

Tropical Asian jumping spiders of the genus *Viciria* (Araneae: Salticidae: Viciriini)

David E. Hill¹

¹ 213 Wild Horse Creek Drive, Simpsonville SC 29680, USA, email platycryptus@yahoo.com

Abstract. The status of the genus *Viciria* is briefly reviewed. *V. praemandibularis* (Hasselt 1893), known only by the original description of one male, is synonymized with the type species for the genus, *V. pavesii* Thorell 1877. A series of recent photographs document the appearance of both the male and the female of this species, as well as brood care by the female.

Keywords. Astioida, Australasia, new synonym, Sunda, *Viciria pavesii*, *Viciria praemandibularis*, Wallacea

Problems with placement of species in the genus *Viciria* Thorell 1877 have been apparent for some time (Prószyński 1984; Bodner 2009; Hill 2010; Bodner & Maddison 2012; Maddison 2015). In 1968 some 60 species were still assigned to this genus (Prószyński 1968), but today only 28 remain, half (14) from tropical southeast Asia, or Sunda, and the other half (14) primarily African, ranging from Sri Lanka to South Africa (WSC 2022). DNA sequencing of a specimen identified as *V. praemandibularis* (Hasselt 1893) has placed this genus securely within the Australasian clade Astioida, as the type of the Tribe Viciriini (Bodner 2009; Bodner & Maddison 2012; Maddison 2015). Because of this, it is an important genus, most likely representing an uncommon astioid invasion from Australasia across Wallacea (Hill 2010). Based on my review of all of the published descriptions for *Viciria* species, I suspect that this might really represent a monotypic genus. A revision of the remaining species assigned to *Viciria*, most known from a single sex or a single specimen, is in order. At least 17 of these have received no attention in the last 100 years.

Curiously, naturalists and photographers posting on *iNaturalist* over a number of years have only found a single, distinctive species of this genus, with 142 observations of spiders identified either as *Viciria praemandibularis*, or as an unknown species of *Viciria*, ranging from southern Thailand to Sulawesi (Figure 1; iNaturalist 2022). While both the male and female *V. pavesii* Thorell 1877 are known, albeit each from a single preserved specimen collected long ago on Sulawesi (Thorell 1877; designated *lectotypes* by Prószyński 1968, 1984), no other specimens of this type species have been described. At the same time, a series of species group names have been synonymized with *V. praemandibularis* (*Lagnus ruber* Workman 1896; *Eupalia rubra* Simon 1899, 1903; *Eupalia praemandibularis* Simon 1903; *Eupalina praemandibularis* Strand 1932), even though the male of that species is known from the brief description of Hasselt (1893), and no type specimen corresponding to that description may exist. Prószyński (1984) published drawings of the pedipalp of a specimen that he thought might be the same species as *V. praemandibularis*, but he could not confirm this. Table 1 provides a list of ten published or posted reports for either *V. pavesii* or *V. praemandibularis*. Respective localities are identified with numbers in Figure 1.

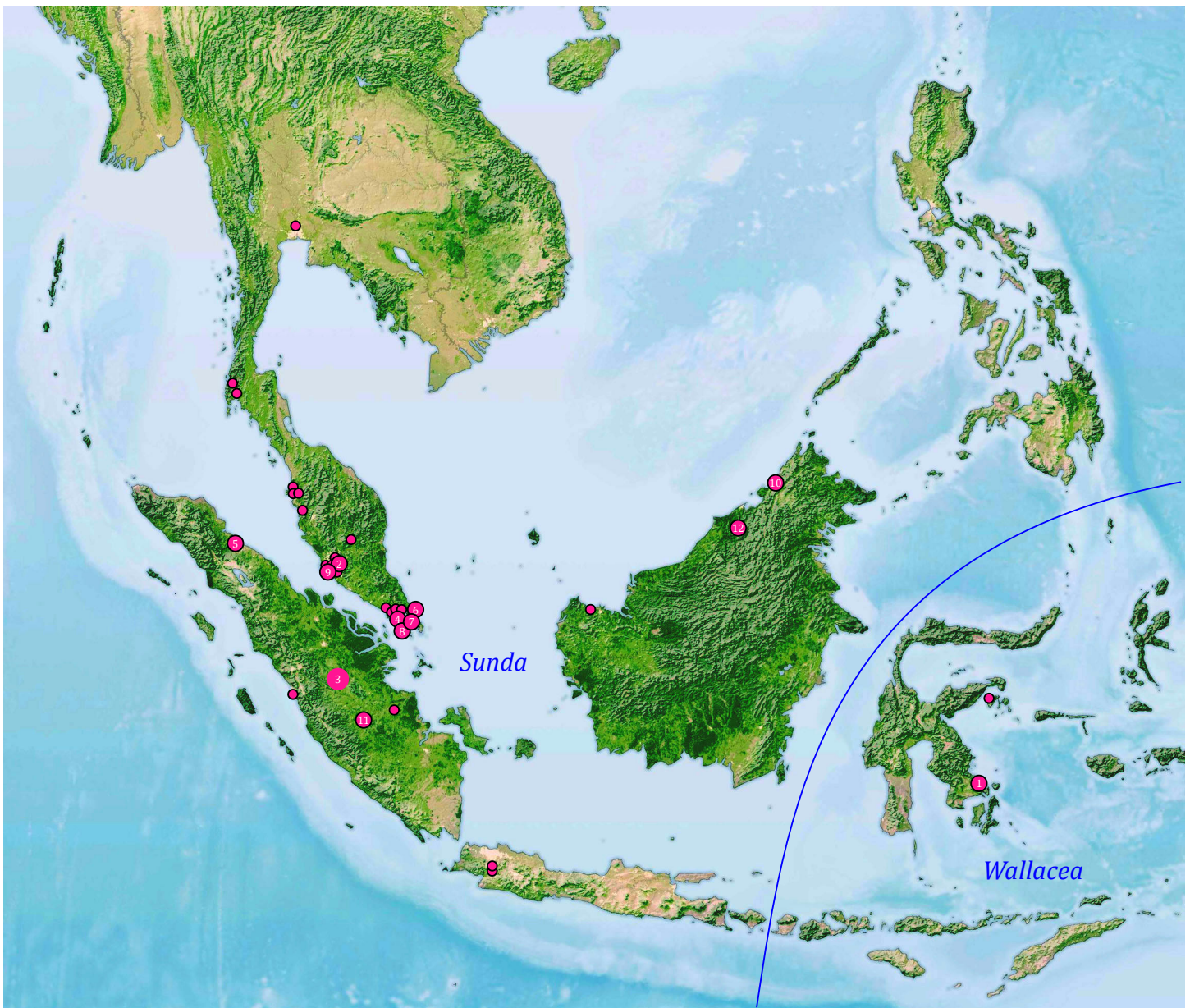


Figure 1. Localities reported for *Viciria pavesii* (1-2) and *V. praemandibularis* (all other records). Numbered localities correspond to records listed in Table 1. Small dots represent additional records posted as photographs on iNaturalist (2022). One iNaturalist record (from the Philippines) that clearly did not represent this species is not shown. The distribution of these *Viciria* is Sundan, with some representation, including the type for *V. pavesii* (1) in Wallacea.

With many photographs now available, it is clear that published descriptions of the female *Viciria pavesii* (Thorell 1877; Prószyński 1968, 1984) apply to the females frequently identified as *V. praemandibularis*. In addition the specimen described by Prószyński (1984) as the male *V. praemandibularis* in the absence of a type specimen for that species, as well as the original description of the male *V. praemandibularis* by Hasselt (1893), both differ little if at all from published descriptions of the male *V. pavesii* (compare Figures 2 and 3). For reference, relevant published descriptions with English translations are provided in Appendix 1, and previously published figures are shown in Figure 2.

Table 1. Published or posted locality records for *Viciria pavesii* and *V. praemandibularis*. Record numbers correspond to numbered localities in Figure 1.

species	record	♂♀	references	locality
<i>Viciria pavesii</i> Thorell 1877 (type)	1	♂♀	<i>V. pavesii</i> Thorell 1877b: 579; Prószyński 1968: 239, 1984: 420, 2017: 37 (type specimens)	Kendari, Sulawesi
	2		Maimusa 2012	Seri Kembangan, Selangor, Malaysia
<i>Viciria praemandibularis</i> (Hasselt 1893)	3	♂	<i>Attus praemandibularis</i> Hasselt 1893: 157; <i>Eupalia praemandibularis</i> Simon 1903: 767	Sumatra
	4	♂	<i>Lagnus ruber</i> Workman 1896: 104; <i>Eupalia rubra</i> Simon 1899: 104, Simon 1903: 763	Singapore
	5	♂	<i>V. praemandibularis</i> Prószyński, 1984: 420 (not the type specimen)	Medan, Sumatra
	6	♂♀	<i>V. praemandibularis</i> Song, Zhang & Li 2002	Singapore
	7	♂	<i>V. praemandibularis</i> Bodner 2009; Bodner & Maddison 2012 (d183)	Singapore
	8	♂♀	<i>V. praemandibularis</i> Hill 2010	Singapore
	9	♀	<i>V. praemandibularis</i> Nasir et al. 2014	Ulu Gombak Biodiversity Centre University of Malaysia, 3°22'60.1"N, 101°47'20"E
	10	♀	<i>V. praemandibularis</i> Nasir et al. 2016	Signal Hill, Sabah
	11		<i>V. praemandibularis</i> Junggebauer 2020	Buket Dua Belas, Jambi, Sumatra
	12	♂♀	<i>V. praemandibularis</i> Maddison 2022	Mulu National Park, Sarawak

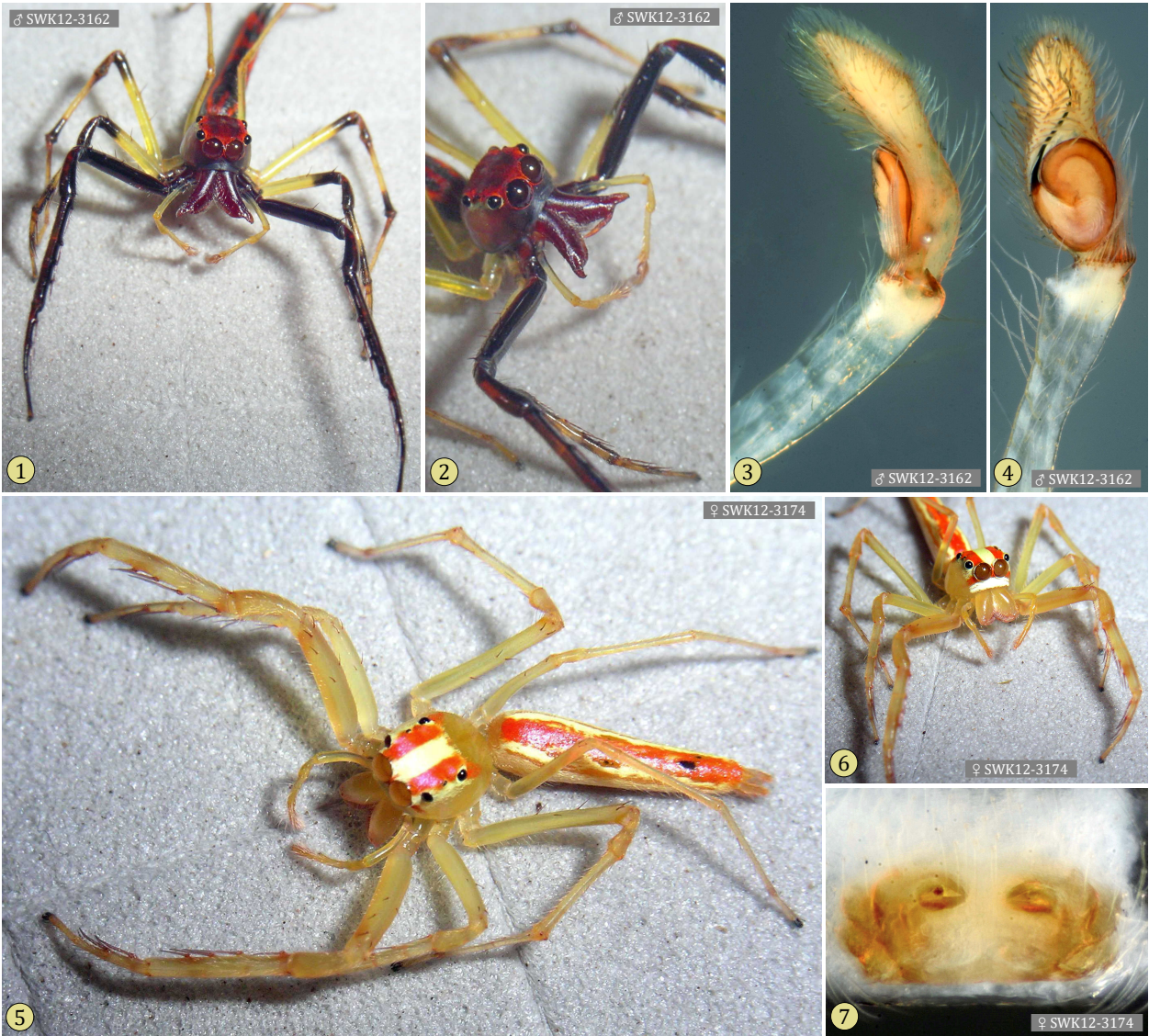


Figure 2. Photographs of a male (1-4) and a female (5-7) *Viciria praemandibularis* from Mulu National Park, Sarawak (Maddison 2022). 3-4, Lateral (3) and ventral (4) views of left pedipalp of preserved specimen. 7, Ventral view of epigynum of preserved specimen. Compare with drawings of the *V. pavesii* lectotypes in Figure 3:4-5. Photographs © W. Maddison, used under a [CC-BY 3.0](#) license.

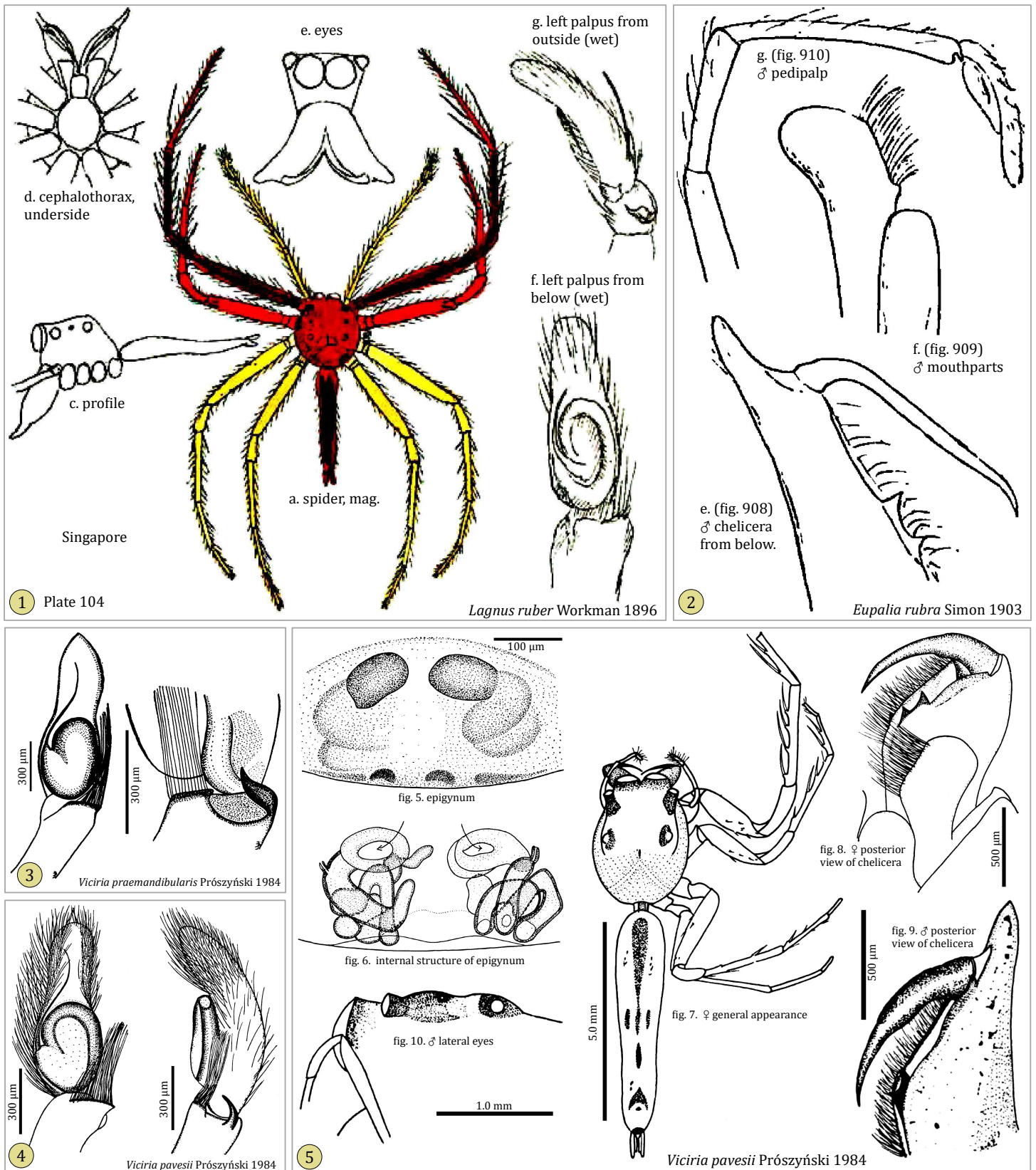


Figure 3. Published figures depicting *Viciria praemandibularis* (1-3) and *V. pavesii* (4-5), with attribution. No drawings are available for the type of *V. praemandibularis*, and (3) represents a male specimen that is similar to *V. pavesii*. The lateral extension of the paturon of the male, beyond the articulation of the fang (2-e, 5-fig. 9) is a distinctive character of both "species," and the description of the female *V. pavesii* clearly agrees with the (now) well-known, but undescribed, female of *V. praemandibularis*. Figures 3-5 © J. Prószyński, used with permission, with modified captions.

As a result of this comparison I propose the following synonymy:

***Viciria pavesii* Thorell 1877** [lectotype ♂♀ described by Prószyński 1968, 1984, 2017]

Attus praemandibularis Hasselt 1893, ♂, **new synonym**

Lagnus ruber Workman 1896, ♂, synonym

Eupalia rubra Simon 1899, 1903, ♂, synonym

Eupalia praemandibularis Simon 1903, ♂, synonym

Eupalina praemandibularis Strand 1932, ♂, synonym

Viciria praemandibularis Prószyński, 1984, ♂, synonym

With many recent field observations under the name *Viciria praemandibularis*, there is no question of the conspecificity of the male and female *V. pavesii* (Figure 4).



Figure 4. Two sets of paired *Viciria pavesii*, Singapore. Femora II of the second male are darker. Photographs © Nicky Bay, used with permission.

The appearance of both male and female *Viciria pavesii* is distinctive and their field identification is not difficult. These are relatively large salticids, with a body length near 10 mm in some cases. Both sexes have long, powerful spines on the underside of tibiae and metatarsi I and II (Figures 7:2, 8:1). In some males there is a crest just behind the posterior eye row of the male (Figure 7:1). Each paturon of the male is extended anterolaterally, far beyond the articulation of the fang (Figure 6:4). Legs I and II of the male are usually darker than the yellowish legs II and IV, but sometimes legs II are yellowish. The pedipalp segments are long, thin, and yellowish. In the male red scales surround the eyes and cover the ocular quadrangle, as well as most of the dorsal opisthosoma, which is very narrow and long. Females have more uniform leg coloration, well-defined orange and white to ivory stripes, to include a whitish middorsal stripe on the carapace, and several long black spots on the dorsal opisthosoma. Representative photographs of living male and female *V. pavesii* are shown in Figures 5-9.



Figure 5. Adult male (1-4) and adult female (5-6) *Viciria pavesii* photographed in Singapore. Pigmentation of legs II of the male varies. In some (1), legs II are dark. In others (2, 3-4) they have the lighter color characteristic of legs III and IV. Male pedipalps are yellow, very long and thin. Photographs © Marcus F. C. Ng, used with permission.



Figure 6. Adult male *Viciria pavesii*, Singapore. **4**, Note the anterolateral extension of each paturon, far beyond the articulation of the respective fang. Photo credits: 1-3, © Nicky Bay, used with permission; 4-6, © Yongi Ng, used with permission.



Figure 7. Adult male *Viciria pavesii*. **1**, Note the crest behind the posterior eye row. This character is variable. **2**, Note the long spines beneath tibiae and metatarsi I and II of this male. Photographs © Shikhei Goh, used with permission.

Females nest on the underside of leaves, securing their brood with a thin fabric of silk lines (Figures 8-9). Initially the female can cover the entire cluster of eggs that she is guarding. After hatching, the developing young move away from the site of the egg cluster to surrounding areas, still on the underside of the leaf and attended by the female (Figure 9:4-6). Some cases where a female has fed on at least one of her own eggs have been documented.

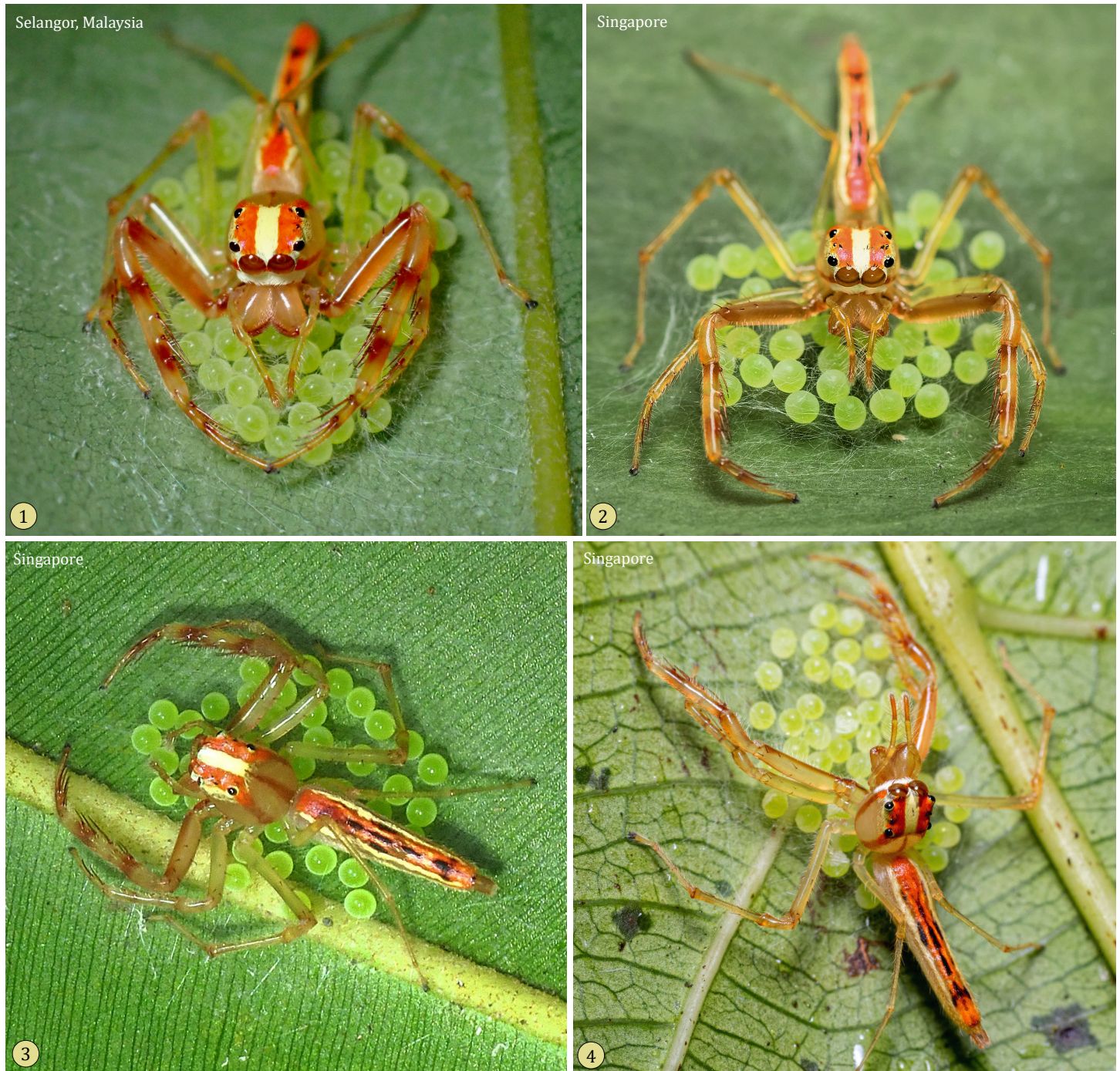


Figure 8. Four different female *Viciria pavesii*, tending their broods on the underside of a leaf. **1-3**, Recently deposited eggs held by a thin silk mesh, with the female in a characteristic *guardian* position. **4**, Female guarding a brood that is beginning to hatch. Photo credits (all modified): 1, © Albert Kang; 2, © Lim Hong Yao; 3, © Cheong Weei Gan; 4, © Goh C. Y. Richard; all posted on iNaturalist, used under a [CC BY-NC 4.0](https://creativecommons.org/licenses/by-nc/4.0/) license.



Figure 9. Female *Viciria pavesii* with their respective broods on the underside of leaves, Singapore. **1-3**, Females with broods that have just hatched. **4-6**, Females with broods that are beginning to move beyond the nest. Photographs © Nicky Bay, used with permission.

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Appendix 1: Early descriptions of *Viciria pavesii* and *V. praemandibularis*

1. Thorell 1877: 573-579, with English translation (no figures included)

Gen. **Viciria**, n. ⁽¹⁾. [⁽¹⁾ *Vicirius* est nom. propr. Romanum.]

Cephalothorax circiter $\frac{1}{3}$ longior quam lator, modice altus, clypei altitudine dimidiam diametrum oculorum anticorum mediorum saltem aequanti. Sternum sat breve, non duplo longius quam latius, coxis latius, non inter coxas 1.¹ paris, quae spatio labii latitudinem saltem aequanti disjunctae sunt, productum. Oculi antichi perfecte visibiles quum desuper inspicitur cephalothorax; series quam formant leviter sursum curvata. Oculi medii antichi maximi, valde prominentes, spatio magno, dimidiam diametrum oculorum lateralium superanti ab his oculis, qui sat parvi sunt, remoti. Quadrangulus oculorum paullo lator antice quam postice, dimidiam longitudinem cephalothoracis non occupans, multo angustior postice quam est cephalothorax eodem loco; oculi 2.^{ae} seriei minuti, fere in medio (vel paullo ante medium) inter oculos laterales anticos et oculos posticos locati; oculi postici circiter diametro sua altius quam laterales antichi positi, et spatio inter se remoti quod minus est quam spatium quo a margine cephalothoracis distant. Mandibulae deorsum et plus minus anteriora versus directae. Maxillae longiores, paullo divaricantes et foras sub-curvatae, labio circa dimidio longiores; labium fere dimidio longius quam latius, versus apicem rotundatum vel sub-truncatum sensim angustatum. Palpi graciles, non in femina apicem versus dilatati vel deplanati. Pedes sat longi, graciles vel crassitie mediocri, 1.¹ paris reliquis saltem interdum robustiores; pedes 3.ⁱⁱ paris reliquis (1.¹ paris interdum exceptis) longiores; tibia cum patella 3.ⁱⁱ paris longior vel saltem non brevior quam tibia cum patella 4.¹ paris. Tibiae patellis multo longiores. Metatarsi 4.¹ paris non apice tantum aculeati. Abdomen longum et angustum, mamillis 6 longis et cylindratis.

Typus: *V. Pavesii* n.

Viciria pars gen. *Maeviae* C. L. Koch esse videtur, a formis quibus Cel. Simon nomen *Maeviae* retinuit eo diversa, quod tibiam cum patella 3.¹¹ paris longiorem vel saltem non brevior quam tibiam cum patella 4.ⁱ paris habet; etiam oculis mediis anticis magis prominentibus ei ab oculis lateralibus anticis spatio majore remotis a *Maevia* (C. L. Koch), Sim. differre nobis *Viciria* videtur.

90. **V. Pavesii** n. *cephalothorace in fundo aut testaceo-ferrugineo, aut testaceo, fasciis tribus longitudinalibus ferrugineis postice, area interoculari pube rubra et, secundum medium, pube flava dense vestita; palpis et pedibus testaceis, pedibus 1.ⁱ paris sub-infuscatis; abdomine valde angusto, circiter 5.plo longiore quam latiore, in fundo testaceo, supra fascia longitudinali nigra posterius in lineolas vel maculas abrupta et utrinque apud eam lineola vel maculis nigris notato, pubeque rubra vestito quae fasciam vel fascias longitudinales format.* ♂♀ ad. Long. 7-9 $\frac{1}{2}$ millim.

FEMINA. Cephalothorax longior quam patella + tibia 4.ⁱ paris, patellam + tibiam 2.ⁱ paris longitudine aequans, plus $\frac{1}{3}$ longior quam lator, fronte sub-truncata; anteriora versus sat fortiter angustatus, in lateribus anterieus levius rotundatus, postice fortiter rotundato-angustatus et in medio emarginatus; mox pone oculos posticos impressionem transversam, in medio profundior et striam formantem ostendit, utrinque inter oculos 2.^{ae} seriei et oculos posticos sat profunde impressus est, arcubus supraciliaribus oculorum posticorum bene expressis. Sat altus est cephalothorax, lateribus declivibus, dorso a latere viso ante oculos posticos (qui multo pone medium dorsi ipsius locum tenent) paullo proclivi parumque convexo, pone hos oculos declivi et convexo et sensim in declivitatem posticam convexam, parum praeruptam ipsoque dorso multo brevior sine ullo limite transeunt. Facies alta: altitudo clypei dimidiam diametrum oculi maximi superat. Oculi medii antichi valde prominentes; quadrangulus oculorum $\frac{2}{5}$ longitudinis cephalothoracis occupat et multo angustior est quam cephalothorax eo loco ubi insistent oculi postici, non multo (non $\frac{1}{4}$) lator postice quam longior, evidentissime (fere oculi postici diametro) lator antice quam postice. Oculi antichi seriem leviter sursum curvatam formant: linea recta margines superiores mediorum tangens laterales paullo sub margine eorum superiore secatur. Oculi medii antichi valde magni sunt, spatio minuto separati; oculi laterales antichi contra parvi, mediis plus duplo, paene triplo minores, et spatio ab iis remoti quod oculi lateralis diametrum paene aequare videtur. Oculi 2.^{ae} seriei minuti, fere in medio inter oculos posticos et laterales anticos locati; oculi postici parum minores quam laterales antichi, diametro sua altius quam ii positi, et spatio inter se remoti quod evidenter minus est quam spatium quo a margine cephalothoracis distant. Oculi tres utriusque lateris lineam evidentissime foras et deorsum curvatam formant. Sternum inverse ovatum, coxis multo latius; coxae 1.¹ paris spatio disjunctae quod latitudinem labii saltem aequat. Mandibulae sub-porrectae (deorsum et anteriora versus directae), lateribus exterioribus leviter rotundatis et paullo divaricantibus, versus apicem late et oblique rotundato-truncatum non angustatae, breves et latae, circiter $\frac{1}{4}$ modo longiores quam latiores, femora antica latitudine saltem aequantes, faciei altitudinem longitudine aequantes fere, dorso extus versus basin levius convexo, praeterea sub-deplanato et interiora versus paullo declivi, subtilissime ruguloso, nitido, intus et apice praesertim piloso. Sulcus unguicularis postice versus apicem dentibus duobus mediocribus et antice in apice dentibus duobus tribusve minutis armatus est; unguis sat longus et fortis. Maxillae angustae, labio plus dimidio longiores, foras curvatae et divaricantes, intus ante labium oblique truncatae, apice rotundatae, angulo ejus exteriori sub-prominenti. Labium saltem

dimidio longius quam latius, versus apicem late rotundato-truncatum sensim angustatum. *Palpi* graciles valde, internodiis cylindratis, sat dense pilosi. *Pedes* sat longi, graciles, parce pilosi et pubescentes, 1.ⁱ paris, qui reliquis fortiores sunt, robusti tamen, 4.ⁱ paris gracillimi; 3.ⁱ paris pedes reliquis longiores, 2.ⁱ paris reliquis breviores. Tibiae patellis multo, circa duplo, longiores sunt, immo in pedibus 4.ⁱ paris patellis circa triplo longiores. Tibia cum patella 3.ⁱⁱ paris non parum longior quam tibia cum patella 4.ⁱ paris, quae paullulo brevior est quam metatarsus cum tarso hujus paris. Patellae posteriores, saltem 3.ⁱⁱ paris, aculeum unum alterumve habent; femora omnia omnesque tibiae et metatarsi aculeata sunt, aculeis in pedibus 4.ⁱ paris brevibus, gracillimis. Tibiae 1.ⁱ paris subter aculeis 2.2.2.2. fortibus et valde longis munitae sunt, tibiae 2.ⁱ paris totidem aculeis, sed minus longis et fortibus instructae; metatarsi anteriores subter 2.2. aculeis valde longis et fortibus armati sunt. Tibiae et metatarsi 4.ⁱ paris aculeis paucis modo praediti, sed non ad apicem tantum, verum etiam (saltem metatarsi) versus medium et basin uno alterove aculeo muniti. Unguiculi tarsorum in pedibus 1.ⁱ paris mediocres et (saltem interior) dentibus longis densis pectinati; in pedibus posterioribus gracillimi et angustissimi sunt, dentibus brevioribus 12-15 ante medium muniti. *Abdomen* longissimum et angustissimum, fere 5.plo longius quam latius, apicem versus sensim paullo angustatum; *vulva* ex area parva sub-infusata constat, quae antice foveas duas nigras ostendit et postice puncta duo ad ipsam rimani genitalem sita, quae puncta cum foveis illis trapezium multo latius antice quam postice formant. *Mamillae* longae, cylindratae, inferiores crassiores et paullo breviores quam superiores, mediae angustiores et fere dimidio breviores quam superiores.

Color. *Cephalothorax* in fundo testaceus, macula nigra inter oculos laterales anticos et oculos seriei 2.^{ae}, aliaque ad oculos posticos, intus, utrinque notatus, ut et fasciis tribus longitudinalibus angustioribus ferrugineis, ad marginem posticum pertinentibus, lateralibus posteriora versus paullo divaricantibus, ab oculis posticis ductis, media inter hos oculos initium capienti; area interoculari in medio pube flava, versus latera, inter oculos, pube rubra tecta, lateribus cephalothoracis saltem sub oculis flavo-pubescentibus (cephalothorax in exemplo nostro praeterea detritus); clypeus pube densa albicanti-flava vestitus; annuli quibus cinguntur oculi medii antiqui, qui colore margaritae sunt, infra ex pube albicanti-flava, praeterea ex pube flava et rubra formati. *Sternum*, *partes oris* et *palpi* testacea. *Pedes* testacei quoque, 1.ⁱ paris paullo obscuriores; aculei pallide fusci. *Abdomen* in fundo testaceum; dorsum ejus fascia media longitudinali nigra a margine antico versus anum ducta et posterius in lineolas et maculas paucas abrupta ornatum est: praeterea utrinque in medio lineam brevem longitudinalem et versus basin et apicem maculam vel lineolam parvam minus distinctam nigras ostendit. Saltem secundum medium dorsum pube appressa rufa vestitum est, fasciam longitudinalem formanti; versus latera pallide testaceo- vel flaveni-pubescentis fuisse videtur. Venter pallide testaceus, apice nigricanti. *Mamillae* testaceae.

MAS a femina parum nisi alia forma mandibularum et palporum differt. *Mandibulae* ejus sub-porrectae sunt, fere duplo longiores quam latiores, paullo latiores quam femora antica, longitudine altitudinem faciei paullo superantes, lateribus exterioribus rectis vel potius paullulo concavo-arcuatis et sat fortiter divaricantibus, lateribus interioribus a basi fere ad medium rectis et paene parallelis, deinde ad basin unguis valde oblique truncatis: mandibulae hic igitur sensim paullo angustatae et fortiter divaricantes; apex lateris exterioris mandibulae ultra basin unguis ut procursus sat fortis, paene dimidio longior quam latior, complanatus, supra paullo excavatus, apice rotundatus productus est; unguis sat longus, non ita fortis. *Palpi* gracillimi; pars patellaris apicem versus paullulo incrassata, plus duplo longior quam latior; pars tibialis priore dimidio longior et paullulo angustior, cylindrata, modo apice paullo incrassata: in apice lateris exterioris haec pars spina acuminata sat gracili et fortiter deorsum curvata, uncum formanti, armata est. Pars tarsalis parte tibiali paene dimidio brevior et paullo latior est, paullo angustior vero quam tibia 1.ⁱ paris, anguste ovato-lanceolata fere, versus medium leviter constricta, apice obtusa; bulbus breviter ovatus vel ellipticus, spinam gracilem longam nigram anteriora versus directam e medio lateris interioris emittens. Tibiae 2.ⁱ paris aculeum parvum antice versus basin, praeter aculeos 2.2.2.2. subter, habent.

Color ut in femina, eo excepto, quod *cephalothorax* paullo obscurior est, testaceo-ferrugineus, fasciis illis ferrugineis carens; area interocularis ad maximam partem pube rubra tecta est, modo in medio satis anguste flavo-pubescentis; annui circum oculos anticos medios rubri quoque (cephalothorax praeterea in exemplo a nobis viso detritus). *Sternum* testaceum. *Mandibulae* ferrugineo-testaceae; *maxillae* et *labium* saturate testacea. *Palpi* pallide flavo-testacei, clava paullo obscuriore, fusco-pubescenti, bulbo pallide fusco. *Pedes* flavo-testacei, 1.ⁱ paris tamen obscuriores, fusco-testacei. *Abdomen* ut in femina in fundo pallide testaceum, dorso fascia angusta longitudinali nigra in lineolas vel maculas oblongas abrupta notato, et utrinque, in medio prope eam, lineola vel macula nigra; fascia media longitudinalis rufescens e pube formata modo antice distincta est, praeterea utrinque, ad latera, fasciam longitudinalem ejusdem coloris ostendit dorsum, his fasciis ad marginem ejus anticum unitis.

♀. Lg. corp. $9 \frac{1}{2}$; lg. cephaloth. $3 \frac{1}{2}$, lat. ej. $2 \frac{2}{3}$, lat. front. 2 millim.; lg. abd. $6 \frac{1}{4}$, lai ej. vix $1 \frac{1}{2}$ millim. Ped. I $11 \frac{1}{4}$, II 9, III 12, IV $10 \frac{1}{4}$; pat. + tib. III $3 \frac{3}{4}$, pat. + tib. IV $3 \frac{1}{4}$, metat. + tars. IV $3 \frac{1}{2}$ millim.

♂. Lg. corp. 7; lg. cephaloth. $2 \frac{4}{5}$, lat. ej. parum plus 2, lat. front. $1 \frac{3}{4}$ millim.; lg. abd. 4, lat. ej. $1 \frac{1}{4}$ millim. Ped. I $\frac{1}{5}$, II $\frac{3}{4}$, III $9 \frac{1}{2}$, IV $8 \frac{1}{2}$, pat. + tib. III 3, pat. + tib. IV $2 \frac{2}{3}$, metat. + tars. IV $2 \frac{3}{4}$ millim.

Exemplum singulum utriusque sexus ad Kandari [Kendari, Sulawesi] inventa vidi.

Viciria, new genus. *Vicirius* is a proper Latin name. [The genus description appears to be based on the female *V. pavesii*.]

Carapace about $\frac{1}{3}$ longer than wide, slightly tall, height of the clypeus at least equal to half the diameter of an AME. Sternum short enough, not twice as long as wide, the coxae wider, not between coxae I, separated by at least the width of the labium. The front eyes are perfectly visible when viewed from above the carapace, forming a slightly curved upward line. The AME are largest, very prominent, a large area, separated by half their diameter from the ALE which are small enough. The ocular quadrangle is slightly wider at the front than at the rear, not occupying half the length of the prosoma, much narrower at the rear than is the prosoma at that place; the PME are minute, almost at the middle (or a little forward from the middle) between the ALE and the PLE; the PLE, about the diameter of the ALE, are higher, with a distance between the PLE less than their distance from the margin of the carapace. The chelicerae are directed downward and more or less toward the front. The endites are longer, slightly more separated and ventrolaterally curved, the labium about half as long; the labium is about half as long as wide, rounded or sub-truncate toward the distal end, gradually narrowed. The pedipalps are slender, not dilated or flattened near the distal femur. The legs are long enough, slender or moderate in thickness, legs I at least sometimes more robust; legs III at least as long (legs I are sometimes exceptions); the tibia plus patella III longer than or at least not shorter than the tibia plus patella IV. The tibiae are much longer than the patellae. The metatarsus IV does not taper distally. Opisthosoma long and narrow, with six long and cylindrical spinnerets.

Type species for genus: *V. pavesii*, new species.

Viciria in part resembles the genus *Maevia* C. L. Koch, of the form that Simon named the *Mavieae* but different, in that the tibia plus patella III is longer or at least not shorter than the tibia plus patella IV; even in the size and placement of the eyes *Maevia* appears different from *Viciria*.

90. ***V. pavesii***, new species. Carapace below either rusty-brick, or brick, with three longitudinal bands of reddish brown on the posterior side, eye region red-haired and, in the second half, covered with dense yellow hairs; pedipalps and legs brick, leg I somewhat brownish; very narrow abdomen, about 5 times longer than wide, at the bottom brick, above longitudinal black fascia in small or abrupt spots, and on either side marked with a small line or black spots, red males clothed in what forms a covering or longitudinal covering. ♂♀ adult. Length 7-9 $\frac{1}{2}$ mm.

Female. Carapace longer than patella plus tibia IV, patella plus tibia II of similar length, $\frac{1}{3}$ longer than wide, the front subtruncated; strongly narrowed in front, slightly rounded at the sides in the front, strongly rounded and narrow at the rear where it is emarginate at the median; near the posterior eyes a transverse impression, forming a deeper and more intense streak in the middle, on both sides between the PME and the PLE impressed with enough depth, the ridges at the rear of the PLE well expressed. As high as the prosoma, on the sides sloping, on the back from side to side as seen from the rear (with much placed behind the middle of the back) slightly downhill and a little convex, these eyes are set on the convex slope and gradually convex to the rear, a little steep and the ridge much shallower without crossing any path. Height of the clypeus exceeds half of the diameter of the AME. AME very prominent; ocular quadrangle occupies $\frac{2}{5}$ of the length of the carapace and is much narrower than the carapace at the posterior eye row, not much (not $\frac{1}{4}$) wider at the rear than long, most clearly (by the diameter of a PLE) wider in front than at the rear. The anterior eye row forms a curved line: A straight line across the upper margins of the AME cuts the ALE slightly below their upper margin. The AME are very large, slightly separated; in comparison the ALE are small, the AME more than twice, almost three times larger, and at a distance that seems almost equal to the diameter of an ALE. The PME are minute, almost in the middle between the PLE and the ALE; the PLE is slightly smaller than the ALE, and placed higher than the ALE, and the distance between the PLE is less than the distance of each PLE from the margin of the carapace. The three eyes on each side clearly form a curved line laterally and ventrally. Sternum inverse ovate, coxae very wide; coxae I separated by at least the width of the labium. Chelicerae sub-incorrect (directed down and to the front), outer sides slightly rounded and slightly dilated, wide and obliquely rounded-truncate, not narrowed, short and broad, only about $\frac{1}{4}$ longer than wide, at least equal in width to the front femora, face height equal to length, dorsally outward toward the base, slightly convex, moreover deflated below and mediodistally slightly sloping, very finely wrinkled, glistening, especially hairy distomedially. The posterior fang groove proximally armed with two average teeth and distally with two or three minute teeth; the fangs are long and strong. Endites narrow, more than half the length of the labium, laterally curving and diverging, medially in front of the labium obliquely truncate, rounded at the apex, its outer corner sub-prominent. Labium nearly half as long as wide, toward the apex broadly rounded, truncate, gradually narrowing. Pedipalps very thin, segments cylindrical, very hairy. Legs long, thin, sparingly hairy and pubescent, legs I stronger than the rest, robust, legs IV very slender; legs III longer than the rest, legs II shorter than the rest. The tibiae are much, almost twice, as long as the patellae, indeed almost three times as long as legs IV. Tibia and patella III not much longer than tibia plus patella IV, which is slightly shorter than the metatarsus and tarsus of the same legs. Posterior patellae, at least for legs III, have one spine or two; all femora, tibiae and metatarsi bear spines, the spines of leg IV very short and fine. Tibiae I are armed below with 2.2.2.2 long and strong spines, tibiae II with the same number, but shorter and less strong; anterior metatarsi armed below with 2.2 spines, long and strong. Tibiae and metatarsi IV with only a few spines, but not to the apex, but also also (at least metatarsals) toward the middle or base. Tarsal claws of legs I average and (at least the anterior claw) has a long and thick comb of teeth; in the hind legs they are very slender and very narrow, fortified with 15-20 shorter teeth in front of the middle. Abdomen very long and narrow, generally 5 times as

long as wide, slowly and slightly narrowed toward the rear; epigynum consists of a small sub-blackened area, which shows two black holes anteriorly and two points posteriorly located at the genitalia itself, these points, together with those pits, form a trapezoid much wider anteriorly than posteriorly. Spinnerets long, cylindrical, the lower larger and slightly shorter than the upper, the middle narrower and nearly half as short as the upper.

Color. Carapace brick at the bottom, black spots between the ALE and PME, and others to the PLE, medially, marked on both sides, as well as three narrow longitudinal bands with reddish brown, extending to the rear margin, toward the rear diverging, leading to the rear eyes, between these eyes yellow-haired in the middle, toward the sides, between the eyes, covered with red hairs, the carapace below the eyes at least yellow pubescent (carapace is also rubbed in our specimen); the clypeus densely covered with whitish-blond hairs; the rings that surround the AME, which are the color of pearls, are below of whitish blond hairs, also from yellow and red hairs, formed. Sternum, mouth parts and pedipalps brick. Legs also brick, leg I slightly darker; spines pale brown. Abdomen brick below; on the dorsum the median longitudinal band is black, drawn from the anterior margin toward the anus, and the back is decorated with small lines and a few abrupt spots. Moreover, on either side in the middle a short longitudinal line, and toward the front and back, a small black spot or a small less distinct line. At least along the middle of the back, dressed in rufous hairs, forming longitudinal lines; toward the sides pale brick or yellow pubescence. Venter pale brick, apex blackish. Spinnerets brick.

Male differs little from the female except for a different form of the chelicerae and pedipalps. His chelicerae are sub-incorrect, generally twice as long as wide, slightly wider than the anterior femur, length generally exceeding the height of the face, the lateral sides straight or slightly concave-arched and strongly diverging, the inner sides from the base almost straight to the middle, and almost parallel, then at the base of the fangs very obliquely truncate: Here the paturon is then narrowed slightly and strongly diverging; the lateral apex of the paturon extends beyond the base of the fang, sufficiently strong, almost half longer than wide, flattened, slightly hollowed out above and rounded at the apex; the fangs are sufficiently long, not so strong. Pedipalps very slender, patella slightly thickened distally, more than twice as long as wide; tibia longer by one half and slightly narrower, cylindrical, only slightly thickened at the apex: At the tip of the lateral side, this part has a very pointed spine, slender and strongly curved downward, armed with a hook. The tarsus is almost half the length of the tibia and is slightly wider, a little narrower than tibia I, narrowly ovate-lanceolate, toward the middle slightly constricted, the apex obtuse; the bulb short ovate or elliptical, sending a long, slender black apophysis distally toward the center of the medial side. Tibiae II have a small anterior spine toward the base, in addition to spines 2.2.2.2 below.

Color as in female, with the exception that the carapace is slightly darker, rusty-brick, lacking those reddish brown bands; the area between the eyes for the most part is covered with red hairs, only in the middle with a fairly narrow yellow-pubescent area; rings around the AME red (carapace moreover in the specimen seen by us). Sternum brick. Chelicerae rusty-brick; endites and labium completely brick. Pedipalps pale yellow-whitish, the club slightly darker, brownish pubescent, the tegulum pale brown. Legs yellow-brick, leg I darker, brownish brick. Abdomen as in female pale brick, narrow dark dorsal longitudinal lines with small or oblong spots, abrupt markings, and on both sides, near the middle, a little line or black spot; a medial longitudinal rufous band formed of hairs is distinct at the front, moreover on both sides a longitudinal band of the same color on the back, with these bands united to its front edge.

♀. Body length $9\frac{1}{2}$; carapace length $3\frac{1}{2}$, lat. ej. $2\frac{2}{3}$, lateral front. 2 mm; opisthosoma length $6\frac{1}{4}$, lat. ej. $1\frac{1}{2}$ mm. Leg I $11\frac{1}{4}$, II 9, III 12, IV $10\frac{1}{4}$; patella + tibia III $3\frac{3}{4}$, patella + tibia IV $3\frac{1}{4}$, metatarsus + tarsus IV $3\frac{1}{2}$ mm.

♂. Body length 7; carapace length $2\frac{4}{5}$, lat. ej. little more than 2, lat. front. $1\frac{3}{4}$ mm; opisthosoma length 4, lat. ej. $1\frac{1}{4}$ mm. Leg I $1\frac{1}{5}$, II $\frac{3}{4}$, III $9\frac{1}{2}$, IV $8\frac{1}{2}$, patella + tibia III 3, patella + tibia IV $2\frac{2}{3}$, metatarsus + tarsus IV $2\frac{3}{4}$ mm.

I have seen a single specimen of each sex from Kendari, Sulawesi.

2. Hasselt 1893: 157, with English translation (no figures included)

115. *Attus* (*Amycus*?) *praemandibularis* nov. sp. ♂

Sumatra.

Longitudo fere 10 mm.

Habitu generali huic in *Amyco* aut *Cocalo* C. K. similis. Oculis lateralibus seriei primae non ad latera mediorum maximorum, sed magis valde oblique pone hos positus. Oculis secundae seriei, minimis, prope laterales anticos situs. Oculis posticis lateralibus primae seriei duplo maioribus. Omnibus, minimis exceptis, brevis ex aurantiaco ciliatis. Cephalothorace, cum mandibulis (vide infra NB.) et unguibus, e rubro-fusco, nitido, plaga oculari ex aureo submicante. Sterno oblongo, luteo. Palpis extraordinarie longis, tenuibus, cum clava, valde simplicibus, albescentibus. Maxillis et labio luteis, solito multo longioribus quam latioribus. Pedibus sat longis; pare I ceteris longiore et fortiore, cum II, ad tibiae et metatarsos longe sed minus crebro aculeato; pare 1 et II fuscis, III et IV albo-luteis. Abdomen multo longius quam latius, quasi anguste lanceolatum; ejus dorso in medio ex viridi cupreo nigricante, ad latera inde a basi usque ad apicem, e sanguineo rubro zonato; ventre concolore, nigro-griseo. Mamillis longis parallelis, nigricantibus.

NB. In relatione ad meam denominationem, de mandibulis hujus *Atti* mentionem facere debeo specialem. Non solum sunt longae, porrectae et divaricantes, sed singulari modo, prolongationem habent sat latam, triquetram, antrorsum et extrorsum versus, subdentiformem et ad apicem brevis mucronatam, prae aut ante locum, ubi, interne, ungues oriuntur.

Ut videtur extraordinarius.

115. *Attus* (*Amycus*?) *praemandibularis*, new species ♂

Sumatra.

Length about 10 mm.

Habitus similar to *Amycus* or *Cocalus* C. L. Koch 1846. The ALE are not to the sides of the AME, but in a more oblique position. The PME, small, near the ALE. The PLE are larger, twice as far from the ALE. Entirely, with few exceptions, covered with short orange hairs. Cephalothorax, with the chelicerae (see below *) and fangs reddish-brown, bright, mixed with gold near the eyes. Sternum oblong, yellowish. Pedipalps extraordinarily long, thin, with a simple, whitish club. Endites and labium yellow, longer than wide. Legs long, legs I longer and stronger than II, with long but sparse spines on the tibiae and metatarsi; legs I and II brown, III and IV white-yellow. Abdomen far longer than wide, narrow and lanceolate, dorso-medially colored coppery-green, on the lateral sides from anterior to posterior blood-red, the venter black-grey. Spinnerets long and straight, blackish.

* The chelicerae of these salticids are special. Not only are they long and porrect [extending horizontally] but they have a fairly wide projection, to the side and front, subdentiform and short at the apex, above or in front of the place where the fangs originate.

This seems extraordinary.

3. Workman 1896: 104, in English (see Figure 3:1 for figures labeled *Lagnus ruber* Work. Singapore)

LAGNUS RUBER. sp. n.

Description of Plate 104 ♂ -a, spider, mag.; b, natural size; c, profile, d, cephalothorax, underside; e, eyes; f, left palpus, from below (wet); g, do., from outside (wet).

Total length, 9; cephalothorax, 4; breadth, 2½; do. across anterior pair of eyes, 1½; abdomen, 5; breadth, 1 millim. Leg. i.-13½; ii.-12; iii.-12; iv.-10½ millim. Patella+tibia, iv.-3½ millim. Palpus, 5 millim.

This spider has considerable resemblance to *L. longimanus*, L. Koch, but differs in the shape of the falcis when looked at from in front, which, in the latter species, are rounded, and in having the large front eyes close to the margin of the clypeus, but more especially in the length of the palpi. In *L. longimanus* the palpi are as long as the anterior legs.

L. ruber has a much narrower abdomen, but I think it is contracted owing to the strength of the spirit in which it is preserved.

One specimen only has been found by me. It was sitting on the lower side of a leaf with its long anterior legs stretched out in front, resembling a prawn or lobster.

Type in my collection.