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Redescriptions of type-species of genera of Salticidae (Araneida), VI—VII Redeskrypeje gatunków typowych rodzajów Salticidae (Araneida), VI—VII Переописания типовых видов родов семейства Salticidae (Araneida), VI—VII

[with 13 figures in text]

VI. Viciria pavesii Thorell, 1877, and discussion of the taxonomic value of some criteria

Material: "Viciria pavesi Thor. Kandari, Celebes, 1874" — 1 ♂ lectotype (new), 1 ♀ paralectotype (new)—Museo Civico di Storia Naturale, Genova,¹ Italy.

Description of male

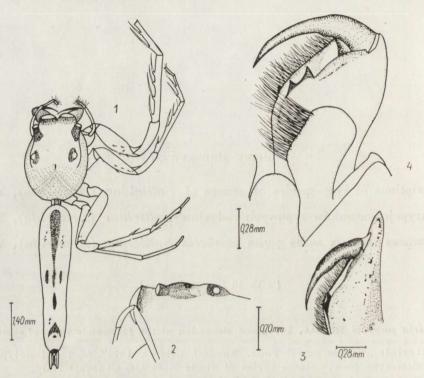
Cephalothorax. Eyes I lateral drawn to the rear so much that do seem to form a separate fourth line resembling that in the *Lyssomanidae*, they are located however, on sides of eyes I median and not behind them (figs. 1, 2). General colouration fawnish-yellow with surroundings of eyes I lateral and II as well as that of eyes III black. Eye field covered with short and inconspicous whitish setae. There is a brush of thicker but short brown setae standing upright between eyes III. Soft tissues partly shrunken. Clypeus narrow, face type I. Length of cephalothorax² 2.02, length of eye field 1.21, width of eye field I 1.57, width of eye field III 1.43, height of eye field 1.32. Ratios: a 0.60, b 1.09, c 0.78.

² For explanation of measurements and ratios see Prószyński (in print)



¹ I wish to express my thanks due to Prof. E. TORTONESE and Dr. G. Delfa for their kind help which enabled me to study specimens described in the present paper.

Abdomen elongated and narrow with traces of blackish spots resembling abdominal pattern of female (fig. 2). It is, however, bent and shrunken now and partly damaged. Ventrally greyish-yellow with a paler longitudinal stripe. Length of abdomen 3.24.

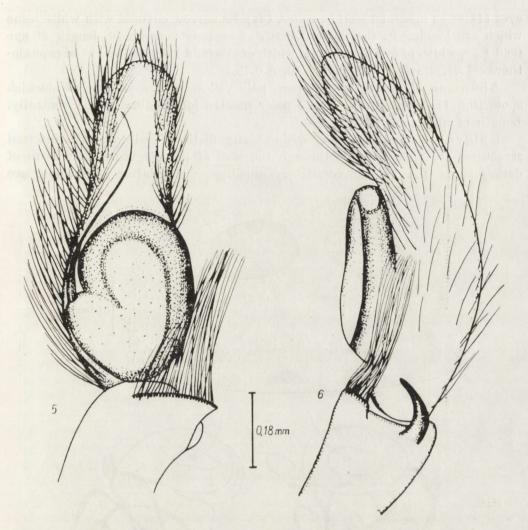


Figs. 1-4. Viciria pavesii Thor.: 1 — female, the whole specimen; 2 — eyes, lateral view; 3 — male chelicera; 4 — female chelicera and maxillary plate.

Sternum yellow. Coxae yellowish but the first pair somewhat darker. Coxae II and III separated more broadly than other. Maxillary plates and labium elongated and yellow. Chelicerae elongated with a long angular protuberance behind the basis of the fang and with a bifid tooth on the inner posterior margin (fig. 3).

Pedipalps very slender with relatively simple copulatory organ. The tip of cymbium is elongated, tibial apophysis slender and hook-like, there is a transversal sclerotized edge covered with long white setae on the tibia ventrally to apophysis (figs. 5, 6). The general colouration of the pedipalps is yellowish-white.

Legs pale yellow, first pair slightly darker — fawnish-yellow. Covered very sparsely with short brownish setae. Tibiae I and II armoured ventrally with 3 pairs of and 1 unpaired long brownish spines, there are 2 similar pairs on metatarsi I and II. There are 3 pairs of slender and inconspicuous spines



Figs. 5-6. Viciria pavesii Thor. genital organ of male, ventral and lateral views.

on metatarsi and tibiae III and IV, located rather on lateral than ventral surfaces. Length of segments of legs: I = +1.54 + 2.46 + 1.35 + 2.51, II 0.79 + +1.61 + 1.78 + 1.00 + 2.16, III 0.76 + 2.08 + 1.89 + 0.92 + 2.97, IV 0.67 + 2.00 + 1.67 + 0.65 + 2.03. Ratio d 0.89.

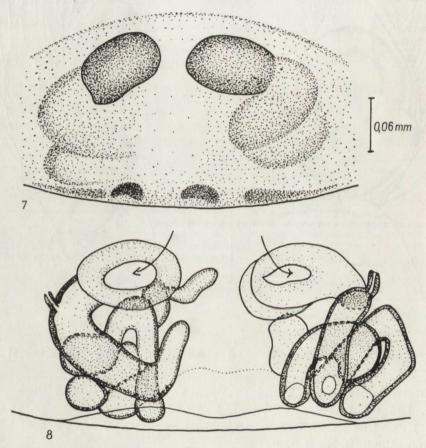
Description of female

Cephalothorax. Eyes I lateral like those in male are located much more posteriorly than eyes I median and form almost a fourth row, they lie however, laterally to eyes I median. Eyes I lateral and II lie on the black spot, eyes III are also surrounded black. There is no trace of a brush of stouter setae between

eyes III — as it can be seen in males. Clypeus narrow covered with white setae which are lacking in the male. Length of cephalothorax 2.70, length of eye field 1.35, width of eye field I 1.81, width of eye field III 1.65, height of cephalothorax 1.51. Ratios: a 0.50, b 1.10, c 0.75.

Abdomen elongated and narrow, pale yellow with a pattern of blackish spots (fig. 1) dorsally and with a paler median longitudinal stripe ventrally. Length of abdomen 5.67.

Epigynum small and flat without any distinct sculpture, the internal structures are partly visible through the wall of the epigynum in a form of darker spots (fig. 7). The copulatory openings, visible after maceration, are



Figs. 7-8. Viciria pavesii Thor. genital organ of female, epigynum before and after maceration.

located in the anterior part of the epigynum. The copulatory canals form an entangled knot and their course cannot be traced sufficiently. The openings of the accessory glands are clearly seen on the walls of the canals near the copulatory openings. The spermathecae are not developed (fig. 8).

Sternum yellowish. Coxae yellowish, the coxae II and III separated. Maxillary plates and labium elongated (fig. 4), fawnish-yellow. Chelicerae yellowish-fawn and elongated, with a bifid tooth on the inner posterior margin (fig. 4). Pedipalps slender and pale yellowish but the tarsus is fawn.

Legs yellowish with pair I slightly more fawn. Tibiae I and II with 3 pairs of and a single unpaired brown spines, long and stout, there are 2 pairs of similar spines on metatarsi I and II. There are long whitish sensory setae on the ventral surfaces of tibiae and metatarsi I and II but less numerous than in male. Spines on tibiae and metatarsi I and II are slender and inconspicuous. Length of segments of legs: I = +1.62 + 2.81 + 1.43 + 2.81, II 0.84 + 1.43 + 2.02 + 1.08 + 2.51, III 0.84 + 2.48 + 2.29 + 1.08 + 3.78, IV 0.81 + 2.35 + 2.13 + 0.81 + 2.59. Ratio d = 0.93.

The case of Viciria pavesii Thor. is perhaps the most striking an example I met across of an argument wrecking the Simon's systematic division of Salticidae and recalling the over and over returning doubts on the taxonomic value of the cheliceral dentition. The genus Viciria Thorell, 1877, containing 60 species (Bonnet, 1949-1961) is a typical example of the Unidentati group of subfamilies, yet the above redescribed species, a type-species of the genus as it happened, has a bifid tooth and must be therefore classified as a "Fissidentati". The removal of the type-species out of the genus would create a nice nomenclatorical mess but fortunately appears premature — the species matches features of several other Viciria species quite well and there is no reason other than the bifid tooth for such a removal. I have compared Viciria pavesii with specimens of Viciria flavobilineata (Doleschall, 1859), V. formosa Simon, 1902 and V. terebrifera Thorell, 1899 identified by W. Kulczyński and kept in the collection of Institute of Zoology, Polish Academy of Sciences, Warsaw. All three have but single tooth on the inner posterior margin of the chelicerae and are therefore "Unidentati". Otherwise however, they does not seem to differ much from V. pavesii. The general appearance seems to be exactly the same with such important details as arrangement of the eyes I and the posterior location of the eyes I lateral entirely comparable. The copulatory organs are different of course but their general structure is comparable and there is nothing compelling the separation into different genera. The structure and proportions of legs, the proportions of the eye field, the dimensions, the remnants of the colour pattern — when present — all suggest rather close relationship. And then - an argument to the contrary - the bifid tooth on inner posterior cheliceral margin in V. pavesii.

What is the real importance of the bifid tooth? There are several questions unanswered yet and that does not permit to resolve the problem off hand. Are there other cases of a bifid tooth in other specimens of $V.\ pavesii$ (incidentally the species is known from the two above redescribed specimens only)? What about the dentition in 56 other Viciria species? How does the bifid tooth develop? I wish to recall here an example of the male specimen of Schen-

kelia modesta de Lessert, 1927 (Prószyński, 1968) having a simple tooth on one chelicera and the bifid one on the second. It was a simpler case — the second cone of the presumably bifid tooth failed to develop, but it has suggested the possibility of a good deal of variation in that cornerstone character of Simon's (1892—1895) systematics. The case of dentition in V. pavesii is more instructive being rather an example of variation within the genus. There is also the case of systematic alignment of the genus Agorius Thorell, 1877 (Prószyński, in print).

Nothing more can be said now about the value of the cheliceral dentition but it seems that several more examples like those above may be enough to scratch out the whole *Pluri-*, *Uni-* and *Fissidentati* division of the family *Salticidae*.

The peculiar arrangement of the eyes I and especially the rather posterior location of eyes I lateral resembles family Lyssomanidae (Peckham and Wheel, 1888), but Viciria is undoubtedly a Salticid. Lyssomanidae have been previously considered as a group within the Salticidae family and their separation is not entirely convincing. The eyes in Viciria may be well an argument in discussion on systematic position of Lyssomanidae.

VII. Nicylla sundevalli Thorell, 1892

Material: "Nicylla sundevalli Thor. Cotypi. Sumatra, Singalang, 1878 — O. Beccari" — 1 \Im (the larger one) lectotype (new), 1 \Im and 1 juv. \Im paralectotypes (new) — Museo Civico di Storia Naturale, Genova, Italy.

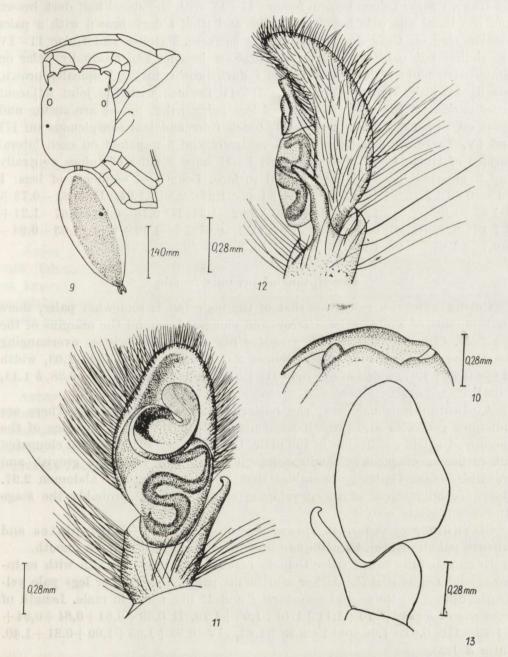
Description of male

Cephalothorax broad and flattened, uniformely dark brown or brown with darkened surrounding of the lateral eyes, covered sparsely with short and fine white setae. Margins of the thorax covered sparsely by the inconspicuous whitish scales. Clypeus narrow, face type I. Length of cephalothorax (lectotype specimen first) 3.70-2.62, length of eye field 1.24-1.13, width of eye field I 2.08-1.78, width of eye field III 1.94-1.57, height of cephalothorax 1.35-1.03. Ratios: $a\ 0.34-0.43$, $b\ 1.07-1.14$, $c\ 0.60-0.64$.

Abdomen dorsally brownish-yellowish-grey with a large lancet-shaped chestnut brown sclerotized shield (fig. 9). Covered very sparsely with inconspicuous whitish scales and setae. The sclerotized shield is mostly bald. Ventrally abdomen is pale whitish-grey with a darker brownish median area. Length of abdomen 4.05-2.97.

Sternum brown. Coxae pale greyish-yellow. Maxillary plates brown and labium dark brown, all white tipped. Chelicerae dark brown with a number of transversal grooves (stridulatory organ?) on the proximal half of their anterior surfaces. Single broad and flattened flap-like tooth on the inner posterior cheliceral margin (fig. 10).

Pedipalps brownish dorsally and pale fawnish ventrally, but the tarsus and the tibia dark brown. Cymbium rather slender, the bulbus elongated with the internal canal forming 3 loops arranged one after another. The stylus form



Figs. 9-13. Nicylla sundevalli Thor.: 9 — male, the whole specimen; 10 — chelicera; 11-13 — male copulatory organ, ventral, lateral and dorsal view.

a crescent-shaped plate with a swollen flattened flap-like tip, it arises from the anterior end of the bulbus (fig. 11). Tibial apophysis long and slightly bent ventralwards, with the tip bent towards the cymbium (figs. 12, 13).

Legs. Femur I dark brown, femora II—IV with the apical half dark brown and the basal one pale fawnish. Patella and tibia I dark brown with a paler median ring on their dorsal and lateral surfaces. Patellae and tibiae II—IV are similar but paler and their pale rings are broader and gradually paler on consecutive pairs of legs. Metatarsus I dark brown, tarsus I apically brown, basally fawnish. Metatarsi and tarsi II—IV fawnish with the joint adjacent areas darkened, the posterior pairs of legs being paler. Spines are strong and stout on tibiae and metatarsi I—II, much finer and less conspicuous on III and IV. There are 3 pairs of spines ventrally and 3 unpaired on each lateral surface of tibiae I—II. The metatarsi I—II have 2 pairs of spines ventrally and 2 unpaired ones on each lateral surface. Length of segments of legs: I 1.13-0.86+2.46-1.48+2.97-1.84+1.89-1.27+2.56-1.94, II 0.81-0.73++1.57-1.08+1.35-1.00+1.11-0.86+2.02-1.54, III 0.76-0.59+1.67-1.24++1.16-0.86+1.11-0.89+2.02-1.67, IV?-0.67+?-1.19+1.30-1.03+0.94-0.78+1.97-1.48. Ratio d 1.12-1.19.

Description of juvenile female

Cephalothorax resembles that of the male but is somewhat paler, there are remnants of white scales, narrow and elongated around the margins of the eye field. Clypeus narrow with a sparse row of whitish bristles overhanging the chelicerae. Length of cephalothorax 2.65, length of eye field 1.03, width of eye field I 1.67, width of eye field III 1.51, height 1.03. Ratios: a 0.38, b 1.11, c 0.61.

Abdomen brownish-grey, the posterior half somewhat paler. There are indistinct yellowish and greyish segmental belts but there is no trace of the sclerotized shield so striking in the male. Covered very sparsely with elongated but rather inconspicuous semitransparent scales and very fine greyish and brownish setae. Ventrally resembles that in male. Length of abdomen 2.97. There are only traces of the developing epigynum, it is probably the stage after penultimate ecdysis.

Sternum greyish-brown. Coxae greish-yellow. Maxillary plates and labium pale brownish. Chelicerae brown, with anterior surfaces smooth.

Legs generally much paler than in male. Leg I pale brownish with metatarsus and femur slightly darker and tarsus pale yellow. Other legs pale yellowish. Spines on tibiae and metatarsi I and II like those in male. Length of segments of legs: I 0.70+1.11+1.40+1.05+1.70, II 0.59+0.84+0.84+0.84+1.43, III 0.67+1.00+0.81+0.89+1.43, IV 0.59+1.05+1.00+0.81+1.40. Ratio d 1.23.

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STRESZCZENIE

Autor podaje redeskrypeje Viciria pavesii Thorell, 1877 i Nicylla sundevalli Thorell, 1892. Zwraca uwagę na występowanie rozszczepionego zęba na krawędzi chelicery V. pavesii i w związku z tym kwestionuje zasadność podziału rodziny Salticidae na grupy Pluri-, Uni- i Fissidentati. Autor podkreśla również, że układ oczu I u V. pavesii przypomina rodzinę Lyssomanidae.

РЕЗЮМЕ

Автор приводит переописание Viciria pavesii Thorell, 1877 и Nicylla sundevalli Тіногеll, 1892, обращает внимание на присутствие росщеплённого зуба на крае хелицеры V. pavesii в связи с чем оспаривает правильность разделения семейства Salticidae на группы Pluri-, Uni- и Fissidentati. Автор обращает также внимание на структуру глаз I у V. pavesii напоминающую семейство Lyssomanidae.

Redaktor pracy — mgr W. Starega

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