p. 49.
Distribution: Chile.

***Indotritia (Indotritia) tricarinata* Niedbała, 2006**

Indotritia tricarinata Niedbała, 2006c, p. 66, fig. 5(A – H); 2011, p. 63, fig. 53(A – I); 2012a, p. 29.
Indotritia (Indotritia) tricarinata Niedbała, 2006: Subías, 2004(2007), p. 34.
Distribution: Palaearctic Region.

***Indotritia (Indotritia) tripartita* Niedbała, 1998**

Indotritia (Indotritia) tripartita Niedbała, 1998a, p. 44, figs. 58 – 63; 2001b, p. 85.
Indotritia (Indotritia) tripartita Niedbała, 1998: Subías, 2004, p. 43.
Indotritia tripartita Niedbała, 1998: Balogh & Balogh, 2002, p. 44.
Distribution: Ethiopian Region.

***Indotritia (Indotritia) tumenensis* n. sp.**

Distribution: China.

***Indotritia (Indotritia) undulata*
Bayoumi & Mahunka, 1979**

Indotritia undulata Bayoumi & Mahunka, 1979, p. 23, figs. 21 – 23; Niedbała, 2000, p. 119, figs. 342 – 344; 2011, p. 64, fig. 54(A – L); 2012a, p. 29; Balogh & Balogh, 2002, p. 43; Liu & Chen, 2010, p. 5, figs. 9 – 16.

Indotritia (Indotritia) undulata Bayoumi & Mahunka, 1979: Mahunka, 1988, p. 356; Subías, 2004, p. 43.

Indotritia aspera Niedbała, 2000, p. 108, figs. 294 – 302; Niedbała, 2011, p. 64.

Indotritia (Indotritia) aspera Niedbała, 2000: Subías, 2004, p. 43.

Distribution: Oriental and Palaearctic Regions.

***Indotritia (Indotritia) vestigia* Niedbała, 2004**

Indotritia vestigia Niedbała, 2004, p. 39, fig. 20(A – E).

Indotritia (Indotritia) vestigia Niedbała, 2004: Subías, 2004(2006), p. 49.

Distribution: Cuba.

***Indotritia (Indotritia) zangherii*
Mahunka & Paoletti, 1984**

Indotritia zangherii Mahunka & Paoletti, 1984, p. 106, fig. VI(1 – 4).

Indotritia zangheri Mahunka & Paoletti, 1984: Niedbała, 2011, p. 65, fig. 55(A – E); 2012a, p. 29.

Indotritia (Indotritia) zangherii Mahunka & Paoletti, 1984: Subías, 2004, p. 43.

Distribution: Italy.

Indotritia (Afrotritia) Mahunka, 1988

***Indotritia (Afrotritia) compacta* Mahunka, 1988**

Indotritia (Afrotritia) compacta Mahunka, 1988, p. 352, figs. 20 – 23.

Indotritia (Afrotritia) compacta Mahunka, 1988: Niedbała, 1998a, p. 34, figs. 64 – 75; 2001b, p. 86; Subías, 2004, p. 43; Niedbała & Stary, 2014, p. 32.

Indotritia compacta Mahunka, 1988: Balogh & Balogh, 2002, p. 43.

Distribution: Ethiopian Region.

Indotritia (Zeaotritia) Mahunka, 1988

***Indotritia (Zeaotritia) aotearoana* Ramsay, 1966**

Indotritia aotearoana Ramsay, 1966, p. 908, figs. 19 – 28; Niedbała, 2012b, p. 187; Balogh & Balogh, 2002, p. 43.

Indotritia (Zeaotritia) aotearoana Ramsay, 1966: Mahunka, 1988, p. 356; Niedbała, 2000, p. 337, figs. 1138 – 1146; Subías, 2004, p. 43.

Distribution: Australian Region.

***Indotritia (Zeaotritia) brevopilosa* Niedbała, 2000**

Indotritia (Zeaotritia) brevopilosa Niedbała, 2000, p. 340, figs. 1147 – 1154.

Indotritia brevopilosa Niedbała, 2000: Niedbała, 2006b, p. 119; 2012b, p. 187; Niedbała & Penttinen, 2007, p. 527.

Indotritia (Zeaotritia) brevopilosa Niedbała, 2000: Subías, 2004, p. 43.

Distribution: Australian Region.

***Indotritia (Zeaotritia) brevisetosa* Niedbała, 2000**

Indotritia brevisetosa Niedbała & Colloff, 1997, p. 494, figs. 6 – 13. "nom. Praeoc." by Berlese, 1923.

Indotritia (Zeaotritia) brevisetosa Niedbała & Colloff, 1997, p. 340.

Indotritia brevisetosa Niedbała, 2000: Niedbała, 2012b, p. 187.

Indotritia (Zeaotritia) brevisetosa Niedbała, 2000: Subías, 2004, p. 43.

Indotritia colloffi Balogh & Balogh, 2002, p. 43; Subías, 2004, p. 43.

Distribution: Australian Region.

Key to species of *Indotritia* of the world

1. Ano-genital cleft absent; anal plates without setae 2
— Ano-genital cleft present; anal plate with setae 4
2. Two pairs of prodorsal lateral carinae present 1. (*Z.*) *brevopilosa*
— One pair of prodorsal lateral carinae present ... 3

3. Sensilli thick and barbed distally, shorter than half height of prodorsum *I. (Z.) aotearoana*
— Sensilli narrow and smooth, longer than height of prodorsum *I. (Z.) brevisetosa*
4. Ano-adanal suture partly reduced, posterior part of anal and adanal plates fused *I. (A.) compacta*
— Ano-adanal suture well developed, anal and adanal plates separated 5
5. Anterior part of prodorsum humped.....
..... *I. (I.) cypha*
— Anterior part of prodorsum without hump 6
6. Anal setae absent *I. (I.) allocotos*
— Anal setae present.....7
7. One pair of prodorsal lateral carinae present ... 8
— More than one pair of prodorsal lateral carinae present 15
8. Prodorsal lateral carinae bifurcated distally..... *I. (I.) partita*
— Prodorsal lateral carinae not bifurcated distally..... 9
9. Four pairs of adanal setae present ... *I. (I.) tetradis*
— Three pairs of adanal setae present 10
10. Two pairs of anal setae present 11
— One pair of anal setae present 12
11. Sensilli club-like and obtuse distally; exobothridial setae vestigial *I. (I.) tumenensis* **n. sp.**
— Sensilli setiform and attenuate distally; exobothridial setae not vestigial *I. (I.) montkoupensis*
12. Sensilli short and fusiform *I. (I.) clavata*
— Sensilli long and setiform 13
13. Sensilli obtuse distally and shorter than interlamellar setae; exobothridial setae not vestigial..... *I. (I.) retusa*

- Sensilli pointed distally and longer than interlamellar setae; exobothridial setae vestigial 14
14. Setae *ad*₂ situated nearly in the middle between setae *ad*₁ and *ad*₃ *I. (I.) africana*
— Setae *ad*₂ situated much more close to setae *ad*₃..... *I. (I.) undulata*
15. Most notogastral setae vestigial... *I. (I.) vestigia*
— Notogastral setae well developed 16
16. Three pairs of prodorsal lateral carinae present..... 17
— Two pairs of prodorsal lateral carinae present..... 19
17. Two pairs of anal setae present.....
..... *I. (I.) tricarinata*
— One pair of anal setae present 18
18. Three pairs of adanal setae present; ano-genital cleft longer than anal plate..... *I. (I.) tripartita*
— Two pairs of adanal setae present; ano-genital cleft shorter than anal plate *I. (I.) jacoti*
19. Two pairs of anal and three pairs of adanal setae present *I. (I.) breviseta*
— Arrangements of anal and adanal setae not as above..... 20
20. Sensilli fusiform or with swollen portion 21
— Sensilli setiform without swollen portion 25
21. Sensilli swollen in proximal part.....
..... *I. (I.) phymatha*
— Sensilli not swollen in proximal part..... 22
22. Sensilli fusiform in shape *I. (I.) fusa*
— Sensilli not fusiform in shape 23
23. Sensilli with thin and elongated apex..... *I. (I.) nunomurai*
— Sensilli without thin and elongated apex 24

24. Sensilli swollen in distal half; setae *ad*₂ situated much more close to setae *ad*₃; lyrifissures *iad* situated at the level of setae *ad*₂ *I. (I.) didyma*
— Sensilli with spindle-shaped head; setae *ad*₂ situated nearly in the middle between setae *ad*₁ and *ad*₃; lyrifissures *iad* situated postero-lateral to the level of setae *ad*₃ *I. (I.) lanceolata*
25. One pair of anal setae and three pairs of adanal setae present 26
— Two pairs of anal setae and two pairs of adanal setae present 29
26. Prodorsal and notogastral setae minute and flexible; genito-aggenital scissures shorter than half length of genital plates *I. (I.) missouri*
— Prodorsal and notogastral setae normal length and rigid; genito-aggenital scissures longer than half length of genital plates 27
27. Exobothridial setae not vestigial *I. (I.) paulyi*
— Exobothridial setae vestigial 28
28. Setae *ad*₃ situated at the level of ano-genital cleft; lyrifissures *iad* situated postero-lateral to setae *ad*₂; anterodorsal spine on femur I hooked
..... *I. (I.) propinqua*
— Setae *ad*₃ situated far posteriorly to the level of anal setae; lyrifissures *iad* situated antero-lateral to *ad*₂; anterodorsal spine on femur I not hooked *I. (I.) javensis*
29. Interlamellar setae almost half of height of prodorsum 30
— Interlamellar setae no longer than fourth of height of prodorsum 33
30. Sensilli with short cilia; three pairs of aggenital setae present; lyrifissures *iad* situated lateral anteriorly to setae *ad*₂ *I. (I.) zangheri*
— Sensilli smooth; two pairs of aggenital setae present; lyrifissures *iad* situated at the level or lateral posteriorly to setae *ad*₂ 31

31. Exobothridial setae not vestigial; lyrifissures *iad* situated lateral to setae *ad*₂ *I. (I.) bellingeri*
— Exobothridial setae vestigial; lyrifissures *iad* situated postero-lateral to setae *ad*₂ 32
32. *le>ss>in>ro*; genito-aggenital scissures reaching setae *g*₆ *I. (I.) eksteeni*
— *ss>in>le=ro*; genito-aggenital scissures reaching setae *g*₇ *I. (I.) paraconsimilis*
33. Exobothridial setae not vestigial; lyrifissures *iad* situated between setae *ad*₁ and *ad*₂ .. *I. (I.) consimilis*
— Exobothridial setae vestigial; lyrifissures *iad* situated lateral to setae *ad*₂ 34
34. Interlamellar setae bent distally; notogastral setae long, longer than 1/3 length between setae *c*₁ and *d*₁ *I. (I.) krakatauensis*
— Interlamellar setae not bent distally; notogastral setae minute, shorter than 1/5 length between setae *c*₁ and *d*₁ *I. (I.) nuda*

Key to species of *Indotritia* of Oriental Region

1. One pair of prodorsal lateral carinae present *I. (I.) undulata*
— More than one pair of prodorsal lateral carinae present 2
2. Two pairs of anal and three pairs of adanal setae present *I. (I.) breviseta*
— Arrangements of anal and adanal setae not as above 3
3. Sensilli fusiform or with swollen portion 4
— Sensilli setiform without swollen portion 5
4. Sensilli with thin and elongated apex *I. (I.) nunomurai*
— Sensilli without thin and elongated apex *I. (I.) lanceolata*
- 5 Two pairs of anal setae and two pairs of adanal setae present *I. (I.) krakatauensis*

— One pair of anal setae and three pairs of adanal setae present 6

6. Setae *ad*₃ situated at the level of ano-genital cleft; lyrifissures *iad* situated postero-lateral to setae *ad*₂; anterodorsal spine on femur I hooked..... *I. (I.) propinqua*
— Setae *ad*₃ situated far posteriorly to the level of anal setae; lyrifissures *iad* situated antero-lateral to *ad*₂; anterodorsal spine on femur I not hooked..... *I. (I.) javensis*

Key to species of *Indotritia* of Palaearctic Region

1. One pair of prodorsal lateral carinae present ... 2
— More than one pair of prodorsal lateral carinae present..... 3

2 One pair of anal setae present *I. (I.) undulata*
— Two pairs of anal setae present.....
..... *I. (I.) tumenensis* n. sp.

3. Three pairs of prodorsal lateral carinae present..... *I. (I.) tricarinata*
— Two pairs of prodorsal lateral carinae present... 4

4. Sensilli fusiform or with swollen portion 5
— Sensilli setiform without swollen portion 6

5. Sensilli with thin and elongated apex..... *I. (I.) nunomurai*
— Sensilli without thin and elongated apex..... *I. (I.) lanceolata*

6. One pair of anal setae and three pairs of adanal setae present *I. (I.) javensis*
— Two pairs of anal setae and two pairs of adanal setae present 7

7. Interlamellar setae almost half of height of prodorsum *I. (I.) zangheri*
— Interlamellar setae no longer than fourth of height of prodorsum..... *I. (I.) consimilis*

Key to species of *Indotritia* of Australian Region

1. Ano-genital cleft absent; anal plates without setae..... 2
— Ano-genital cleft present; anal plate with setae..... 4

2. Two pairs of prodorsal lateral carinae present..... *I. (Z.) brevopilosa*
— One pair of prodorsal lateral carinae present... 3

3. Sensilli thick and barbed distally, shorter than half height of prodorsum *I. (Z.) aotearoana*
— Sensilli narrow and smooth, longer than height of prodorsum *I. (Z.) brevisetosa*

4. One pair of anal setae and three pairs of adanal setae present *I. (I.) javensis*
— Two pairs of anal setae and two pairs of adanal setae present *I. (I.) krakatauensis*

Key to species of *Indotritia* of Nearctic Region

1. Three pairs of prodorsal lateral carinae present..... *I. (I.) jacoti*
— Two pairs of prodorsal lateral carinae present... 2

2. One pair of anal setae and three pairs of adanal setae present..... *I. (I.) missouri*
— Two pairs of anal setae and two pairs of adanal setae present *I. (I.) krakatauensis*

Key to species of *Indotritia* of Ethiopian Region

1. Ano-adanal suture partly reduced, posterior part of anal and adanal plates fused *I. (A.) compacta*
— Ano-adanal suture well developed, anal and adanal plates separated 2

2. Anterior part of prodorsum humped.....
..... *I. (I.) cypha*
— Anterior part of prodorsum without hump ... 3

3. One pair of prodorsal lateral carinae present ... 4
— More than one pair of prodorsal lateral carinae

- present.....8
4. Prodorsal lateral carinae bifurcated distally.....*I. (I.) partita*
— Prodorsal lateral carinae not bifurcated distally.....5
5. Two pairs of anal setae present.....*I. (I.) montkoupensis*
— One pair of anal setae present 6
6. Sensilli short and fusiform *I. (I.) clavata*
— Sensilli long and setiform 7
7. Sensilli obtuse distally and shorter than interlamellar setae; exobothridial setae not vestigial.....*I. (I.) retusa*
— Sensilli pointed distally and longer than interlamellar setae; exobothridial setae vestigial.....*I. (I.) africana*
8. Three pairs of prodorsal lateral carinae present.....*I. (I.) tripartita*
— Two pairs of prodorsal lateral carinae present..9
9. Two pairs of anal and three pairs of adanal setae present *I. (I.) breviseta*
— Arrangements of anal and adanal setae not as above.....10
10. Sensilli fusiform or with swollen portion 11
— Sensilli setiform without swollen portion.....13
11. Sensilli swollen in proximal part.....*I. (I.) phymatha*
— Sensilli not swollen in proximal part.....12
12. Sensilli fusiform in shape *I. (I.) fusa*
— Sensilli not fusiform in shape *I. (I.) didyma*
13. One pair of anal setae and three pairs of adanal setae present *I. (I.) paulyi*
— Two pairs of anal setae and two pairs of adanal setae present14

14. Interlamellar setae almost half of height of prodorsum 15
— Interlamellar setae no longer than fourth of height of prodorsum.....16
15. $le > ss > in > ro$; genito-aggenital scissures reaching setae g_6 *I. (I.) eksteeni*
— $ss > in > le = ro$; genito-aggenital scissures reaching setae g_7 *I. (I.) paraconsimilis*
16. Interlamellar setae bent distally; notogastral setae long, longer than 1/3 length between setae c_1 and d_1 *I. (I.) krakatauensis*
— Interlamellar setae not bent distally; notogastral setae minute, shorter than 1/5 length between setae c_1 and d_1 *I. (I.) nuda*

Key to species of *Indotritia* of the Neotropical Region

1. Anal setae absent *I. (I.) allocotos*
— Anal setae present.....2
2. One pair of prodorsal lateral carinae present ... 3
— More than one pair of prodorsal lateral carinae present.....4
3. Four pairs of adanal setae present...*I. (I.) tetradis*
— Three pairs of adanal setae present .. *I. (I.) retusa*
4. Most notogastral setae vestigial.....*I. (I.) vestigia*
— Notogastral setae well developed.....5
5. Three pairs of prodorsal lateral carinae present.....*I. (I.) jacoti*
— Two pairs of prodorsal lateral carinae present..6
6. Interlamellar setae almost half of height of prodorsum, not bent distally; exobothridial setae well developed, always two pairs of aggenital setae.....*I. (I.) bellingeri*
— Interlamellar setae no longer than fourth of height of prodorsum; bent distally, exobothridial setae vestigial, sometimes three or four pairs of

aggenital setae *I. (I.) krakatauensis*

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