

Notes on the genus *Natta* KARSCH, 1879 (*Araneae, Salticidae*)

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ABSTRACT. As a result of the present revision, the genus *Natta* KARSCH, 1879 comprises only two species, viz. *N. chionogastra* and *N. horizontalis*. Description of a new species *N. immemorata*, provisionally included in this genus, is presented as well.

INTRODUCTION

The genus *Natta* was described by KARSCH in 1879 from Central Africa. PRÓSZYŃSKI (1985) showed the African species of the genus *Cyllobelus* SIMON, 1885 to be congeneric with *Natta* (three African *Cyllobelus*: *C. ciliatus* SIMON, *C. lucipeta* SIMON and *C. splendidissimus* CAPORIACCO are impossible to verify due to loss of their types). The study of new abundant materials and reanalysis of type materials of *Natta* and *Cyllobelus* enabled a synonymization of *N. australis* and *N. rufopicta* with *N. chionogastra*, as well as synonymization of *N. tristellata* with *N. horizontalis*.

MATERIALS

The present paper is based on study of specimens kept in the following collections: ZM - Zoologisches Museum, Berlin; SAM - South African Museum, Cape Town; MHN - Muséum d'Histoire Naturelle, Geneve; MCSN - Museo Civico di Storia Naturale, Genova; MCZ - Museum of Comparative Zoology, Cambridge, Mass.; BMNH - British Museum, Natural History, London; MNHN - Muséum National d'Histoire Naturelle, Paris; MRAC - Muséum Royal d'Afrique Centrale, Tervuren; NM - Naturhistorisches Museum, Wien. I wish to express my thanks to the curators of these collections for their kind help during my work.

Genus *Natta* KARSCH, 1879

Cyllobelus SIMON, 1885: 90 (part: African species).

Type species: *Natta horizontalis* KARSCH, 1879, by monotypy.

Small spiders. Carapace convex, eye field more or less square, eyes surrounded by black. Chelicerae rather long. First legs of male with very long and bushy setae on tibia, some of these setae sometimes scale-like. This genus is characterized by the structure of copulatory organs.

SPECIES ACCOUNTS

Natta chionogastra (SIMON, 1901)

(Figs 1 - 16)

Cyllobelus chionogaster SIMON, 1901: 151.

Natta chionogastra: PRÓSZYŃSKI 1985: 80, 42-45 and 48 ff.

Cyllobelus australis PECKHAM et PECKHAM, 1903: 194, XXI t., 2 A f., syn. n.

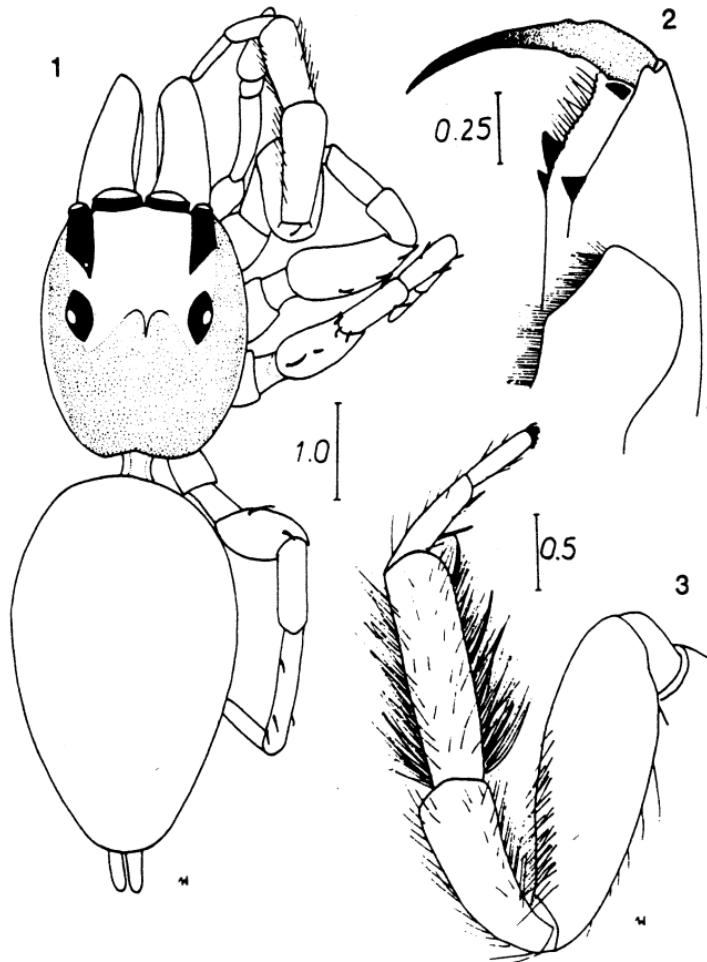
Natta australis: PRÓSZYŃSKI 1985: 83.

MATERIAL

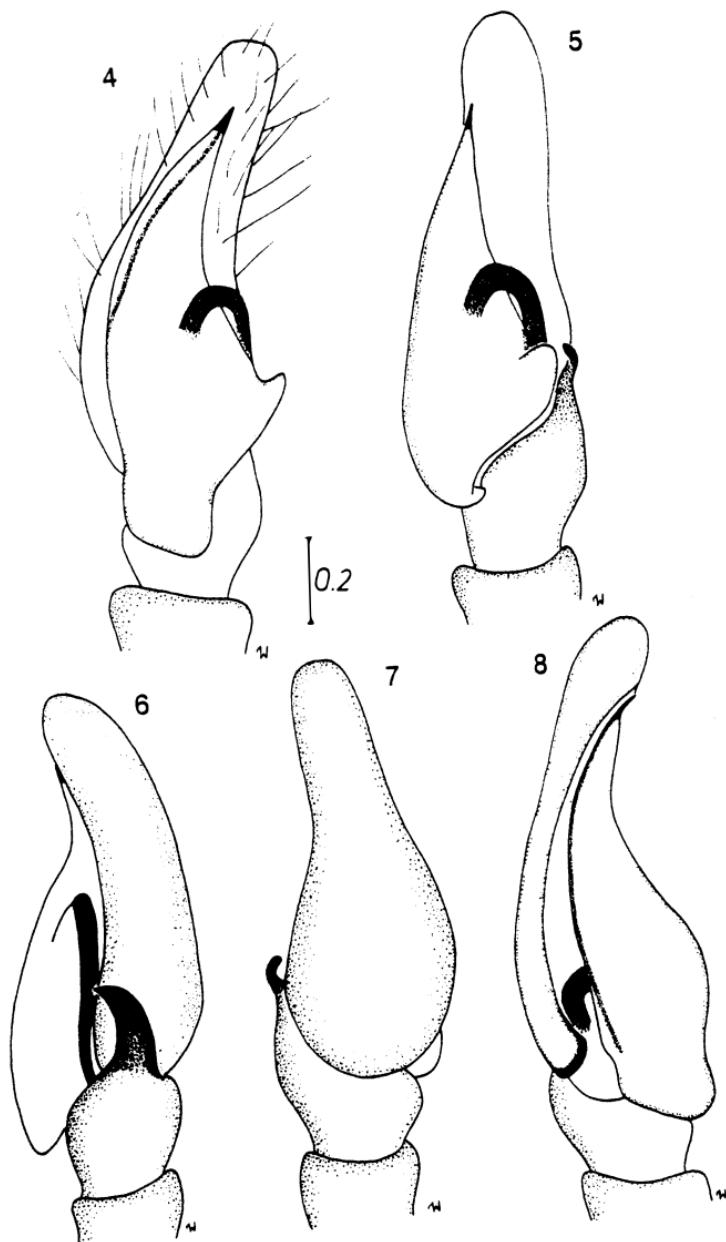
NAMIBIA: Mate, III.1923, 1 F (SAM B 6273); SOUTH AFRICA, Cape Peninsula: Bergville, 1898, leg. W. P[URCELL], 3 MM, 2 FF (SAM 3042), I.1899, leg. W. P[URCELL], 1 F (SAM 8758), XII.1898, leg. W. P[URCELL], 2 MM, 1 F, 3 juv. (SAM 6143, 6208, 8739), Camp's Bay, X.1898, leg. W. P[URCELL], 1 M (SAM 4447), Kalk Bay (?), II.1898, leg. R. L[IGHTFOOT], 1 F (SAM 3139); "Cape Colony": Grahamstown, leg. LEPPAN, det. D. CLARK, 2 FF, 2 juv. (BMNH), XI.1899, leg. J. O'NEIL, 4 MM, 1 F, 3 juv. (SAM 5793), Hanover, IX-X.1901, leg. SCHRÄNER, 2 MM, 3 juv. (SAM 9596), Knysna, III.1896, leg. W. P[URCELL], 1 F (SAM 883), Grat Reinet (?), leg. LEPPAN, det. D. CLARK, 1 M, 1 F, 1 juv. (BMNH); Umhlali, VI.1902, leg. PATRICK, 1 F (SAM 12 563); Pt Elizabeth, XI.1898, 1 M (SAM 4528); Bedford Cape, the Babiaan river, leg. LEPPAN, 1 F (BMNH); Kimberley, Vryburg, Bloemfontein (col. E. SIMON), 2 MM, 7 FF, 2 juv. (paratypes of *C. chionogaster*) (MNHN 20 082); Algoa Bay, 1 F (holotype of *C. australis*) (MCZ); ZAIRE: Mulongo, leg. D. GÉRARD, 1 M (MRAC 15 529); Kivu, Plain of the Ruindji river, 10. VII.1972, leg. P. LEEUWE, 1 M (MRAC 144 640); exact locality illegible (South Africa): Dunbrody (?), 1899, leg. J. O'NEIL, 2 MM, 1 F, 1 juv. (SAM 8423); Devils (?); XII.1898, leg. W. P[URCELL], 3 MM, 1 F (SAM 6017); det. D. CLARK, 2 MM, 1 F (BMNH); XI.1897, leg. W. P[URCELL], 1 M (SAM 2922); III.1901, leg. W. P[URCELL], 1 F, 2 juv. (SAM 9177); 1 M, 4 FF, 9 juv. (SAM 2919); 1 M, 1 F, 1 juv. (SAM B 6632); II.1902, leg. W. P[URCELL], 1 F (SAM 12 320); XI.1901, 7 MM, 1 F, 3 juv. (SAM 12 216); III.1902, leg. W. P[URCELL], 1 F (SAM 12 344).

DIAGNOSIS

Species closely related to *N. horizontalis*. Male may be separated by the shape of tibial apophysis (cf. Figs 6, 10 and 23, 27, 28, 33). Female separated by the shape of



1-3. *Natta chionogastra* (SIMON) - male (from South Africa); 1 - general appearance, 2- cheliceral dentition,
3- first leg



4-8. *Natta chionogastra* (SIMON) - male (from South Africa), palpal organ, ventral lateral and dorsal views

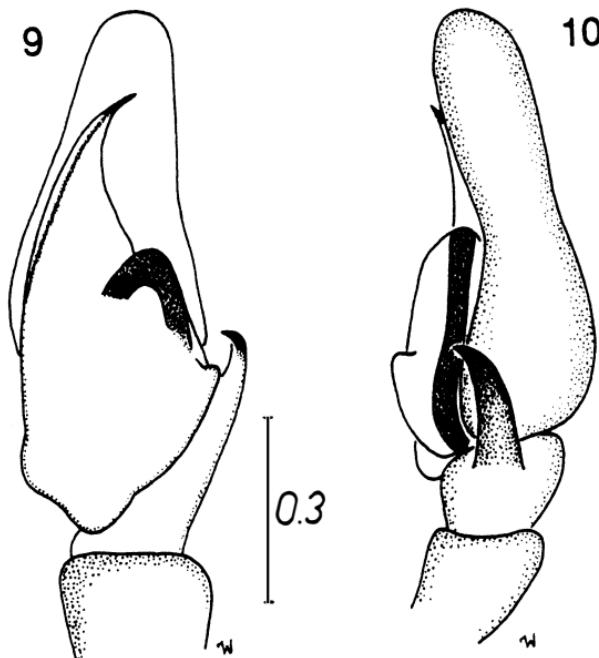
epigyne; in *N. horizontalis* epigyne is more rounded (cf. Figs 13, 15 and 36, 40) and seminal ducts substantially shorter than in *N. chionogastra* (cf. Figs 14, 16 and 37). In fresh specimens probably coloration of abdomen may be helpful, too; in *N. chionogastra* it is rather uniform or with delicate light spots, whereas in *N. horizontalis* usually with contrasting orange spots.

REMARK

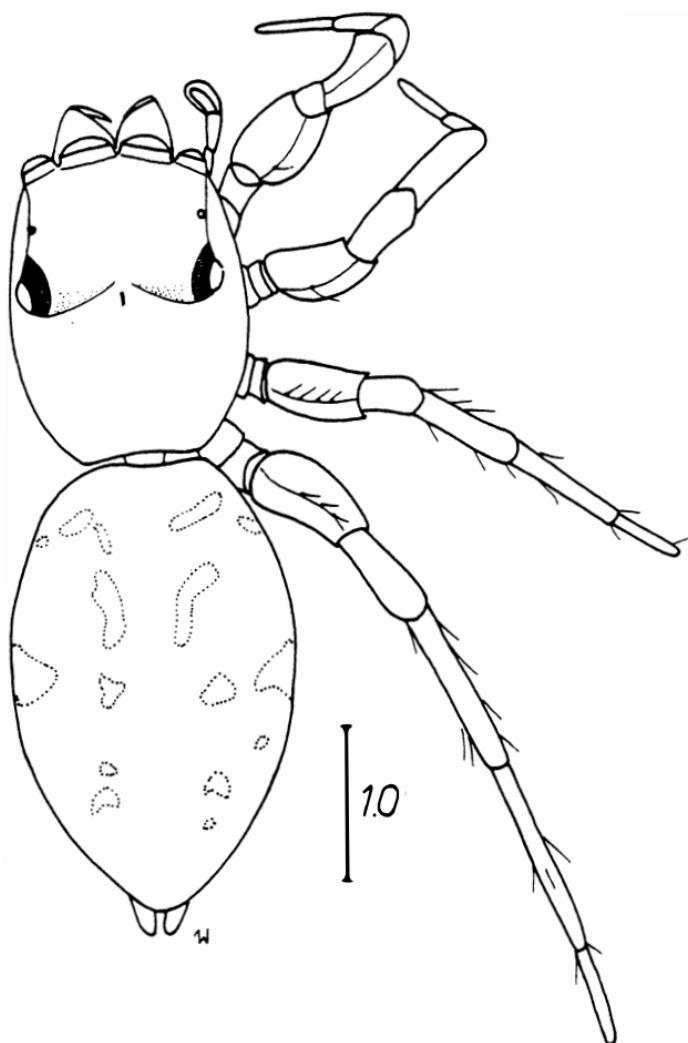
In PRÓSZYŃSKI's paper (1985) figures of internal structures of epigyne in *N. chionogastra* and *N. rufopicta* (Figs 47 and 48) are misplaced.

DESCRIPTION

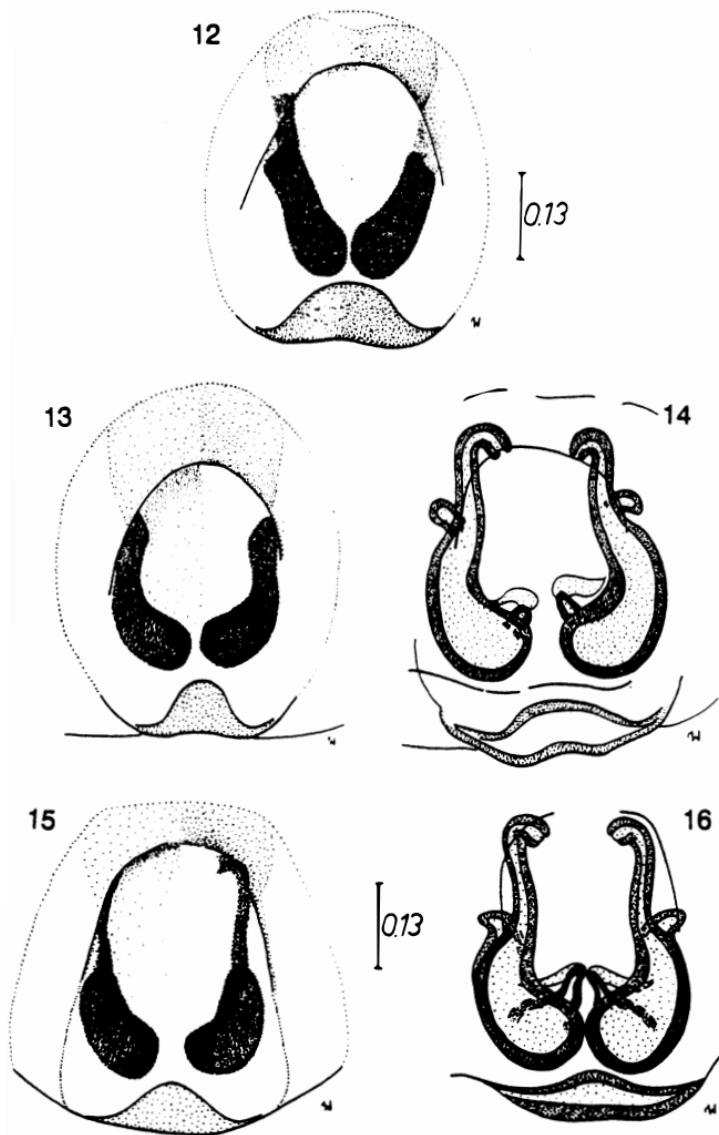
Male. Length of cephalothorax 2.0-2.5, length of eye field 1.1-1.3, width of eye field I 1.1-1.3, width of eye field III 1.2-1.4, length of abdomen 2.4-3.4. Dorsal aspect in Fig. 1. Carapace brown, eye field almost black with metallic shine. In some specimens behind eye field semicircular clear patches. Scarce brown setae and white scales on carapace, near eyes setae denser, anterior eyes fringed with white scales.



9-10. *Natta chionogastra* (SIMON) - male (from Zaire), palpal organ, ventral and lateral views



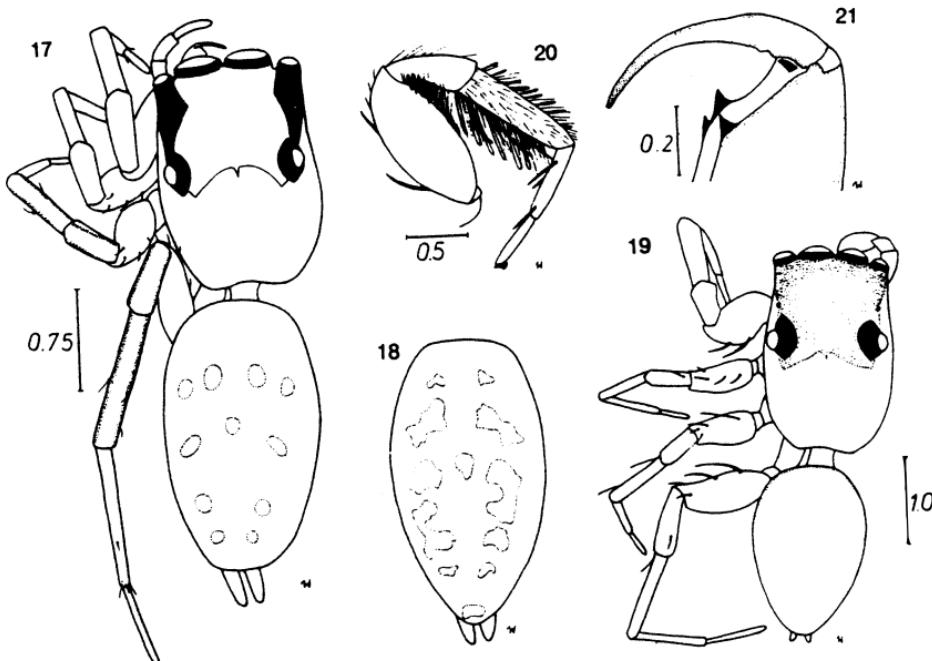
11. *Naita chionogastra* (SIMON) - female, general appearance (holotype of *Cyllobelus australis*)



12-16. *Natta chionogastra* (SIMON)- female (specimens from South Africa), epigyne and its internal structures

White scales form narrow edge along sides of carapace. Clypeus very low, covered with dense white hairs. Chelicerae long, light brown, promargin with two teeth, retromargin with single tooth (Fig. 2). Labium and maxillae dark brown with yellow margins. Sternum scutiform, yellow or brown. Abdomen russet, covered with brown scales and long brown hairs, ventrally also dark, in some specimens lighter. Spinnerets dark. Legs I-III brown with yellow metatarsi and tarsi, legs IV yellow with two longitudinal narrow brown stripes, only femora brown. First legs with dark long scale-like hairs on tibiae, patellae and femora (Fig. 3). Dense long hairs on remaining legs, spines brown. Pedipalps light brown with narrow yellow cymbium. Tibial apophysis long. Palpal organ shown in Figs 4 - 10.

Female. Length of cephalothorax 1.9-2.4, length of eye field 1.1, width of eye field 11.1-1.2, width of eye field III 1.1-1.3, length of abdomen 2.6-3.8. Carapace brown with darker eye field, vicinity of eyes black. Very scarce brown setae on carapace, near eyes more numerous. Posterior part of carapace and sides with single adherent white hairs. Abdomen russet with 3-4 pairs light spots (Fig. 11), in some specimens abdomen



17-21. *Natta horizontalis* KARSCH, male and female; 17 - general appearance of female (syntype of *Cyllobelus rufopictus*), 18 - abdominal pattern of female (specimen from Zaire), 19 - general appearance of male (holotype of *Cyllobelus tristellatus*), 20 - first leg of male, 21 - cheliceral dentition

uniform. Ventrally abdomen yellow. Legs yellow or light brown, sometimes with darker femora. First legs usually darker than remaining ones, but metatarsi and tarsi always yellow. Pedipalps light. Epigyne with large depression (Figs 12, 13, 15). Internal structures of epigyne as in Figs 14 and 16.

Natta horizontalis KARSCH, 1879

(Figs 17 - 41)

Natta horizontalis KARSCH, 1879: 362.

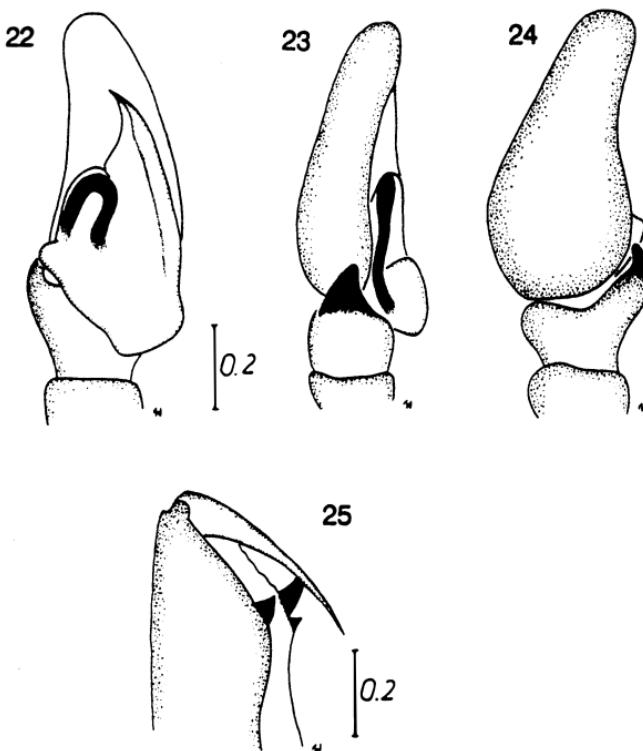
Natta horizontalis: PRÓSZYŃSKI 1985: 78-80, 32-38 ff.

Natta horizontalis: PRÓCHNIEWICZ 1989: 218-219, 33-38 ff.

Cyllobelus rufopictus SIMON, 1909: 420, syn. n.

Cyllobelus rufopictus: BERLAND & MILLOT 1941: 320, 22 f.

Cyllobelus rufopictus: LAWRENCE 1942: 187, 32 f.



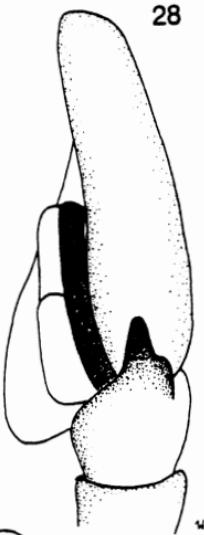
22-25. *Natta horizontalis* KARSCH, male - holotype; 22-24 - palpal organ, ventral, lateral and dorsal views, 25 - cheliceral dentition



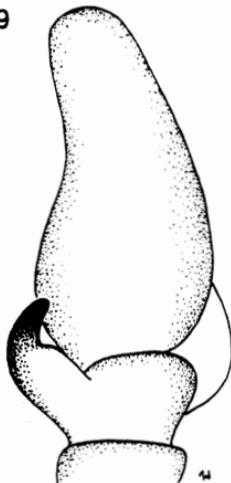
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29



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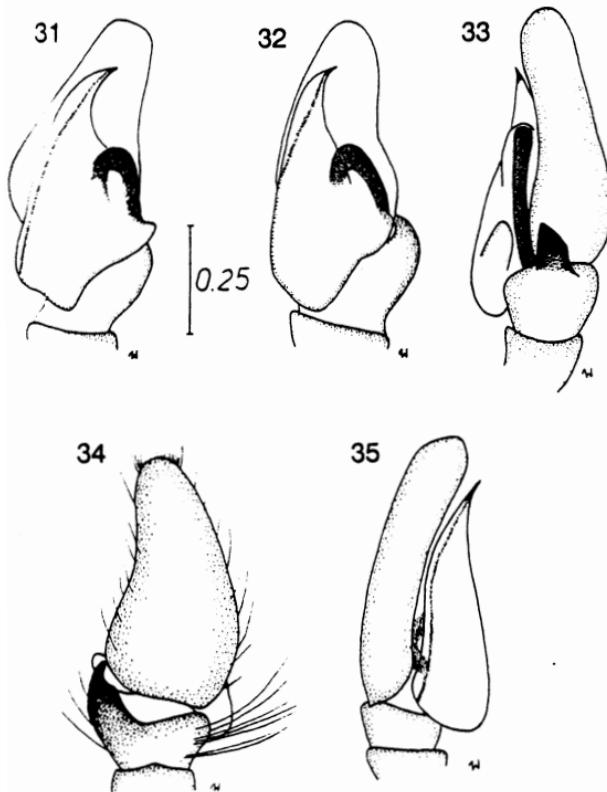


26-30. *Natta horizontalis* KARSCH, male, palpal organ, ventral, lateral and dorsal views; 26-29 - holotype of *Cyllobelus tristellatus*, 30 - specimen from Zaire

- Cyllobelus rufopictus*: WANLESS & CLARK 1975: 274.
Natta rufopicta: PRÓSZYNSKI 1985: 82, 46-47 ff.
Cyllobelus tristellatus SIMON, 1906: 1171 *syn. n.*
Natta tristellata: PRÓSZYNSKI 1985: 83, 42-44 ff.

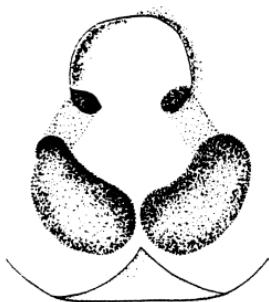
MATERIAL

BURUNDI: Plain of the Ruzizi river, Gihanga, on the ground, V.1966, leg. S. NDANI, det. F. WANLESS, 1 M (MRAC 130 576); IVORY COAST, Kossou: garden, 17.IV.1974, leg. R. Jocqué, 1 F (151 769), 29.IX.1975, leg. R. JOCQUÉ, 1 M (MRAC 149 725); MALAWI, Chintheche: forest, 3-20.III.1978, 1 M (MRAC 152 988), 3.I.1978, leg. R. JOCQUÉ, 2 FF (MRAC 148 045), 2.II.1976, 1 F (MRAC 147 992); near the equator, forest, in nest *Cricetomys*, X.1959, leg. N. LELEUP, 1 F (MRAC 114 520); MOZAMBIQUE: Vila Pery, leg. P. LESNE, det. R. LESSERT, 1 M (palp and one leg only)



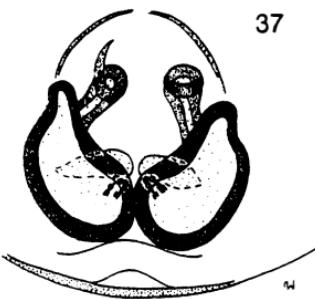
31-35. *Natta horizontalis* Karsch, male (from Togo), palpal organ, ventral, lateral and dorsal views

36

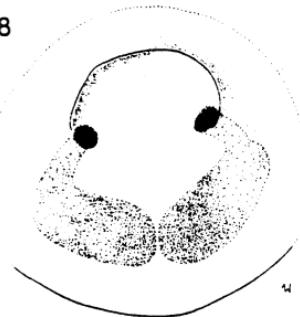


0.13

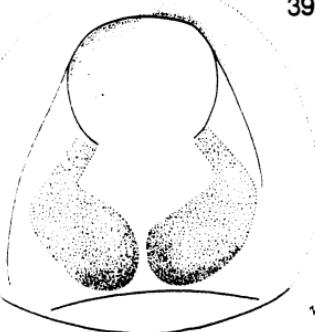
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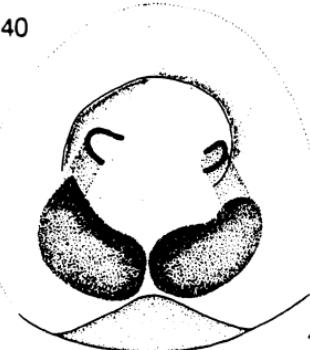
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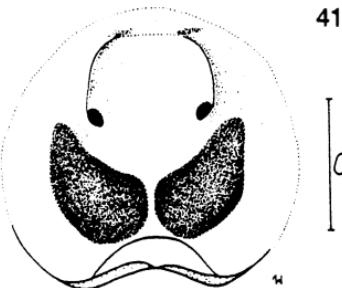
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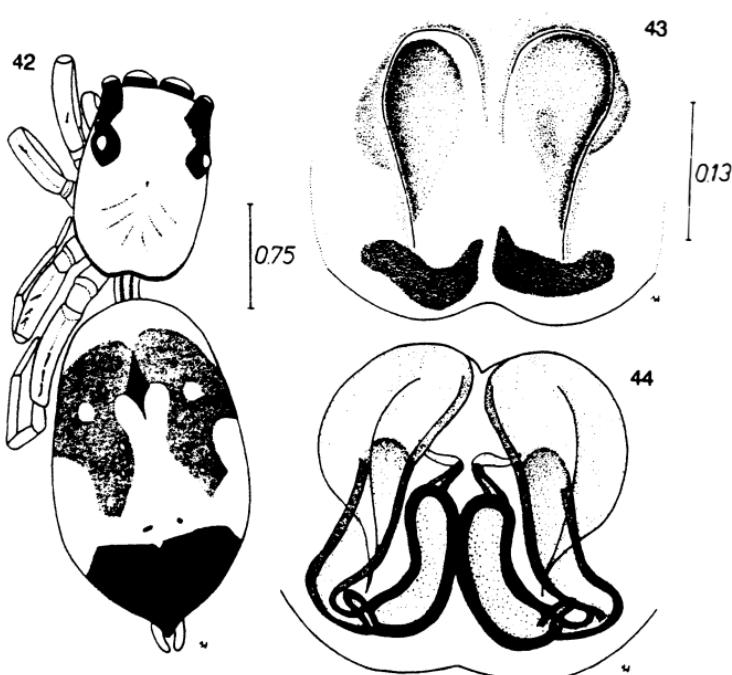
41



0.19

36-41. *Natta horizontalis* Karsch, female, epigyne and its internal structures; 36-37 - syntype of *Cyllobelus rufopictus*, 38 - 40 - specimens from Zaire, 41 - specimen from South Africa

(MHN); RWANDA: Kagera Park Nat., VI.1969, leg. R. Kiss, 1 F (MRAC 135 874); Butare, II-III.1971, leg. P. NYALAGUKA, det. F. WANLESS, 1 F (MRAC 139 070); SAO THOMÉ: Ribeira Palma, leg. L. FEA, 2 FF (syntypes of *C. rufopictus*) (MCSN); SOUTH AFRICA, Transvaal: Roodepoort, IX.1978, leg. A. LE ROY, 1 F (MRAC 150 933), Kaapimuiden, 1979, leg. A. LE ROY, 1 F (MRAC 151 486), Pretoria, col. E. SIMON, 2 FF (syntypes of *C. rufopictus*) (MHNH 20 175); SUDAN: Gondokoro [upper Nile], 1905, leg. WERNER, 1 M (holotype of *C. tristellatus*) (NM 12 093); TOGO: Palimé, VI.1963, leg. J. DUC, 1 M (MRAC 124 448); ZAIRE, Kivu: 6.II.1957, leg. N. LELEUP, 1 M (MRAC 91 343), Ilombe, Uvira, 1200 m a.s.l., VI.1961, leg. N. LELEUP, det. F. WANLESS, 1 F, 1 juv. (MRAC B 152), Plain of the Ruindi river, Butembo, 1000 m a.s.l., near a termitarium, 21.VI.1972, leg. R. LEJEUNE, det. F. WANLESS, 1 F (MRAC 144 604). Chinchoxo [Lake Kivu], leg. FALKENSTEIN, 1 M (holotype of *N. horizontalis*) (ZM 2972); Komi, leg. G. GHEQUIERE, det. R. LESSERT, 1 M (MRAC 11 823); Chysville, a grotto, 1500 m a.s.l., 3.X.1938, leg. M. BEGVAERT, 1 F (MRAC 1383); Katangá: Lubumbashi.



42-44. *Natta immemorata* sp. n - holotype; 42 - general appearance, 43-44 - epigyne and its internal structures

V. 1968, leg. G. GOFFINET, det. F. WANLESS, 1 F (MRAC 134 221); Luiswishi, 28 km NE of Lubumbashi, 1200 m a.s.l., savannah, 1974, leg. F. MALAISSE, 1 F (MRAC 145 487); Ishangi, overflow of Lake Edouard beyond Semliki, 26-29.XII.1968, leg. R. LEJEUNE, 1 F (MRAC 135 370); Kasongo, gallery forest, VII. 1959, leg. P. BENOIT, 1 F (MRAC 115 012).

REMARK

This species was also collected from Guinea (BERLAND & MILLOT 1941) and Kenya (JACKSON 1986).

DIAGNOSIS

See under *N. chionogastra*.

DESCRIPTION

Male. Length of cephalothorax 1.6-2.1, length of eye field 0.9-1.1, width of eye field I and III 1.0-1.2, length of abdomen 1.4-2.3. Dorsal aspect shown in Fig. 19. Carapace as in *N. chionogastra*. Abdomen dark brown or black with metallic shine, in some specimens posteriorly with 3-5 small orange dots. Ventrally abdomen light. Spinnerets yellowish-grey. First legs dark brown, sometimes with yellow metatarsi and tarsi. Long and dense black hairs on tibiae (Fig. 20). Remaining legs yellow, their femora, patellae and tibiae with two brown longitudinal stripes. Pedipalps yellow or light brown. Palpal organ shown in Figs 22 - 24, 26 - 35. Embolus very short, tibial apophysis thick and short.

Female. Length of cephalothorax 1.7-1.9, length of eye field 0.8-1.1, width of eye field I 1.1, width of eye field III 1.1-1.2. Colouration resembles male, but abdomen distinctively coloured. There are very bright orange patches on dark brown or black with metallic shiny background. These patches are usually small and round (Fig. 17), sometimes large and irregular (Fig. 18), exceptionally patches almost invisible. Over spinnerets sometimes two white dots. Ventrally abdomen light. Spinnerets pale yellow. First legs yellow or light brown, remaining ones yellowish with longitudinal narrow stripes on femora, patellae and tibiae. Pedipalps light. Epigyne more or less rounded with shallow depression (Figs 36, 38 - 41), insemination ducts short and straight. Spermathecae elongated (Fig. 37).

Natta? immemorata sp. n.

(Figs 42-44)

MATERIAL

ZAIRE: Kivu, near Butembo, IX-X. 1965, leg. M. CELIS, 1 F (holotype) (MRAC 130 131).

REMARK

This species is included in this genus provisionally on the base of epigyne structure but its status has to be verified after the male is available.

DIAGNOSIS

This species may be separated by the abdominal pattern (Fig. 42) and structure of epigyne (Fig. 44).

DESCRIPTION

Length of cephalothorax 1.6, length of eye field 0.7, width of eye field I 0.9, width of eye field III 1.0, length of abdomen 2.4. Carapace rather convex, light brown with black margins in posterior edge. Eyes surrounded with black. Eye field with some few brown hairs, denser near eyes. Clypeus low light brown. Chelicerae light brown, promargin with two teeth, retromargin with single tooth. Labium and maxillae brown with pale margins. Sternum yellowish-orange with dark edges. Abdomen yellowish-white with brown pattern, the darkest posteriorly (Fig. 42). Ventrally abdomen dark with two small light dots near spinnerets. Abdomen covered with scarce brown hairs. Spinnerets pale. Legs yellowish-orange. Femora, patellae and tibiae of first legs with longitudinal narrow stripes on internal ventral surface, remaining legs with pale brown stripes on dorsal surface of femora. Epigyne rounded with large depression (Fig. 43). Spermathecae elongated heavily sclerotized, large accessory glands (Fig. 44).

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