

Male colour morphs of the Australasian jumping spider *Mopsus mormon* (Araneae: Salticidae: Astioida: Mopsini)

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Two colour morphs of the male *Mopsus mormon* Karsch 1878 are identified. One morph (*niger*) is found from Cairns to the north, the other (*viridis*) from Townsville south, on the Queensland coast. The appearance of females in these areas is also reviewed. Predation by *M. mormon* on a variety of insect and spider species is documented, and the species name of this spider is reviewed, with original and/or English versions of original descriptions.

Mopsus mormon Karsch 1878 is a well-known inhabitant of tropical rainforests in Australasia, to include the Queensland coast. Attaining a length of 15 mm, this is also one of the largest jumping spiders in that region. It is sometimes called the *Northern Green Jumping Spider* because of its vivid green colours, and there is no other spider like it. It is often encountered and photographed, particularly in more populated areas like Brisbane and Townsville. Yet there is one fact about this spider that is not generally recognized: Males come in two different and distinct colour forms. The form most encountered from Brisbane north to Townsville has translucent green femora I, with a sparse cover of thin white setae (Figures 1.1, 2). North of Townsville, from Cairns north to New Guinea and west to Darwin, male *M. mormon* have dark, often black, femora I, ornamented with an array of bright white scales (Figures 1.2, 3). Based on records posted on *iNaturalist*, the geographic distribution of the two forms is shown in Figure 4.



Figure 1. The two colour morphs of ♂ *Mopsus mormon*. **1**, ♂ *viridis* morph, Townsville. Note the translucent, vivid green femora I. **2**, ♂ *Niger* morph, Cairns. A cover of spaced, bright-white scales covers the prolateral surface of each dark femur I. Photo credits: 1, iNat. obs. 103514825, © Dee McMahon, CC BY-NC 4.0; 2, iNat. obs. 99973870, © globeseeker, CC BY-NC 4.0.



Figure 2. ♂ *Mopsus mormon*, *viridis* morph. 1, ♂, Brisbane. 2, ♂, Seaforth, north of Mackay. 3, ♂, Brisbane. 4, ♂, Tingalpa, near Brisbane. 5, ♂, Togroom, west of Hervey Bay. 6, ♂, Maryborough, south of Hervey Bay. Photo credits: 1, iNat. obs. 105705145, © rick_franks, CC BY-NC 4.0; 2, iNat. obs. 163918680, © Gunter Maywald, CC BY-NC 4.0; 3, iNat. obs. 238551004, © Gunter Maywald, CC BY-NC 4.0; 4, iNat. obs. 103115943, © Christian Perrin, CC BY-NC 4.0; 5, iNat. obs. 181700675, © Nigel Main, CC BY 4.0; 6, iNat. obs. 245917265, © Nigel Main, CC BY 4.0.

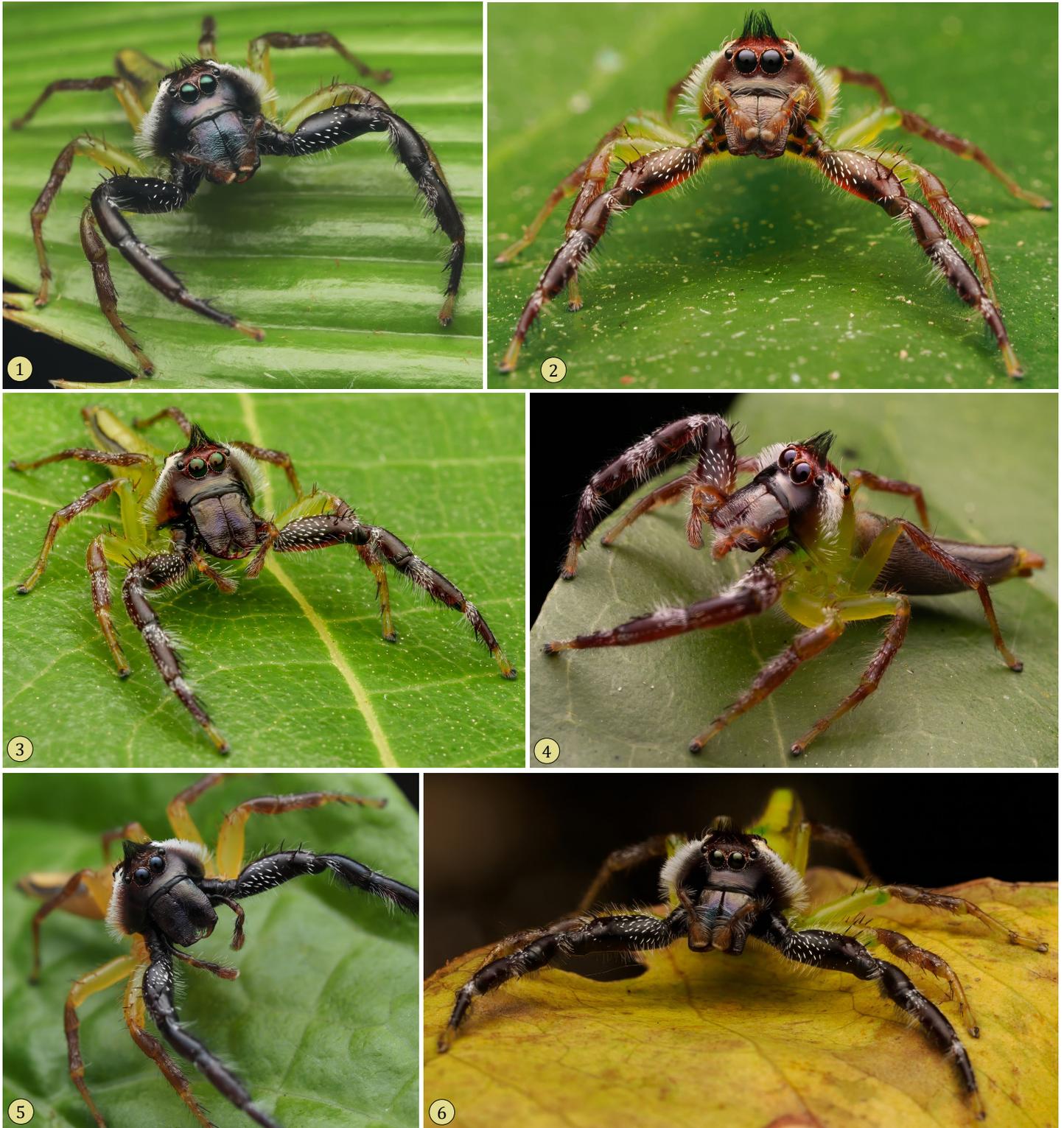


Figure 3. ♂ *Mopsus mormon*, *niger* morph, from the vicinity of Cairns. As with the *viridis* morph (Figure 2), heavily pigmented leg segments vary from dark brown to black in colour. Photo credits: 1, iNat. obs. 120302934, © Caleb Jones, CC BY-NC 4.0; 2, iNat. obs. 146557680, © Bridgette Gower, CC BY-NC 4.0; 3, iNat. obs. 292219757, © Gunter Maywald, CC BY-NC 4.0; 4, iNat. obs. 171555568, © t-weichselbaum, CC BY-NC 4.0; 5, iNat. obs. 194091743, © mauriceallan, CC BY-NC 4.0; 6, iNat. obs. 171555568, © Bridgette Gower, CC BY-NC 4.0.

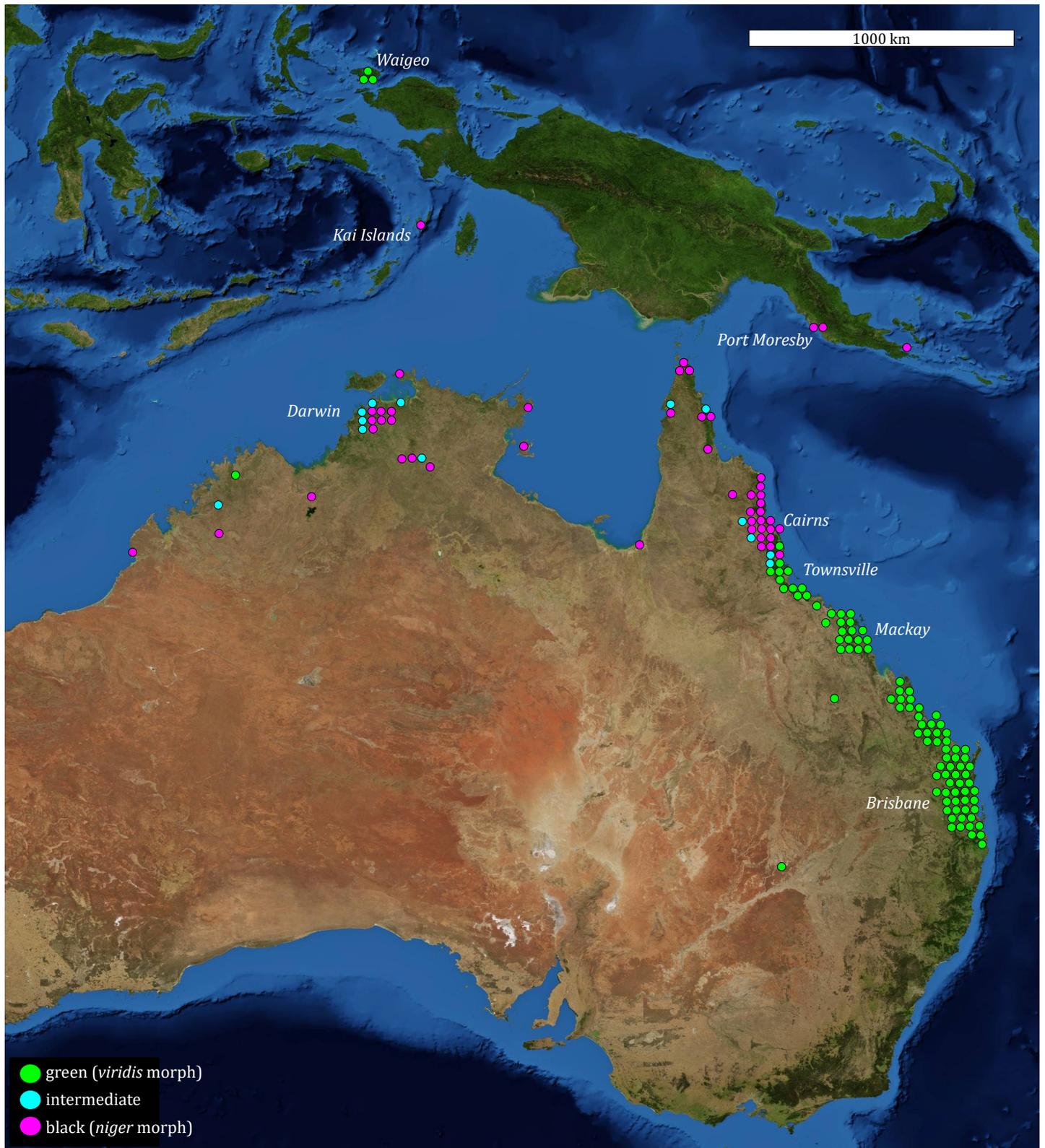


Figure 4. Distribution of ♂ colour morphs for *Mopsus mormon*, based on examination of records and photographs posted on iNaturalist. Only representative records are shown for populated areas of the Queensland coast. There appears to be a relatively sharp boundary between *viridis* males in the vicinity of Townsville, and *niger* males in the vicinity of Cairns.

In contrast to the males, female *Mopsus mormon* appear to be relatively uniform in appearance, or at least show little to no geographic variation, irrespective of locality (Figure 5). There is some variation in pigmentation of the legs, but not like that seen in males. As with males, some individuals are more light orange or yellow than green (Figure 5.11).

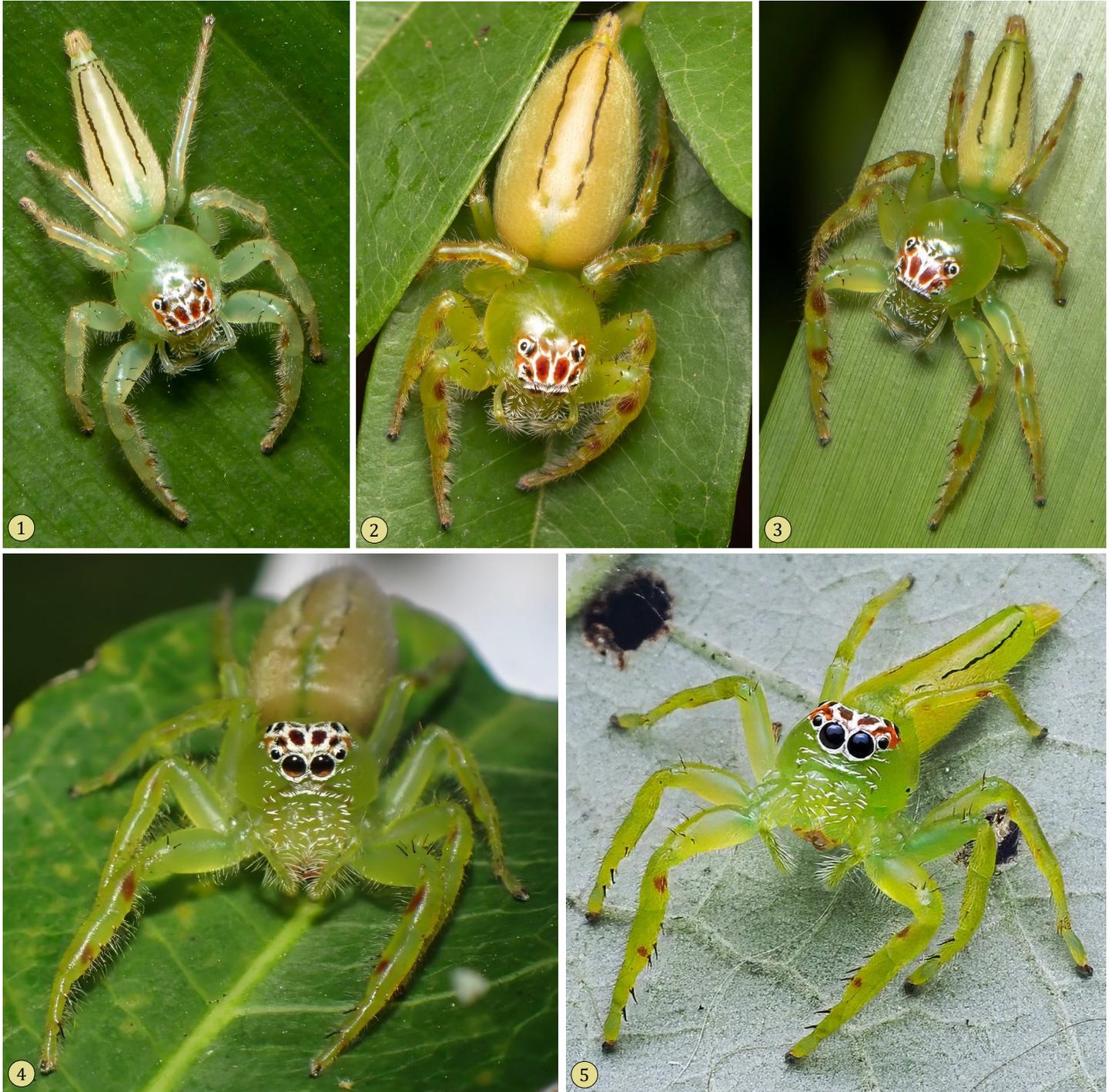


Figure 5 (continued on next page). ♀ *Mopsus mormon*. 1-5, Five different ♀, Brisbane area. Photo credits: 1, iNat. obs. 135217040, © Steve Murray, CC BY-NC 4.0; 2, iNat. obs. 255046138, © Chris Burwell, CC BY-NC 4.0; 3, iNat. obs. 137610220, © Steve Murray, CC BY-NC 4.0; 4, iNat. obs. 250885039, © eklemp, CC BY-NC 4.0; 5, iNat. obs. 243307521, © Ged Tranter, CC BY 4.0.



Figure 5 (continued from previous page). ♀ *Mopsus mormon*. **6**, ♀, Bilambil Heights, New South Wales. **7**, ♀, Rocklea near Brisbane. **8-9**, ♀, Mount Surprise, southwest of Cairns. **10-11**, Two different ♀, Cairns. Photo credits: 6, iNat. obs. 174566822, © Jade Blacker, CC BY-NC 4.0; 7, iNat. obs. 195984723, © alexceleste, CC BY-NC 4.0; 8-9, iNat. obs. 229176652, © Gunter Maywald, CC BY-NC 4.0. 10, iNat. obs. 233379662, © pat_jones, CC BY-NC 4.0; 11, iNat. obs. 233379663, © pat_jones, CC BY-NC 4.0.

The two male morphs for *Mopsus mormon*, *niger* and *viridis*, do not represent polymorphism in a single population (sympatric), but rather parapatric geographic variation. Based on the many *iNaturalist* records for this species, there are some intermediate forms, but not many. The division between the *niger* Cairns population and the *viridis* Townsville population is quite abrupt. With respect to selection driving differentiation of the two forms, if that is relevant, we can consider the impact of male appearance on both sexual selection and male survival.

With respect to *sexual selection*, we do not know the relative importance of ritual male:male combat (agonistic behavior, associated with *selection by the male*) and male courtship display (*selection by the female*) for *Mopsus mormon*. Thus we do not know if the difference in appearance of the *niger* and *viridis* forms affects male behavior, or female behavior, or both. Indeed, the same can be said for the other impressive features (e.g., the prominent white fringe around the black face) displayed by adult males of both forms. However, the flat, grooved front surface of the paturon has been associated with ritual male:male combat (*pushing contests*) in other unrelated salticids, to include *Colonus* species (Hill 2018). In some salticids selection by the male is most important (e.g., *Lyssomanes viridis*; Tedore & Johnsen 2012, 2015). In almost all of the Australian peacock spiders (*Maratus*) male:male combat is unknown, and selection by the female is associated with elaborate courtship display by the male (Otto & Hill 2024, 2025). But for many salticids, both male:male combat and courtship display are important. One paper has been published on the subject of male:female encounters by *Mopsus mormon* (Jackson 1983), and this includes the observation that males may enter female nests to mate, and may also construct their own shelter near that of a penultimate female, awaiting her maturation. Both behaviors have been frequently observed in other salticids.

But if sexual selection (of some kind) is driving the details of the male appearance in this species, then why does this appearance change so suddenly between Cairns and Townsville? Is the boundary between the two morphs stable? Are there are other differences in the behavior of *Mopsus mormon* in the two populations that are not visible, but important in maintaining a level of genetic isolation?

Environmental differences may be important. Townsville is near the northern limit of a dry tropical or semi-arid zone, and Cairns is near the southern limit of a wet tropical, monsoonal rainforest zone, subject to more variation in both humidity and rainfall. Cairns is much more humid, with almost twice the annual rainfall (~2000 mm/y; WP 2025). Related differences in vegetation might have an important impact on *Mopsus mormon*, often characterized as a rainforest species. It is possible that the contrasting, bright white scales on each tibia I of the *niger* morph has more impact on either a female or a rival under the rainforest canopy near Cairns. If the appearance of the adult male is relevant to its probability of survival, then the presence of *different* predators in the two areas might also be important. Extensive field studies of the ecology and microhabitat of *Mopsus mormon* might provide some answers to these difficult questions, as the vegetation of the Queensland coast is complicated and there are many different categories of forest or vegetation to consider (Neldner et al. 2023).

Prey records. *Mopsus mormon* is a large salticid predator that preys on a wide variety of insects and spiders, to include conspecifics. Photographs of adult spiders with their prey are shown here in Figure 6. It is important to note that these are anecdotal records, useful for showing what they can do, but not representative of their behavior in the field. In fact, field studies of salticid predation are very difficult, subject not only to distraction of the spiders by the observer, but also subject to a number of sampling errors. The fact that it takes longer to consume larger prey makes feeding on large prey more likely to be observed than feeding on a small prey item. In addition, any comprehensive study of salticid predation needs to look at the prey items relevant to each instar as the spider grows. There are no good field studies of predation by early instars of salticid spiders.



Figure 6 (continued on next page). *Mopsus mormon* with prey. 1-2, ♂, Wonga, with *Oxyopes macilentus* (Oxyopidae) as prey. 3, ♂, Cooray, feeding on cicada. 4, ♂, Lake MacDonal, with conspecific prey. 5-6, Two ♀, vicinity of Brisbane, with orthopteran prey. Photo credits: 1-2, iNat. obs. 282775458, © David White; 3-4, iNat. obs. 68532303, CC BY-NC 4.0 (3), iNat. obs. 134527428 (4), © donnamareetomkinson, CC BY-NC 4.0; 5, iNat. obs. 182438639, © Dee Newton, CC BY-NC 4.0; 6, iNat. obs. 133570097, © Ged Tranter, CC BY 4.0.



Figure 6 (continued from previous page, continued on next page). *Mopsus mormon* with prey. **7**, ♀, Douglas-Daly, Northern Territory, with *Oxyopes macilentus*. **8**, ♀ *O. macilentus*, Malaysia. **9**, ♀, Elimbah, north of Brisbane, with *Arkys lancearius* (Arkyidae). **10**, ♀ *A. lancearius*, Queensland. **11**, ♀, Holloways Beach, north of Cairns, feeding on spider. **12**, ♀, Cooroy, north of Brisbane with captured moth. Photo credits: 7, iNat. obs. 26045421, © simono, CC BY-NC 4.0; 8, iNat. obs. 31966254, © Richard Ong, CC BY-NC 4.0; 9, iNat. obs. 264085295, © elimbahlfw, CC BY-NC 4.0; 10, iNat. obs. 160707339, © Bridgette Gower, CC BY-NC 4.0; 11, iNat. obs. 1998023, © Lek Khauv, CC BY 4.0; 12, iNat. obs. 67999758, © donnamareetomkinson, CC BY 4.0.



Figure 6 (continued from previous page). *Mopsus mormon* with prey. **13**, ♀, Gold Coast, with planthopper. **14**, ♀, Wonga Beach, with nymphalid butterfly. **15**, ♀, Brisbane, with cicada. **16**, ♀, Cairns, with butterfly chrysalis attached to leaf. **17**, ♀, Gold Coast, with conspecific ♀. Photo credits: 13, iNat. obs. 249971951, © hermanmoller, CC BY-NC 4.0; 14, iNat. obs. 202769674, © David White, CC BY-NC 4.0; 15, iNat. obs. 255046138, © Chris Burwell, CC BY-NC 4.0; 16, iNat. obs. 236232806, © Roxanne Lazarus, CC BY-NC 4.0; 17, iNat. obs. 248721703, © hermanmoller, CC BY-NC 4.0.

Naming and description. The naming of *Mopsus mormon* has an interesting history, beginning with the fact that it involves two names from the same publication (Karsch 1878). Karsch briefly described two large jumping spiders in two different genera, from specimens preserved in alcohol. He did not provide any drawings of these spiders. Here I give his original text description of the new genera and species, with an English translation:

***Ascyllus* (n. g.).** Cephalothorace minus alto, rotundato, antice latiore, postice angustato, parte cephalica non descendente, clypeo lateribus in planum verticale transversale, angulum acutum formans, valde prolongato,

dilatato, extrema dilatationis parte pilis nonnullis longis ornata. Mandibulis subrectis. Quadrangulo oculorum latiore quam longiore. Oculis I ante frontem sitis. Pedibus I et II robustioribus, longioribus, III et IV tenuioribus, brevioribus, aculeatis; mandibulis in ♀ rotundatis, minoribus, in ♂ longioribus, supra paullo deplanatis, lateribus acutis, divergentibus. Abdomine cephalothorace angustiore, elongato, antice rotundato, postice tenuiore. Mamillis longioribus. Ad hoc genus et *Attus opulenus* Walck. (Hist. Nat. Ins. Apt., I, 1837, pp. 477—478, n. 141) et *Hyllus pterygoidem* L. Koch (Verh. zool.-bot. Ges. Wien, 1865, XV, pp. 876-8) referendos esse censeo. **19. *Ascyrtus penicillatus* (n. sp.).** Cephaloth. ♀ 5, ♂ 6 mill. long., ♀ 4.5, ♂ 5 mill. lat. (post dilatationem); abdomine ♂ 7, ♀ 8 mill. long. Cephalothorace lateritio, nigro-marginato, parte cephalica nigricante, splendido, dilatatione faciali viridi-squamata, metallica; dilatatione supra postice nigro-marginata, cacumine nigro-penicillato. Mandibulis lateritiis (♂), nigro-marginatis, nigro-brunneis (♀); antice infra (♂) dente lateritio armatis. Abdomine pallidiore, dorso flavo, nitido, duabus vittis longitudinalibus, nigro-brunneis parallelis, interdum pallido-interruptis. Pedibus scopula instructis et ut in *Ascyrtus divino* armatis. Mamillis superioribus longioribus. Maris mandibulis supra et infra parte anteriore dente armatis. Nonnulla specimina, ♂ et ♀, sub Nr. 1673 —1681 siccata, acu affixa, „Fejee Ins. — Daemel" et „Austral. Sept — Daemel" signata. Duo specimina, amb. sex., spiritu vini asservata, sub Nr. 2617 „Viti Levu. — Rewa? — Gazelle" signata.

***Mopsus* (n. g.).** *Mopsus* generi *Ascyrtus* habitu valde similis, sed clypeo lateribus non dilatato, minus latiore, magis altiore, supra paullo attenuato et margine cephalico antice supra et lateribus scopula pilis tenuibus longis instructo. Oculis II minimis prope laterales I et paullo intra quadrangulum oculorum sitis. Mandibulis cum facie sub-perpendicularibus. Oculis I recurvis, cohaerentibus, infra frontem sitis; parte cephalica altiore, brevioris quam in genere *Ascyrtus*. Thorace post oculos oblique descendente. **21. *Mopsus Mormon* (n. sp.).** Cephalothorace 6, abdomine 8.8 mill. long. Frontis altitud. cum mandibulis 5.8 mill. Abdomine 2.5, cephalothorace ca. 6 mill. lat. Cephalothorace lateritio, parte cephalica, facie, mandibulis brunneo-nigris, palpis pedibusque lateritiis, patellis I et tibiis I maxima parte brunneo-nigris. Scopula frontis media pilis longis nigris, scopulis frontis lateralibus pilis longis albis formatis. Abdomine pallido, lateribus dorsi fasciola longitudinali tenuiore nigro-brunnea. Lateribus pallidioribus. Ventre figura triangulari longitudinali brunnea. Specimen unicum masc., in spiritu vini asservatum, sub Nr. 2613, „Segaar Bay. — Gazelle" signatum examinavi.

***Ascyrtus* (n. g.).** Cephalothorax moderately high, rounded, broader in front, narrower behind; the cephalic part not sloping downward; clypeus with the sides forming a vertical transverse plane, creating an acute angle, strongly prolonged and expanded, with the extreme part of the expansion adorned with a few long hairs. Mandibles nearly straight. Eye quadrangle broader than long. Anterior (first) eyes situated in front of the face. First and second legs more robust and longer; third and fourth more slender and shorter, spined; mandibles in the female rounded and smaller, in the male longer, slightly flattened above, with sharp, divergent sides. Abdomen narrower than cephalothorax, elongated, rounded in front, tapering behind. Spinnerets longer. To this genus, I believe *Attus opulenus* Walck. (Hist. Nat. Ins. Apt., I, 1837, pp. 477—478, no. 141) and *Hyllus pterygoides* L. Koch (Verh. zool.-bot. Ges. Wien, 1865, XV, pp. 876–878) should be referred. **19. *Ascyrtus penicillatus* (n. sp.).** Cephalothorax: ♀ 5 mm, ♂ 6 mm long; ♀ 4.5 mm, ♂ 5 mm wide (after expansion). Abdomen: ♂ 7 mm, ♀ 8 mm long. Cephalothorax brick-red, black-margined, cephalic part blackish, shiny, with a green-scaled metallic facial expansion; the expansion black-margined above and behind, the tip with a black brush-like tuft. Mandibles brick-red in male, black-margined; dark brown to black in female; in front, below (♂), armed with a brick-red tooth. Abdomen paler, the dorsum yellow, glossy, with two longitudinal, parallel dark brown stripes, sometimes faintly interrupted. Legs equipped with scopulae (tufts), armed as in *Ascyrtus divinus*. Superior spinnerets longer. Male chelicerae armed above and below in the front part with a tooth. Several specimens, both male and female, dried and pinned under Nos. 1673–1681, labeled "Fejee Islands — Daemel" and "Northern Australia — Daemel". Two specimens of both sexes preserved in alcohol, under No. 2617, labeled "Viti Levu — Rewa? — Gazelle".

***Mopsus* (n. g.).** *Mopsus* is very similar in general appearance to the genus *Ascyrtus*, but differs by having the clypeus without lateral expansions, narrower, somewhat higher, slightly tapered above, and with the anterior and lateral margins of the cephalic part above adorned with a brush (scopula) of fine long hairs. Second pair of eyes very small, situated near the lateral anterior eyes and slightly within the eye quadrangle. Mandibles nearly perpendicular to the face. First pair of eyes recurved, touching, located below the face; cephalic part higher and shorter than in the genus *Ascyrtus*. Thorax sloping obliquely downward behind the eyes. **21. *Mopsus mormon* (n. sp.).** Cephalothorax 6 mm, abdomen 8.8 mm long. Height of face with mandibles 5.8 mm. Abdomen 2.5 mm, cephalothorax approx. 6 mm wide. Cephalothorax brick-red; cephalic part, face, and mandibles dark brown to black; palps and legs brick-red; patellae I and tibiae I mostly dark brown to black. Central front brush composed of long black hairs; lateral brushes of long white hairs. Abdomen pale, with a narrow dark brown longitudinal stripe along the dorsal sides. Lateral sides paler. Venter with a longitudinal triangular brown marking. A single male specimen preserved in alcohol, under No. 2613, labeled "Segaar Bay — Gazelle," was examined.

The *Ascyrtus penicillatus* of Karsch might be viewed as a *nomen dubium* since, without designating a type specimen, he assigned this name to a series of at least six, perhaps many more, males and females from at least two different locations (Fiji, Northern Australia). Keyserling later (1883, see below) recognized this as a synonym of *Hyllus pterygodes* L. Koch. Karsch described *Mopsus mormon* from a single male specimen collected at *Segaar Bay*, an historic place name associated with the far western coastline of New Guinea, explored by the German Naval Vessel *SMS Gazelle*. This brief description includes several characters (e.g., cephalothorax with lateral brushes of long white hairs) of the male *M. mormon*.

Three years later, in 1881, Thorell published a long description of new male (*niger* morph) and female spiders that he recognized as *Mopsus mormon* Karsch 1878. Here I present both the original Latin text and an English translation of this description:

Gen. **Mopsus**, KARSCH 1878. 241. **M. Mormon** Karsch cephalothorace fusco-testaceo, vitta lata obliqua alba e pube densa formata ab oculis ad coxas 1ⁱ paris ducta utrinque notato, ante has vittas vero, in clypeo et genis, nigro-fusco, area inter-oculari rubra vel fusca, margine frontali crista transversa triangula e pilis nigris formata ornato; mandibulis nigro-fuscis; pedibus fusco-testaceis, 1ⁱ paris plerumque fuscis, intus saepe nigris; abdomine sub-testaceo, plerumque lineis duabus parallelis nigris postice in dorso et fascia brevi nigra postice in ventre notato. — ♂ ad. Long. 10 ½ — 16 millim. Cephalothorace, mandibulis et pedibus testaceis vel fusco-testaceis, area inter-oculari maculis duabus rubris oblongis glabris anterieus notata et circum has maculas et oculos decise albo-pubescenti, crista pilorum et vittis obliquis albis carenti; abdomine ut in mare est dictum. — ♀ ad. Long. 13— 15 ½ millim. Syn.: 1878. *Mopsus Mormon* Karsch, Diagn. Attoid. aliquot nov. Novae Holl., *cet.*, in Mittheil. d. Münchener Entom. Ver., 1878, p- 31.

MAS ad. — Cephalothorax modo paullulo longior quam lator, tibiam + ⅓ patellae 1ⁱ paris, patellam + tibiam + ½ metatarsi 4ⁱ paris longitudine circiter aequans, ante coxas 1ⁱ paris lateribus leviter rotundatis anteriora versus sensim fortiter angustatus, pone has coxas lateribus primum sat leviter, dein fortiter rotundatis posteriora versus angustatus, desuper visus sub-orbiculatus; fronte angustissima, dimidium cephalothoracem latitudine non aequanti, paene truncata; postice in medio anguste emarginatus. Valde altus antico est cephalothorax et transversim fortiter et satis aequaliter convexus, facie alta et directa, dorso a latere viso antice (ante oculos posticos) breviter et sat fortiter proclivi et modice convexo, ab oculis posticis usque ad marginem posticum sensim sat fortiter declivi et leviter convexo, limite inter dorsum ipsum et declivitatem posticam vix ullo. In medio inter et paullo pone oculos posticos impressio magna sat fortis sub-triangula adest, quae posterius sulcum medium longitudinalem brevem et tenuem ostendit; paene in medio inter oculos posticos et marginem cephalothoracis posticum alius sulcus ejusmodi sed magis obsoletus conspicitur. Arcus supra-ciliares oculorum posticorum debiles, sed evidentes. Laevis et nitidus est cephalothorax, in margine frontali crista transversa sub-triangula anteriora versus et sursum directa e pilis longis densis formata ornatus et fascia lata pubescentiae fortis ab oculis utriusque lateris deorsum et retro ad basin coxarum 1ⁱ paris ducta munitus, praeterea modo parce pilosus; clypeo alto, diametrum oculi maximi latitudine aequanti, cum genis ante fascias illas glabro et transversim striato. Quadrangulus oculorum parvus, vix ¼ longitudinis cephalothoracis et circa ⅔ latitudinis ejus occupans, circa ¼ lator quam longior, vix lator postico quam antico. Oculi parvi, mediis anticis exceptis; linea recta margines superiores lateralium anticorum tangens medios anticos paullo sub margine superiore secat. Oculi medii antici, spatio exiguo sejuncti, lateralibus anticis triplo majores sunt et ab iis spatiis remoti quae dimidiam diametrum oculi lateralis circiter aequant. Oculi 2^{ae} seriei minuti, circa dimidio longius ab oculis posticis quam a lateralibus anticis remoti; oculi postici, hos oculos magnitudine aequantes, plus diametro sua altius quam ii positi sunt: spatium quo inter se distant circa duplo minus est quam id quo a margine cephalothoracis sunt remoti. Oculi tres utriusque lateris lineam paullulo foras et sat fortiter deorsum curvatam formant. Sternum inverse ovatum, antico minus late truncatum: spatium inter coxas 1ⁱ paris labii latitudinem aequat. Mandibulae paene directae, sat fortes, femoribus anticis paullo angustiores, paene duplo longiores quam latiores, sub-cylindratae, apice parum oblique truncatae, in latere exteriori ad longitudinem leviter convexae et costa sat tenui marginatae, intus rectae, dorso intus costa longitudinali limitato quoque; in dorso ad longitudinem et latitudinem parum convexae sunt, paene planae, intus ab apice ultra medium leviter impressae; sat nitidae, transversim sat crasse rugoso-striatae. Unguis sat brevis. Maxillae parallelae, duplo longiores quam latiores, labio duplo longiores, anguste ovatae fere; labium vix longius quam latius, apicem rotundato-acuminatum versus sensim fortiter angustatum. Palpi gracillimi sed non longi, clava metatarsum 1ⁱ paris latitudine circiter aequanti; pars patellaris cylindrata est, duplo longior quam lator; pars tibialis longitudine partis patellaris est et, apice, latitudine ejus, a basi apicem versus sensim paullulo incrassata, circa duplo longior quam lator, in apice lateris exterioris spina vel

calcari forti, acuminato, paullo incurvo, diametrum internodii longitudine fere aequanti, anteriora versus et paullo foras directo armata. Pars tarsalis parte tibiali plerumque evidenter et non parum longior est, et apice ejus non parum latior, circa duplo longior quam latior, anguste ovato-quadrata fere, apice valde obtusa; bulbus humillimus, oblongus, ovato-quadratus fere, apice intus spina gracili oblique intus directa munitus. Pedes longitudine mediocri, ut palpi pilis longioribus minus dense vestiti; gradatim graciliores evadunt: 1ⁱ paris, reliquis longiores, valde robusti sunt, 4ⁱ paris sat graciles. Tibiae 1ⁱ et 4ⁱ parium patella paullo longiores sunt, tibiae 2ⁱ paris patella vix, 3ⁱⁱ paris ea non longiores. Femora et patellae 6 posteriores aculeata; tibiae 1ⁱ paris modo subter 2.2.2.2, metatarsi ejusdem paris subter 2.2. aculeos fortes habent; tibiae 2ⁱ paris subter 2.2.2, antice 1. vel 1.1. aculeis sunt instructae, metatarsi 2ⁱ paris subter 2.2. aculeis; metatarsi posteriores modo versus basis et apicem aculeati. Abdomen sub-lanceolatum, triplo longius quam latius. Mamillae sat longae, superiores cylindratae et non parum (longitudine articuli 2ⁱ) longiores et angustiores quam inferiores, articulo 2^o aequae fere longo ac lato, obtuso. Color. — Cephalothorax clarius vel obscurius fusco-testaceus interdum antice infuscatus, area inter-oculari rubra vel fusca, clypeo et genis nigro-fuscis; crista pilorum frontalis nigra est, vittae duae obliquae anticae albae. Annuii circum oculos medios anticos saltem supra rubri, infra albi; margo frontalis sub ipsa crista rubro-pilosus quoque. Sternum fusco-testaceum vel testaceum. Mandibulae nigro-fuscae, interdum apice extus sub-ferrugineae. Maxillae et labium nigro-fusca vel nigra, apice interdum anguste sub-testacea. Palpi fusco-testacei vel sub-fusci, clava interdum obscuriore. Pedes 1ⁱ paris fusci vel testaceo-fusci, antice (intus) saepe ad magnam partem nigri, tarsis testaceis, femoribus interdum testaceis quoque; ut reliqui pedes nigro-pilosi et -aculeati sunt, et, ut pedes 2ⁱ paris, in latere antico femorum, patellarum et tibiarum pube vel squamulis albis sparsi. Reliqui sex pedes clarius vel obscurius fusco-testacei sunt, femoribus magis testaceis. Abdomen flavo- vel luteo-testaceum, in dorso lineis vel fasciis duabus longitudinalibus angustis, parallelis, ab apice postico ad circa $\frac{2}{3}$ longitudinis dorsi anteriora versus ductis et saepe in lineolas vel maculas abruptis notatum; venter paullo pallidior fasciam mediam latam nigram a mamillis fuscis vel testaceis anteriora versus ad circa $\frac{1}{4}$ longitudinis ventris ductam plerumque ostendit.

FEMINA. — Cephalothorax praesertim antico minus altus quam in mare, in lateribus magis aequaliter rotundatus, paullo longior quam latior, fronte sub-truncata dimidium cephalothoracis latitudine aequanti; dorsum ipsum ante oculos posticos (qui paullo ante medium dorsi ipsius positi videntur) modice proclive et paullo convexum est, pone eos primum sub-libratum et parum convexum, dein magis convexum et declive et in declivitatem posticam sine limite bene expresso sensim transiens; clypei altitudo dimidiam diametrum oculi maximi non aequat. Crista frontali et vittis illis latis e pube longiore formatis caret cephalothorax, in area inter-oculari et circum oculos dense pubescens; clypeus pilis crassis sparsus est. Sternum inverse ovatum; spatium inter coxas 1ⁱ paris labii latitudinem vix aequat. Quadrangulus oculorum fere $\frac{1}{3}$ longitudinis cephalothoracis occupat; paullo (vix $\frac{1}{4}$) latior est quam longior, postice parum latior quam antice, ibique multo (diametro oculi postici 5—6.pla) angustior quam cephalothorax eodem loco. Linea margines superiores oculorum anticorum tangens paene recta est. Praeterea oculi sunt ut in mare diximus. Mandibulae femoribus anticis non parum angustiores, duplo longiores quam latiores, cylindratae fere, apice oblique rotundato-truncatae, in dorso modico convexae, laeves, costis carentes, nitidae, pubescentia crassa sparsae. Maxillae ad formam fere ut in mare, parallelae, labio fere dimidio longiores; labium longius quam in eo, circa duplo longius quam latius, apicem truncatura versus sensim angustatum. Palpi graciles, tarsis 1ⁱ paris vix crassiores, pilis longis minus densis vestiti, apice dense et brevius pilosi; pars patellaris paene duplo longior est quam latior, pars tibialis ea paullo longior et paullo angustior, pars tarsalis partem tibiale longitudine; et crassitie aequans, cylindrata, apice rotundata. Pedes 4 anteriores valde robusti, pedes 4ⁱ paris reliquis graciliores et longiores; tibiae, 4ⁱ paris exceptis, patella parum longiores sunt; eodem modo atque in mare aculeati sunt pedes, eo excepto, quod modo posteriores patellae aculeatae videntur, et quod aculei tres interiores subter in tibiis 2ⁱ paris seriem brevem deorsum curvatam prope apicem internodii formant. Abdomen paullo latius quam in ♂, circa duplo et dimidio longius quam latius. Vulva ex area parva transversa constat, quae in medio tubercula duo minuta ostendit. Color. — Cephalothorax, sternum, mandibulae et pedes fusco-testacea, hi interdum sub-fusco-maculati; area inter-ocularis maculas duas oblongas rubras glabras ostendit, sed praeterea ad maximam partem pube densa albida tecta est; oculi omnes annulo ejusmodi pubis sunt cincti; sub oculis utriusque lateris plerumque stria vel macula transversa e pube rubra formata conspicitur; clypeus et mandibulae pube crassa alba sparsi sunt. Sternum, maxillae, labium et palpi clarius vel flavo-testacea, hi pallido-pilosi. Abdomen ad colorem ut in mare; fascia ilia ventrali nigra tamen saepe caret, praesertim in junioribus. Mamillae testaceofuscae.

♂. — Lg. corp. 15; Ig. cephaloth. 5 $\frac{1}{2}$, lat. ej. paullo plus 5, lat. front. 2 $\frac{1}{2}$; lg. abd. 9, lat. ej. 3 millim. Ped. I 16 $\frac{1}{4}$, II 13, III 13 $\frac{3}{4}$, IV 14 $\frac{2}{3}$; pat. + tib. III paullo plus 4, pat. + tib. IV 4 $\frac{2}{3}$, metat. + tars. IV 4 $\frac{2}{3}$ millim.

♀. — Lg. corp. 15 $\frac{1}{2}$; lg. cephaloth. paene 5 $\frac{1}{2}$, lat. ej. 4 $\frac{3}{4}$, lat. front. circa 2 $\frac{1}{2}$, lg. abd. 9 $\frac{1}{2}$, lat. ej. 4 millim. Ped. I 12 $\frac{1}{2}$, II 11 $\frac{1}{4}$, III 11 $\frac{2}{3}$, IV paullo plus 13; pat. + tib. III paene 4, pat. + tib. IV paene 4 $\frac{1}{2}$, metat. + tars. IV 4 millim.

Exempla non pauca hujus araneae vidi, ad partem in Nova Guinea inventa (ad Dorei, Andai et Ramoi a Beccari, in Pulo Faor, in ins. Yule et in monte Epa a L. M. D'Albertis), ad partem ad Wokan in ins. Aru a Beccari et ad Somerset (Cape York) a L. M. D'Albertis collecta. Cel. Karsch marem ex "Segaar Bay" (Novae Guineae ? vel Novae Hannoveriae ?) obtinuit.

Genus *Mopsus*, Karsch 1878, p. 241. *Mopsus mormon* (Karsch): — **Adult** ♂: Length 10½–16 mm. The cephalothorax is dark testaceous (brownish-yellow), with a wide oblique white stripe formed from dense pubescence, marked on each side from the eyes to the coxae of the first pair of legs. In front of these stripes, on the clypeus and cheeks, it is dark brown to black; the area between the eyes is red or brown. The front edge bears a transverse triangular crest formed of black hairs. The chelicerae are dark brown-black. The legs are brownish-yellow; the first pair mostly dark, often black on the inner side. The abdomen is somewhat testaceous (yellowish), usually marked on the dorsal side posteriorly with two parallel black lines, and on the ventral side with a short black band at the back. **Adult** ♀: Length 13–15½ mm. Cephalothorax, mandibles, and legs are testaceous to brownish. The area between the eyes is marked in front with two red, oblong, hairless spots, and around these spots and the eyes is distinctly covered with white pubescence. The crest of hairs and the oblique white stripes are absent. Abdomen as described for the male. **Synonym:** 1878. *Mopsus mormon* Karsch, in Diagnoses Attoidarum aliquot novarum Novae Hollandiae collectionis Musei Zoologici Berolinensis, Mitteilungen der Münchener Entomologischen Verein, 1878, p. 31.

Adult ♂ — Cephalothorax slightly longer than wide; tibia + ⅓ of the patella of the first pair of legs approximately equal in length to the patella + tibia + ⅓ of the metatarsus of the fourth pair; anterior to the first coxae, the sides are slightly rounded, then gradually and strongly narrowed toward the front; behind these coxae, the sides are first moderately, then strongly rounded, narrowing posteriorly. In dorsal view, the cephalothorax is sub-orbicular. The front is very narrow, not equaling half the width of the cephalothorax, and nearly truncate; posteriorly, the middle is narrowly notched. The cephalothorax is very high at the front, strongly and evenly convex transversely; the face is high and vertical. In lateral view, the dorsal surface slopes steeply and is moderately convex before the posterior eyes; from the posterior eyes to the rear margin it slopes down fairly strongly and is slightly convex, with almost no boundary between the dorsal surface and the posterior declivity. Between and just behind the posterior eyes there is a large, fairly strong, sub-triangular depression, posteriorly continuing into a short, narrow median groove; nearly halfway between the posterior eyes and the rear margin of the cephalothorax there is another, more obscure groove. Supra-ciliary arcs above the posterior eyes are weak but distinct. The cephalothorax is smooth and shiny, adorned at the frontal margin with a transverse, sub-triangular crest of dense long hairs directed forward and upward; equipped with a broad band of dense pubescence extending downward and backward from the eyes on each side to the base of the first coxae. Elsewhere, sparsely hairy. The clypeus is high, equal in width to the diameter of the largest eye, smooth and transversely striated with the cheeks before the pubescent bands glabrous. The eye quadrangle is small, occupying barely ¼ the length and about ⅔ the width of the cephalothorax, about ¼ wider than long, only slightly wider at the rear than at the front. Eyes are small, except for the large anterior medials. A straight line tangent to the upper margins of the anterior laterals cuts across the anterior medials just below their upper margin. Anterior medial eyes are close together, three times larger than the anterior laterals, separated from them by a space about half the diameter of the lateral eye. Second row eyes are tiny, placed more than half their diameter farther from the posterior eyes than from the anterior laterals. Posterior eyes are equal in size to the second row, situated over one diameter higher; the space between them is about half the distance to the posterior margin. The three eyes on each side form a line gently curved outward and distinctly downward. Sternum inversely ovate, slightly truncated anteriorly; space between the first coxae equals the width of the labium. Chelicerae nearly straight, fairly strong, slightly narrower than the anterior femora, almost twice as long as wide, sub-cylindrical, apex slightly obliquely truncated; outer surface slightly convex along its length and bordered by a fine ridge, inner side straight, dorsal side with a weak longitudinal ridge. Dorsally slightly convex, nearly flat; slightly depressed on the inner surface from apex to beyond the midpoint. Glossy, with coarse transverse wrinkles. Fang moderately short. Maxillae parallel, twice as long as wide, narrowly ovate; labium twice as long as wide, apically rounded and strongly narrowed toward the tip. Palps very slender but not long; the club about equal in width to the first metatarsus. Patellar segment cylindrical, twice as long as wide. Tibial segment equal in length and width to the patella, slightly thickened toward the apex, about twice as long as wide; armed at the outer apex with a strong, pointed, slightly curved spine or spur, directed forward and slightly outward, about equal in length to the diameter of the joint. Tarsal segment usually clearly and significantly longer than the tibia, broader at the apex, about twice as long as wide, narrowly ovate-quadrangle, with a very blunt tip. Bulb very low, oblong, nearly ovate-quadrangle, with a slender, inwardly directed apical spine. Legs of moderate length, less densely covered with long hairs than the palps; gradually become more slender. First pair longest and very robust; fourth pair fairly slender. Tibiae of first and fourth pairs slightly longer than their patellae; tibiae of second pair barely longer, and third pair not longer than the patellae. Femora and patellae

of legs II-IV spined. Tibiae of first pair bear strong ventral spines in pattern 2.2.2.2; metatarsi 2.2. Tibiae of second pair with ventral 2.2.2, anteriorly 1 or 1.1 spines; metatarsi 2.2. Posterior metatarsi spined only at base and apex. Abdomen sub-lanceolate, about three times as long as wide. Spinnerets fairly long; upper pair cylindrical and distinctly longer and narrower than the lower pair. Second article of lower pair nearly as long as wide, blunt. Colour — Cephalothorax lighter or darker brownish-yellow, sometimes darkened at the front. Interocular area red or brown; clypeus and cheeks dark brown to black. Frontal crest black; two oblique white hair stripes anteriorly. Annuli around median anterior eyes red above, white below; area below the crest also covered with reddish hairs. Sternum brownish-yellow to testaceous. Chelicerae dark brown, sometimes slightly rust-coloured at the tip outside. Maxillae (endites) and labium dark brown or black, sometimes pale at the tip. Palps yellowish-brown to brown, club sometimes darker. First pair of legs brown to dark testaceous, often mostly black on inner side; tarsi testaceous, femora sometimes pale. All legs with black hairs and spines; anterior surface of second femora, patellae, and tibiae often scattered with white pubescence or scales. Remaining legs lighter or darker brownish-yellow, femora often paler. Abdomen yellow to ochre with two narrow, parallel longitudinal black lines or bands on the dorsum extending from posterior tip to about $\frac{2}{3}$ forward, often broken into spots or short streaks. Venter slightly paler, usually with a broad black median band running from spinnerets anteriorly to about $\frac{1}{4}$ of abdominal length.

Adult ♀ — Cephalothorax less high in front than in male, sides more evenly rounded; slightly longer than wide. Frontal margin sub-truncate, equal to half the cephalothorax's width. Dorsal surface before the posterior eyes (which are slightly anterior to the midpoint) is moderately sloping and slightly convex; behind them nearly level and faintly convex, then more strongly convex and sloping, smoothly blending into the posterior slope without a clearly defined boundary. Clypeus height does not equal half the diameter of the largest eye. Cephalothorax lacks the frontal crest and oblique hair bands, but is densely pubescent in the interocular area and around the eyes. Clypeus scattered with coarse hairs. Sternum inversely ovate; space between first coxae barely equals labium width. Eye quadrangle occupies nearly $\frac{1}{3}$ the cephalothorax length, slightly more than $\frac{1}{4}$ wider than long, posteriorly slightly wider than anteriorly, but at that point much narrower (by 5–6 eye diameters) than the cephalothorax. Line tangent to upper margins of anterior eyes nearly straight. Other eye details as in male. Chelicerae distinctly narrower than anterior femora, twice as long as wide, nearly cylindrical, apex obliquely rounded-truncate, dorsally slightly convex, smooth, without ridges, shiny, scattered with coarse pubescence. Maxillae shaped like male's, parallel, about twice the length of the labium. Labium longer than in male, about twice as long as wide, apex gradually narrowed and truncated. Palps slender, barely thicker than first tarsi, less densely covered with long hairs; apex more densely and shortly haired. Patellar part nearly twice as long as wide. Tibial part slightly longer and narrower. Tarsal part equal in length and thickness to tibia, cylindrical, tip rounded. Legs: First four pairs very robust, fourth pair slender and longest. Tibiae (except fourth pair) only slightly longer than patellae. Spination similar to male, except that only posterior patellae are spined, and inner three ventral spines on second tibiae form a short, downward-curved row near apex. Abdomen slightly broader than male's, about 2.5× longer than wide. Epigyne composed of a small transverse area with two tiny central tubercles. Colour — Cephalothorax, sternum, chelicerae, and legs brownish-testaceous, sometimes spotted. Interocular area shows two oblong red glabrous spots, but is otherwise covered with dense whitish pubescence. All eyes surrounded by such pubescence. Below the eyes on each side usually a transverse stripe or spot of red pubescence. Clypeus and chelicerae scattered with coarse white hairs. Sternum, maxillae, labium, and palps lighter yellowish-testaceous; palps covered with pale hairs. Abdomen coloured as in male, though the ventral black band is often absent, especially in younger individuals. Spinnerets testaceous-brown.

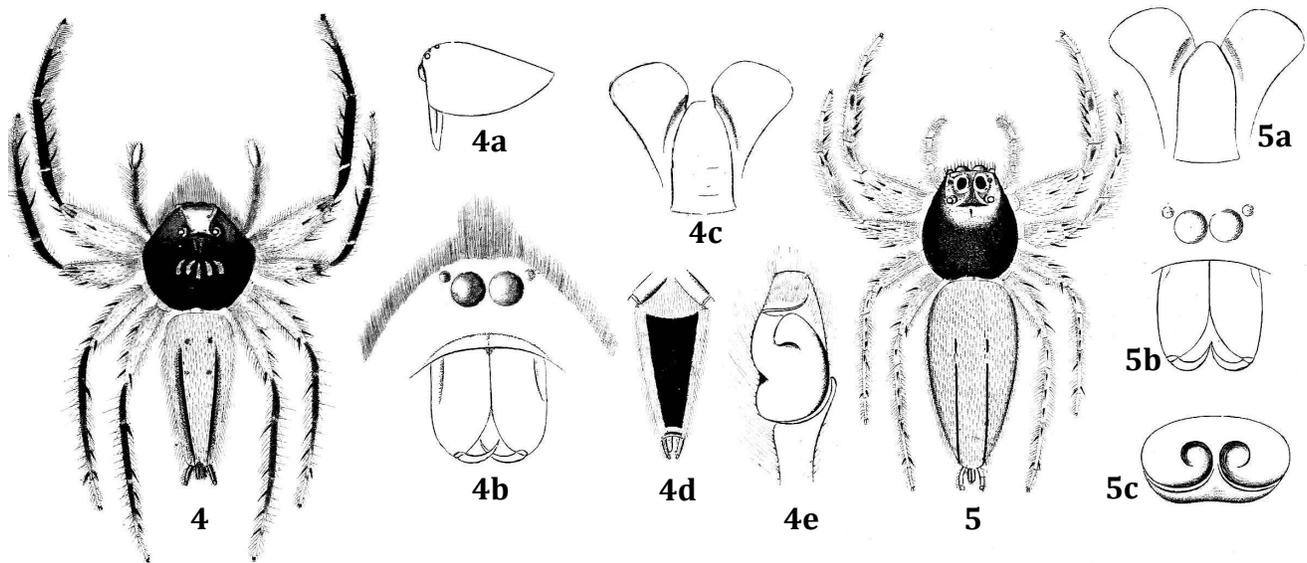
♂ — Body length: 15 mm, cephalothorax: 5.5 mm long, a little over 5 mm wide, front width 2.5 mm, abdomen: 9 mm long, 3 mm wide. Legs: I: 16 $\frac{1}{4}$ mm, II: 13 mm, III: 13 $\frac{3}{4}$ mm, IV: 14 $\frac{2}{3}$ mm, patella + tibia III: a little over 4 mm, patella + tibia IV: 4 $\frac{2}{3}$ mm, metatarsus + tarsus IV: 4 $\frac{2}{3}$ mm.

♀ — Body length: 15 $\frac{1}{2}$ mm, cephalothorax: nearly 5 $\frac{1}{2}$ mm long, 4 $\frac{3}{4}$ mm wide, front width ~2 $\frac{1}{2}$ mm, abdomen: 9 $\frac{1}{2}$ mm long, 4 mm wide. Legs: I: 12 $\frac{1}{2}$ mm, II: 11 $\frac{1}{4}$ mm, III: 11 $\frac{2}{3}$ mm, IV: a little over 13 mm, patella + tibia III: nearly 4 mm, patella + tibia IV: nearly 4 $\frac{1}{2}$ mm, metatarsus + tarsus IV: 4 mm.

Numerous specimens of this spider were observed. Some were found in New Guinea (at Dorei, Andai, and Ramoi by Beccari; on Pulo Faor; Yule Island; and Mount Epa by L. M. D'Albertis), some on Wokan in the Aru Islands (by Beccari), and at Somerset (Cape York) by L. M. D'Albertis. Herr Karsch obtained a male from "Segaar Bay" (New Guinea? or New Hanover?).

Keyserling (1881) redescribed *Ascyltus penicillatus* Karsch from a series of male and female specimens from Australia, apparently collected from Townsville and coastal areas to the south. These were not the specimens examined by Karsch, yet Keyserling clearly described the spider that we now recognize as *Mopsus mormon* Karsch:

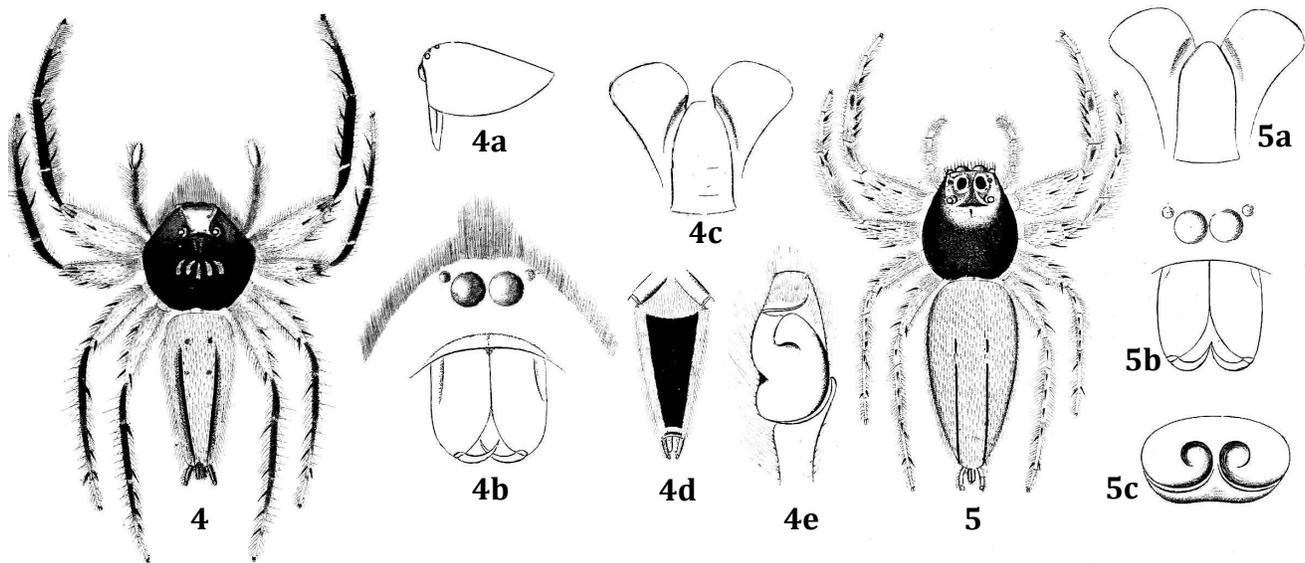
Ascyltus penicillatus. Karsch. Mittheilungen des Münchener entom. Vereins 1878 p. 30. Tab. 112 fig. 4. mas. fig. 4a Cephalothorax von der Seite, fig. 4b vordere Augenreihe und Mandibeln, fig. 4c Maxillen und Lippe, fig. 4d Abdomen von unten, fig. 4e Palpe; fig. 5 femina, fig. 5a Maxillen und Lippe, fig. 5b vordere Augenreihe und Mandibeln, fig. 5c Epigyne.



Mas. Der Cephalothorax braungelb, vorn und oben zwischen den Augen schwarzbraun mit stahlblauem Schiller, über den vorderen MA. rothbraun und hier rothgelb behaart; der Haarschopf über den Augen der vorderen Reihe braun, der Bart, welcher von den Augen an den Seiten hinabzieht, reinweiss, nur zunächst der Augen der dritten Reihe mehr gelblich weiss; die Mandibeln schwarzbraun, mit starkem Metallschiller; ganz ähnlich sind auch die Maxillen und die Lippe gefärbt; das Sternum bräunlich gelb; das Abdomen blassgelb, mit zwei parallelen schwarzen Längsstreifen, welche ungefähr am Ende des vordersten Drittheils beginnen und bis zu den Spinnwarzen reichen; an der Unterseite ein breiter, schwarzer, hinten verschmälerter Längsstreifen, welcher jedoch nicht bei allen Exemplaren vorhanden ist. Die Palpen röthlich braun, gelblich weiss behaart. Die Schenkel der Beine heller bräunlich gelb, am ersten Paare die Patellen, Tibien und Metatarsen schwarzbraun, an den übrigen Beinen die Patellen und Tibien, sowie die Basalhälfte der Metatarsen röthlichbraun, die Endhälfte der letzteren, sowie sämtliche Tarsen, bräunlich gelb. Der Cephalothorax so lang, als über der Hälfte des zweiten Beinpaares breit, vorn sehr hoch, vom Hinterrande bis zur dritten Augenreihe mit leichter Wölbung schräge ansteigend, in den Seiten gerundet, an der seitlichen Abdachung gewölbt. Am Hinterrande eine feine aufgeworfene Kante. Die Fläche zwischen den Augen gewölbt und sanft nach vorn geneigt, metallisch schillernd. Die seitliche und hintere Fläche des Cephalothorax glänzend, mit abstehenden feinen Haaren weitschichtig bewachsen; an der hinteren Abdachung fünf seichte Längseindrücke, der mittelste davon der längste, die vier seitlichen kürzer und paarweise schräge gegeneinander gestellt. Hinter den Augen der dritten Reihe die kurze Mittelritze in einer leichten Impression. Zwischen den Augen der zweiten und dritten Reihe beginnt ein schräge nach den Seiten herabziehender, breiter Haarstreifen; die Haare sind vorwärts gerichtet und stehen beiderseits an der vorderen Wand des Cephalothorax bartähnlich ab. Ueber den MA. der ersten Reihe ein Schopf langer, vorwärts gerichteter Haare. Die vordere Wand des Cephalothorax senkrecht abfallend, metallisch mattschillernd, unter der vorderen Augenreihe der Quere nach seicht eingeschnürt. Die Wimpern um den oberen, äusseren und unteren Theil des Umkreises der MA. der ersten Augenreihe rothgelb, mit weissen Spitzen, jene des unteren Theiles weiss. Diese MA. dicht beisammen, fast weiter als um ihren Durchmesser vom Kopfrande entfernt, die SA. klein, ebenfalls ganz nahe an den MA. und so hoch stehend, dass ihre Mitte in einer Linie mit dem obersten Punkte der Peripherie der MA. liegt. Das Auge der zweiten Reihe dem SA. der ersten auffallend näher als dem Auge der dritten, etwas einwärts stehend. Die Augen der dritten Reihe weiter von einander entfernt, als die SA. der ersten, so gross als diese und von einander ungefähr ebenso weit als vom Seitenrande entfernt. Die Mandibeln vom Kopfrande senkrecht abfallend, länger als die Höhe des vorderen Kopfrandes beträgt und auch etwas länger als die vorderen Patellen, vorn sehr wenig gewölbt, innen mit scharfer Kante an einander schliessend, am

Aussenrande ebenfalls scharfkantig, metallisch schillernd, der Quere nach gerunzelt, mit kurzen, feinen Härchen spärlich bewachsen; an der Basis aussen eine längliche Impression. Die Klaue sehr stark gekrümmt, der vordere Falzrand befranset. Die Maxillen lang, vorn allmählig an Breite zunehmend, gewölbt. Die Lippe der Länge nach stark gewölbt, vorn gerundet, mehr als halb so lang als die Maxillen. Das Sternum oval, flach, glänzend, mit langen feinen Haaren reichlich bewachsen. Das Abdomen mehr als halb so breit als der Cephalothorax, mehr als doppelt so lang als breit, von der Basis nach hinten allmählig verschmälert, mit mässig langen, feinen, aufrechten Haaren spärlich bewachsen. Das oberste Paar der Spinnwarzen gebogen, dünn und merklich länger als das unterste. Das Femoralglied der Palpen seitlich zusammengedrückt, aufwärts gebogen; der Patellar- und Tibiaitheil von gleicher Länge, letzterer am vorderen Ende aussen mit einem vor- und etwas auswärts gerichteten Fortsatz, dessen Spitze einwärts gebogen ist. Die Decke der Copulationsorgane schmal, an der Basis nur wenig breiter als am Ende, licht behaart, vorn schräge abgestutzt, hier rundlich vertieft und dicht kurz behaart. Die Beine etwas glänzend, die Patellen, Tibien und Metatarsen des ersten Paares mit leichtem Metallschiller; das erste Paar merklich dicker als die übrigen; die Patellen, Tibien und Metatarsen dieses und des zweiten Paares mit langen, feinen, gerade abstehenden Haaren besetzt; am dritten und vierten Paare sind diese Glieder mit einzelnen langen Haaren bewachsen. Patella und Tibia III kürzer als Patella und Tibia IV, Metatarsus und Tarsus IV auch ein wenig kürzer als Patella und Tibia IV. Bestachelung: Erstes Beinpaar: Femur oben 1.1.6; Tibia unten 2.2.2; Metatarsus unten 2.2. Zweites Beinpaar ebenso. Drittes und viertes Femur ähnlich; Patella vorn und hinten 1; Tibia unten 1.1 — 2, vorn 2, hinten 3; Metatarsus am Anfänge und Ende mehre. Totallänge. 10,6 Mm. Cephalothorax lang. 4,3 Mm. Cephalothorax in der Mitte breit 4,2 Mm. Cephalothorax vorn breit 2.0 Mm. Abdomen lang 6,3 Mm. Abdomen breit 2,9 Mm. Mandibeln lang 2,2 Mm. 1. Fuss: Fem. 3,0 Mm., Pat. 2,0 Mm., Tib. 2,4 Mm., Metat. 2,0 Mm., Tar. 0,8 Mm., Summa 10,2 Mm. 2. Fuss: Fem. 2,5 Mm., Pat. 1,7 Mm., Tib. 1,7 Mm., Metat. 1,7 Mm., Tar. 0,7 Mm., Summa 8,3 Mm. 3. Fuss: Fem. 2,7 Mm., Pat. 1,7 Mm., Tib. 1,4 Mm., Metat. 2,2 Mm., Tar. 0,8 Mm., Summa 8,8 Mm. 4. Fuss: Fem. 2,7 Mm., Pat. 1,4 Mm., Tib. 2,0 Mm., Metat. 2,2 Mm., Tar. 0,8 Mm., Summa 9,1 Mm. **Femina.** Der Cephalothorax hell bräunlichgelb, auf der Kopfplatte zwei braune, mit weissen Härchen gesäumte, ovale Fleckchen, von welchen zwei gebogene weisse Haarstreifen nach den Augen der dritten Reihe laufen; die Augen sind mit weissen Schuppen umgeben, unterhalb der Augen der zweiten und dritten Reihe mit Fleckchen gelbrother Schüppchen; an Stelle des Backenbartes bei den Männchen, feine, kurze, weisse Härchen. Mandibeln, Maxillen, Lippe, Sternum, Palpen und Beine hell bräunlichgelb; an der Vorderseite der Patellen und Tibien des ersten und zweiten Beinpaars je ein braunes Fleckchen; bei vielen Exemplaren sind diese Fleckchen nur am ersten Beinpaar zu bemerken. Das Abdomen blassgelb, oben zwei, am Ende des ersten Drittheils beginnende, parallele, bis zu den Spinnwarzen reichende, dunkle Längslinien, oft vor denselben zwei schräge Strichelchen. Die Unterseite einfarbig. Die Behaarung der Palpen und Beine weiss. Der Cephalothorax nur unbedeutend länger als an seiner breitesten Stelle breit, an der hinteren Abdachung stärker gewölbt, oben zwischen den Augen der dritten und ersten Reihe stärker abgedacht, daher auch vorn beträchtlich niedriger. Es fehlt der Haarschopf über den MA. der ersten Reihe und die bartähnliche Behaarung der Seiten des Kopftheiles. Die Zeichnung der von den Augen begränzten Fläche und ein Streifen unterhalb derselben an den Seiten sind durch Schuppen gebildet. Die MA. der ersten Reihe sind nicht völlig in der Breite ihres Durchmessers vom Kopfrande entfernt; sonst ist die Augenstellung wie bei dem Männchen. Die Mandibeln treten mit starker, knieförmiger Wölbung unter dem Kopfraude hervor und fallen dann senkrecht ab, sie sind glänzend und mit einzelnen keulenförmigen Haaren, zwischen welchen feine längere Borsten hervorstehen, spärlich besetzt; ihre Länge kommt jener der Patellen des ersten Beinpaars gleich; die Klauen ebenfalls stark gekrümmt und der vordere Falzrand befranset. Maxillen, Lippe und Sternum wie bei dem Männchen. Das Abdomen vorn gerundet, von der Basis an nach hinten allmählig schmaler werdend und gegen die Spinnwarzen ziemlich spitz zulaufend, vorn hoch. Die Beine glänzend, beide Vorderpaare dicker, das erste am dicksten; die Behaarung an der Unterseite an den Patellen, Tibien und Metatarsen dieser Beine, ähnlich jenen beim Männchen, jedoch weniger dicht. Die Bestachelung ebenso, die Stacheln aber meist schwächer. Die Palpen dünngliedrig, lang behaart, auch die Oberseite des Patellar-, Tibial- und Tarsalgliedes behaart. Totallänge. 11,0 Mm. Cephalothorax lang. 4,0 Mm. Cephalothorax in der Mitte breit 3,7 Mm. Cephalothorax vorn breit 2.0 Mm. Abdomen lang 7,0 Mm. Abdomen breit 3,7 Mm. Mandibeln lang 1,9 Mm. 1. Fuss: Fem. 2,6 Mm., Pat. 1,6 Mm., Tib. 1,8 Mm., Metat. 1,6 Mm., Tar. 0,8 Mm., Summa 8,4 Mm. 2. Fuss: Fem. 2,3 Mm., Pat. 1,4 Mm., Tib. 1,4 Mm., Metat. 1,4 Mm., Tar. 0,8 Mm., Summa 7,3 Mm. 3. Fuss: Fem. 2,7 Mm., Pat. 1,4 Mm., Tib. 1,4 Mm., Metat. 1,9 Mm., Tar. 0,8 Mm., Summa 8,2 Mm. 4. Fuss: Fem. 2,8 Mm., Pat. 1,3 Mm., Tib. 1,9 Mm., Metat. 2,2 Mm., Tar. 0,8 Mm., Summa 9,0 Mm. Zahlreiche Exemplare im Museum Godeffroy von Sydney, Rockhampton und Bowen.

Ascyrtus penicillatus. Karsch. Mitteilungen des Münchener entomologischen Vereins, 1878, p. 30. Plate. 112 fig. 4. male. fig. 4a Cephalothorax from the side, fig. 4b anterior eye row and mandibles, fig. 4c maxillae and labium, fig. 4d abdomen from below, fig. 4e palp; fig. 5 female, fig. 5a maxillae and labium, fig. 5b anterior eye row and chelicerae, fig. 5c epigyne.



Male. The cephalothorax is brown-yellow, blackish brown at the front and on top between the eyes with a steel-blue sheen; reddish brown above the anterior medial eyes (AME), with reddish-yellow hairs in that area. The hair tuft above the eyes of the front row is brown; the beard extending from the eyes along the sides is pure white, only near the third row of eyes more yellowish-white. The mandibles are dark brown with strong metallic sheen; maxillae and labium similarly coloured. The sternum is brownish-yellow. The abdomen is pale yellow, with two parallel black longitudinal stripes beginning around the end of the anterior third and extending to the spinnerets; underneath is a broad, black longitudinal stripe narrowing towards the rear, though this is not present in all specimens. The palps are reddish-brown, covered with yellowish-white hairs. The femora of the legs are lighter brown-yellow; in the first pair, the patellae, tibiae, and metatarsi are dark brown. In the other legs, the patellae and tibiae and the basal half of the metatarsi are reddish brown; the distal half of the metatarsi and all tarsi are brownish yellow. The cephalothorax is as long as it is wide over the second leg pair; very high in front, ascending with a slight dome from the rear edge to the third eye row, rounded at the sides, and vaulted on the lateral slopes. At the rear edge is a fine raised rim. The area between the eyes is convex and gently inclined forward, with metallic sheen. The lateral and posterior surfaces of the cephalothorax are glossy, sparsely covered with long, fine, upright hairs. On the posterior slope are five shallow longitudinal grooves: the central one is the longest, the four lateral ones are shorter and arranged in oblique pairs. Behind the third row of eyes is a short median groove in a light depression. Between the second and third eye rows begins a broad stripe of forward-pointing hairs that descend diagonally towards the sides, forming beard-like structures on both sides of the anterior wall of the cephalothorax. Above the AME of the first row is a tuft of long, forward-pointing hairs. The anterior wall of the cephalothorax descends vertically, with a dull metallic sheen, slightly constricted transversely beneath the anterior eye row. The eyelashes around the upper, outer, and lower parts of the AME of the first eye row are reddish-yellow with white tips; the lower ones are entirely white. The AME are closely set, almost more distant from the front margin of the head than their own diameter. The anterior lateral eyes (ALE) are small, also very close to the AME and so elevated that their center aligns with the uppermost point of the AME perimeter. The second row of eyes is strikingly closer to the ALE of the first than to the third row, and slightly set inward. The third row of eyes is more widely spaced than the ALE of the first row, equal in size, and about as far from each other as from the lateral margin. The chelicerae descend vertically from the head margin, longer than the front head height, and also slightly longer than the anterior patellae; slightly convex in front, with sharp inner edges meeting each other; also sharply edged on the outer margin, with metallic sheen, wrinkled transversely, sparsely covered with short fine hairs; at the base on the outside is a longitudinal depression. The fang is strongly curved, with fringed front groove margin. The endites are long, gradually widening towards the front, and convex. The labium is strongly convex lengthwise, rounded at the front, and more than half the length of the endites. The sternum is oval, flat, glossy, and richly covered with long fine hairs. The abdomen is more than half as wide as the cephalothorax, more than twice as long as wide, narrowing gradually from the base to the rear, sparsely covered with moderately long, fine, upright hairs. The uppermost pair of spinnerets is curved, slender, and noticeably longer than the lower pair. The femur of the pedipalp is laterally compressed and curves upward; patella and tibia

of equal length, the tibia ending anteriorly on the outside with a forward- and slightly outward-pointing process whose tip bends inward. The covering of the copulatory organs is narrow, slightly wider at the base than at the tip, lightly haired, front obliquely truncated, roundedly indented there, and densely covered with short hairs. The legs are slightly glossy; the patellae, tibiae, and metatarsi of the first pair show a slight metallic sheen. The first pair is noticeably thicker than the others; patellae, tibiae, and metatarsi of the first and second pairs are covered with long, fine, straight, upright hairs. On the third and fourth pairs, these segments bear individual long hairs. Patella and tibia III are shorter than patella and tibia IV; metatarsus and tarsus IV are also a bit shorter than patella and tibia IV. Spination: First leg: femur dorsal 1.1.6; tibia ventral 2.2.2; metatarsus ventral 2.2. Second leg same as the first. Third and fourth femur similar; patella anterior and posterior 1; tibia ventral 1.1—2, anterior 2, posterior 3; metatarsus with several spines at beginning and end. Total length: 10.6 mm. Cephalothorax length: 4.3 mm. Cephalothorax width in middle: 4.2 mm. Cephalothorax width at front: 2.0 mm. Abdomen length: 6.3 mm. Abdomen width: 2.9 mm. Chelicera length: 2.2 mm. 1st leg: femur 3.0 mm, patella 2.0 mm, tibia 2.4 mm, metatarsus 2.0 mm, tarsus 0.8 mm, total 10.2 mm. 2nd leg: femur 2.5 mm, patella 1.7 mm, tibia 1.7 mm, metatarsus 1.7 mm, tarsus 0.7 mm, total 8.3 mm. 3rd leg: femur 2.7 mm, patella 1.7 mm, tibia 1.4 mm, metatarsus 2.2 mm, tarsus 0.8 mm, total 8.8 mm. 4th leg: femur 2.7 mm, patella 1.4 mm, tibia 2.0 mm, metatarsus 2.2 mm, tarsus 0.8 mm, total 9.1 mm. **Female.** The cephalothorax is light brownish-yellow, with two brown, oval spots bordered with white hairs on the head plate. From each runs a curved white hairline toward the third eye row. The eyes are surrounded by white scales, with spots of yellow-red scales beneath the eyes of the second and third rows. In place of the beard seen in the male, there are fine, short, white hairs. Chelicerae, endites, labium, sternum, palps, and legs are all light brownish-yellow; a brown spot is found on the front of the patellae and tibiae of the first and second leg pairs — though in many specimens only on the first pair. The abdomen is pale yellow, with two dark longitudinal lines on top beginning at the end of the anterior third and extending to the spinnerets, often with two short diagonal streaks in front of them. The underside is uniformly coloured. The hair covering of palps and legs is white. The cephalothorax is only slightly longer than it is wide at its broadest point, more vaulted at the rear slope, more steeply sloped between the third and first eye rows, and therefore significantly lower at the front. Lacking the hair tuft above the AME of the first row and the beard-like hair of the male's head sides. The pattern on the area enclosed by the eyes and the stripe below it on the sides is formed by scales. The AME of the first row are not fully one diameter away from the head margin; otherwise, the eye arrangement is like the male. The chelicerae emerge from below the head margin with a strong knee-like bulge and then fall vertically; they are glossy, sparsely covered with clavate hairs among which fine, longer bristles protrude. Their length equals that of the first leg pair's patellae. Fangs are also strongly curved with a fringed front groove margin. Endites, labium, and sternum are as in the male. The abdomen is rounded at the front, narrowing gradually from the base to the rear, tapering sharply toward the spinnerets, high at the front. Legs are glossy; both front pairs are thicker, with the first the thickest. The hair cover on the underside of the patellae, tibiae, and metatarsi is like in the male but less dense. Spination is the same, though the spines are generally weaker. The pedipalps are slender-limbed, long-haired, with hair also on the upper side of the patellar, tibial, and tarsal segments. Total length: 11.0 mm. Cephalothorax length: 4.0 mm. Cephalothorax width in middle: 3.7 mm. Cephalothorax front width: 2.0 mm. Abdomen length: 7.0 mm. Abdomen width: 3.7 mm. Chelicera length: 1.9 mm. 1st leg: femur 2.6 mm, patella 1.6 mm, tibia 1.8 mm, metatarsus 1.6 mm, tarsus 0.8 mm, total 8.4 mm. 2nd leg: femur 2.3 mm, patella 1.4 mm, tibia 1.4 mm, metatarsus 1.4 mm, tarsus 0.8 mm, total 7.3 mm. 3rd leg: femur 2.7 mm, patella 1.4 mm, tibia 1.4 mm, metatarsus 1.9 mm, tarsus 0.8 mm, total 8.2 mm. 4th leg: femur 2.8 mm, patella 1.3 mm, tibia 1.9 mm, metatarsus 2.2 mm, tarsus 0.8 mm, total 9.0 mm. Numerous specimens in the Godeffroy Museum from Sydney, Rockhampton, and Bowen.

Two years later, Keyserling (1883), after receipt of "type specimens" forwarded by Karsch, published a correction in which he stated that the spiders that he had described as *Ascyrtus penicillatus* in 1881 were actually *Mopsus mormon* Karsch 1878. Keyserling also recognized *Ascyrtus penicillatus* Karsch 1878 as a synonym of *Hyllus pterygodes* L. Koch, and he erected a new genus, *Sandalodes*, to include two species that he had previously placed in the genus *Mopsus* (Keyserling 1882):

Berichtigungen. Durch Herrn Dr. Karsch aufmerksam gemacht und durch die freundliche Uebersendung der typischen Exemplare in Stand gesetzt, sie selbst zu untersuchen, habe ich mich überzeugt, dass *Ascyrtus penicillatus* Karsch p. 1319, gleich *Mopsus mormon*. Karsch ist und daher dieser letztere Name an Stelle des ersteren gesetzt werden muss. Der wahre *Ascyrtus penicillatus* Karsch ist dagegen gleich *Hyllus pterygodes* L. K. p. 1339 und musste daher diese Art, da der von Dr. Koch gebrauchte Artname älter ist, heissen: *Ascyrtus pterygodes*. Die Gattungscharactere beider sind, bis auf die Höcker an den Seiten des Kopfes, ganz dieselben. Die beiden unter *Mopsus* beschriebenen Arten: *bipenicillatus* p. 1330 und *albobarbatus* p. 1333 bilden daher eine neue

Gattung, zu der auch das Weib von *Acompse ludricus* zu rechnen ist, welche ich *Sandalodes* nennen will und folgendermassen characterisire: Der Cephalothorax ungefähr um den fünften Theil länger als breit, mässig hoch, in den Seiten gerundet, beträchtlich breiter als die dritte Augenreihe, hinten und vorn gleichmässig schmaler werdend, vom Hinterrande bis zur dritten Augenreihe schräge ansteigend und die Kopfplatte nach vorn geneigt. Die Mittelritze gleich hinter der dritten Augenreihe und der Clypeus gleich dem vierten Theil eines vorderen Mittelauges. Das Augenviereck, breiter als lang, vorn eben so breit als hinten, reicht nur bis zum ersten Drittheil des Cephalothorax. Die vordere Augenreihe mässig gebogen und die Augen derselben ziemlich nahe beisammen. Die Augen der zweiten Reihe in der Mitte zwischen den vorderen Seitenaugen und denen der hintersten Reihe, welche von einander weiter als vom Seitenrande entfernt sind. Mandibeln senkrecht abwärts gerichtet, nicht divergirend und kurz. Die vorn stark erweiterten Maxillen nur um den dritten Theil länger als die längere als breite Lippe. Das Sternum lang und schmal, schmaler als die Coxen des zweiten Beinpaares. Die Beine: 1.4.3.2. Alle mit Stacheln besetzt, das erste Paar dicker als die anderen. Patella und Tibia III kürzer als Patella und Tibia IV; Metatarsus und Tarsus IV auch kürzer als Patella und Tibia IV; Metatarsus IV in seiner ganzen Länge bestachelt. Das ovale Abdomen reichlich doppelt so lang als breit. Diese Gattung hat grosse Aehnlichkeit mit *Icius* und unterscheidet sich von derselben hauptsächlich durch das schmale Sternum.

Corrections. Having been alerted by Dr. Karsch and enabled by his kind forwarding of the type specimens to examine them personally, I have become convinced that *Ascyrtus penicillatus* Karsch p. 1319 is identical with *Mopsus mormon* Karsch, and therefore the latter name must replace the former. The true *Ascyrtus penicillatus* Karsch, on the other hand, is identical with *Hyllus pterygodes* L. K. p. 1339, and since the species name used by Dr. Koch is older, this species must accordingly be named: *Ascyrtus pterygodes*. The generic characters of both are, apart from the protuberances on the sides of the head, entirely the same. The two species described under *Mopsus*: *bipenicillatus* p. 1330 and *albobarbatulus* p. 1333 therefore form a new genus, to which the female of *Acompse ludricus* must also be assigned. I propose to name this genus *Sandalodes*, and characterize it as follows: The cephalothorax is approximately one-fifth longer than wide, moderately high, rounded at the sides, considerably broader than the third eye row, narrowing evenly both at the front and rear, ascending obliquely from the rear margin to the third eye row, with the head plate inclined forward. The median groove is located just behind the third eye row, and the clypeus is about one-fourth the height of an anterior medial eye. The eye quadrangle is broader than it is long, equally wide at the front and rear, and reaches only to the first third of the cephalothorax. The anterior eye row is moderately curved, with the eyes fairly close together. The second row of eyes is located midway between the anterior lateral eyes and those of the rear row, which are spaced further apart from each other than from the lateral margins. The chelicerae point vertically downward, are not divergent, and are short. The maxillae, strongly broadened at the front, are only one-third longer than the labium, which is longer than wide. The sternum is long and narrow, narrower than the coxae of the second leg pair. The leg formula is: 1.4.3.2. All legs are spined, with the first pair thicker than the others. Patella and tibia III are shorter than patella and tibia IV; metatarsus and tarsus IV are also shorter than patella and tibia IV; metatarsus IV is spined along its entire length. The abdomen is oval and more than twice as long as it is wide. This genus bears a strong resemblance to *Icius*, but differs primarily by the narrow sternum.

Two decades later the naming of *Mopsus mormon* Karsch appeared to be settled, as Simon (1903) published a very brief description that acknowledged Keyserling's 1883 correction, and also included several drawings of the male:

Mopsus Karsch, *Mitth. d. Münch. Entom. Ver.*, 1878, p. 31 (non *Mopsus* Keyserling). — *Ascyrtus* Keyserling, in L. Koch, *Ar. Austr.*, 1882, p. 1319 (non *Ascyrtus* Karsch). A *Thyena* differt oculis anticis in lineam magis recurvam, a margine antico clypeo latiore discretis, quadrangulo oculorum dorsalium minore parte thoracica fere triplo brevior, fronte angusta, maris longissime cristata, sterno postice latiore sed antice magis attenuato, pedibus anticis paulo magis aculeatis, patella intus minute uniaculeata, tibia subtus aculeis majoribus 3-3 et utrinque aculeo parvo laterali, armatis, pedibus 3ⁱ paris (patellis exceptis) pedibus 4ⁱ paris evidentiter brevioribus sed paulo crassioribus, metatarsis posticis tibiis paulo longioribus. TYPUS: *M. Mormon* Karsch. AR. GEOGR: N. Guinea et N. Hollandia sept. et orientalis.

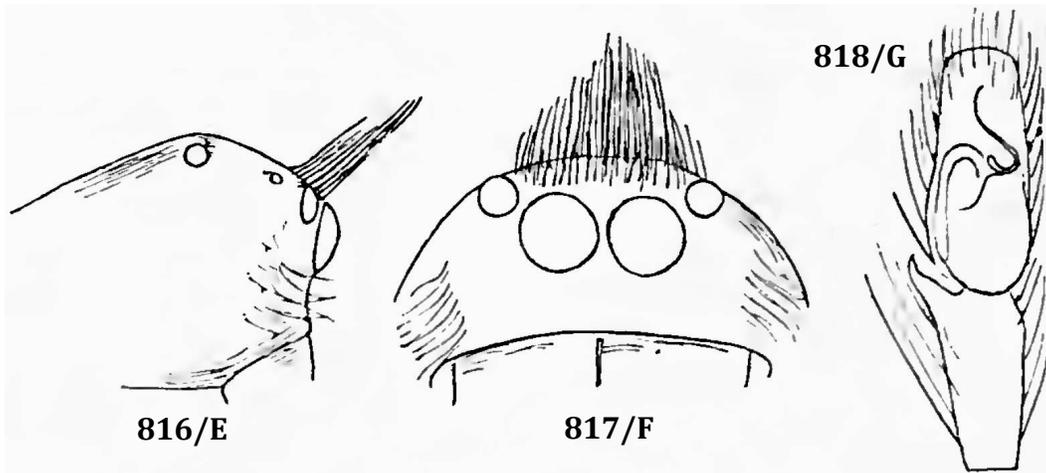
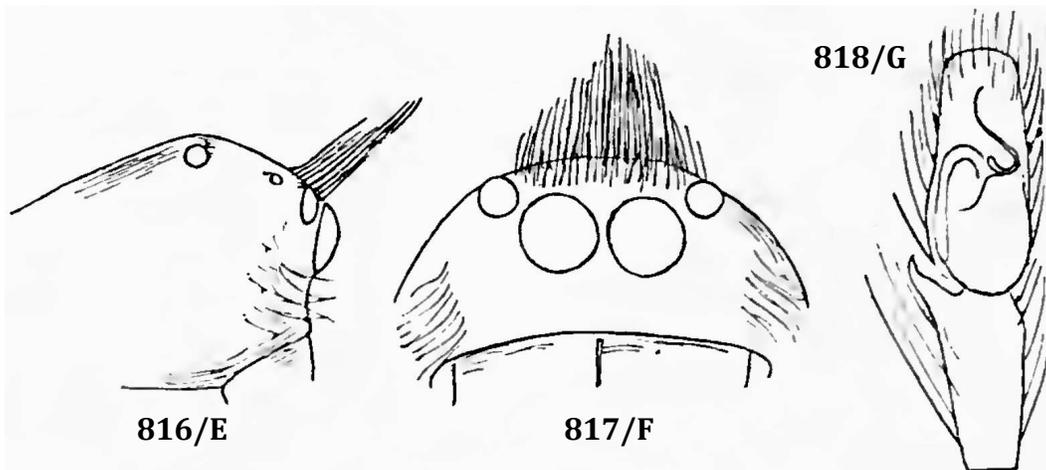


Fig. 816 à 818. E. *Mopsus mormon* Karsch. Céphalothorax de profil. - F. Idem. Face. - G. P.-M. ♂.

Mopsus Karsch, *Mitteilungen des Münchener Entomologischen Vereins*, 1878, p. 31 (not *Mopsus* Keyserling). — *Ascyrtus* Keyserling, in L. Koch, *Arachniden Australiens*, 1882, p. 1319 (not *Ascyrtus* Karsch). Differs from *Thyene* by the anterior eyes being arranged in a more recurved line, clearly separated from the anterior margin of the clypeus by a broader space; by the quadrangle of the dorsal eyes being smaller, and nearly three times shorter than the thoracic part; by a narrower face; by the male being very long-crested; by the sternum being broader posteriorly but more tapered anteriorly; by the front legs being somewhat more spined, the patella bearing a small inner spine, the tibia armed beneath with three large spines (3-3) and with a small lateral spine on each side; by the third pair of legs (excluding the patellae) being clearly shorter but somewhat thicker than the fourth pair; and by the posterior metatarsi being slightly longer than the tibiae. Type: *Mopsus mormon* Karsch. Geographic distribution: Northern New Guinea and northeastern and eastern Australia.



Figs. 816 to 818. ♂ *Mopsus mormon* Karsch. E, Cephalothorax in profile. F, Face. G, Pedipalp.

At this point, the identity of *Mopsus mormon* was essentially resolved. But then Rainbow (1911) resurrected *Ascyrtus penicillatus* as *Mopsus penicillatus*, for the first time listing two different species under the genus *Mopsus*, each with a different geographic distribution:

Genus Mopsus, Karsch. (= *Ascyrtus, Keys.*, non *Ascyrtus, Karsch.*) *Obs.* - *Mopsus mormon*, Karsch, is the type species of this genus.

MOPSUS MORMON, Karsch. *Mopsus mormon*, Karsch, MT. d. Münch. ent. Ver., 1878, p. 31. *Mopsus mormon*, Thor., Studi Ragni Mal. e Papuani, iii., 1881, p. 462. *Hab.* - New Guinea and N. Australia.

MOPSUS PENICILLATUS, Karsch. *Ascyrtus penicillatus*, Karsch, MT. d. Münch. ent. Ver., 1878, p. 30. *Hab.* - Queensland and New South Wales.

Rainbow either missed or did not understand Keyserling's 1883 correction, perhaps interpreting this as a correction to genus only. Thus Rainbow recognized a separate species named *M. penicillatus*. Curiously the distribution of Rainbow's *M. penicillatus* corresponds to the territory occupied by *Mopsus* populations with a *niger* male morph, and much of the distribution of his *M. mormon* includes populations with a *viridis* male morph. Much later Roewer (1954) followed Rainbow's lead, although he did not cite Rainbow and may have been unaware of his work:

Gen. **Mopsus** Karsch 1878.

♂ **mormon** Karsch 1878. Neu-Guinea, Australien: **M. m.** Karsch 1878, Mitt. Ent. Ver. 2 p. 31 (D ♂). **M. m.** Peckham 1886, Proc. Ac. Sci. Wiscons. 4 p. 304 (D). **M. m.** Simon 1903, Hist. Nat. Araig. 2 (4) p. 687 f. 816-818 (N ♂). **M. m.** Strand 1911, Abh. Senckenbg. Ges. 34 (2) p. 185 (N ♂).

♂♀ **penicillatus** (Karsch) 1878. Queensland, New-S. Wales: **Ascylytus p.** Karsch 1878, Mitt. München Ent. Ver. 2 p. 30 (D ♂♀). **Ascylytus p.** Keyserling 1881, Arach. austral. 1 (2) p. 1319 T. 112 F. 4, 5 (D ♂♀). **M. p.** Keyserling 1883, Arachn. Austral. 1 (2) p. 1476 (N).

Unlike Rainbow, Roewer cited Keyserling's 1883 correction, but wrongly gave Keyserling credit for the combination *M. penicillatus*. This suggests that he did not understand that Keyserling corrected the name of the spider that he described as *Ascylytus penicillatus* in 1881 to *Mopsus mormon*, not *M. penicillatus*.

Chrysanthus (1968) followed Rainbow and Roewer in their recognition of two distinct and parapatric *Mopsus* species, and he clearly described the *squamiform white hairs* (or *scales*) of the femora I that are characteristic of the male *niger* morph:

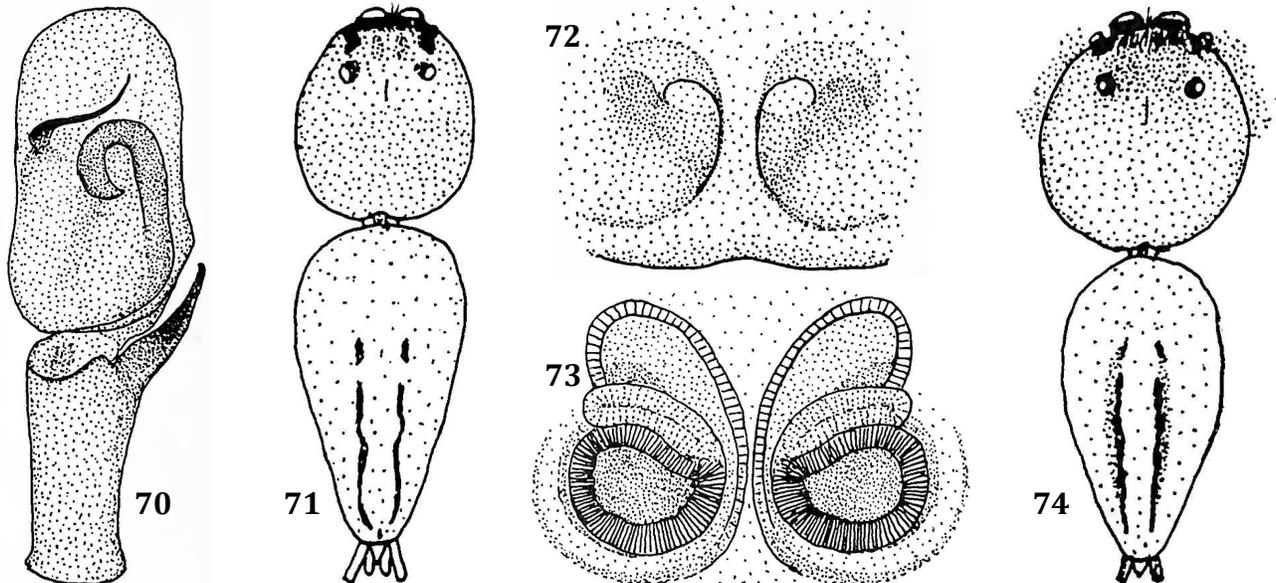


Fig. 70. *Mopsus mormon* Karsch, ♂, left palp, ventral view. Fig. 71-74. *Mopsus mormon* Karsch. 71, ♀; 72, id. epigyne; 73, id. vulva; 74, ♂.

Thyeninae. *Mopsus* Karsch, 1878. *Mopsus mormon* Karsch, 1878. Fig. 70—74. Karsch, 1878, Mitt. Münchn. Entom. Ver. 2: 31, ♂. Thorell, 1881, Ann. Mus. civ. stor. nat. Genova 17: 462, ♀♂. Simon, 1903, Hist. nat. Araignées 2: 686, Fig. 816—818, ♀♂. In his "Katalog der Araneae" Roewer suggested that the male only was described (1954: 1109) though he mentioned Simon, who gave a description of the female and added: "très répandue en Nouvelle Guinée et dans le Nord de l'Australie" (1903: 686). There are many females (12—15 mm) and males (12—15 mm) in my collection, all from Merauke (1956—1957), only one male from Mindiptana (1965). The species was recorded from several places in New Guinea, adjacent islands and Cape York (Australia) (Thorell, loc. cit.: 466; Roewer, 1954: 1109; Bonnet, 1957: 2985). In Queensland and New South Wales the closely related *M. penicillatus*

(Karsch, 1878) is found. Strongly contrasting with the female, where the cephalothorax is brownish yellow and the abdomen is yellowish white, the male is beautifully coloured: the abdomen is yellowish white with two black longitudinal stripes like in the female (Strand [1911, *Abh. senckenb. naturf. Ges.* 34: 185] remarked that in living specimens the abdomen is green). The cephalothorax is orange, eye region lively red, frontal part of the cephalothorax, chelicerae and underside of the stout first legs dark wine-red, the femora with some squamiform white hairs, the tips of the chelicerae and the greater part of the first legs orange; the anterior median eyes have a greenish lustre. A rather broad fringe of snow-white hairs extends from the lateral eyes to about the middle of the cephalothorax, whereas long black hairs form a tuft between the anterior lateral eyes.

Two years later, Mascord (1970) included the name *Mopsus penicillatus* in his popular book on Australian spiders, apparently following the lead of Rainbow, Roewer, and Chrysanthus. More recent guides to Australian spiders (e.g., Main 1976; Whyte & Anderson 2017) have called these *Mopsus mormon*.

In 1984 Prószyński figured two specimens, including one from the collection of the Museum of Vienna that he thought could represent either *Mopsus penicillatus* or *M. mormon* (Figure 7.1). That specimen was not a type, and it was collected in 1884 *after* Karsch published his description of *Ascyrtus penicillatus*. From the drawing, this specimen was most likely a male *M. mormon*. At the same time this drawing may have fueled some speculation that the *M. penicillatus* resurrected by Rainbow (1911) was, indeed, a separate and distinct species. For comparison, Prószyński also drew the pedipalp of a male *Ascyrtus pterygodes* L. Koch from Upolu, which was quite different from this male *Mopsus*. In fact, *Ascyrtus* is a typical euophryine (Maddison 2015), quite different from the astioid *Mopsus*.

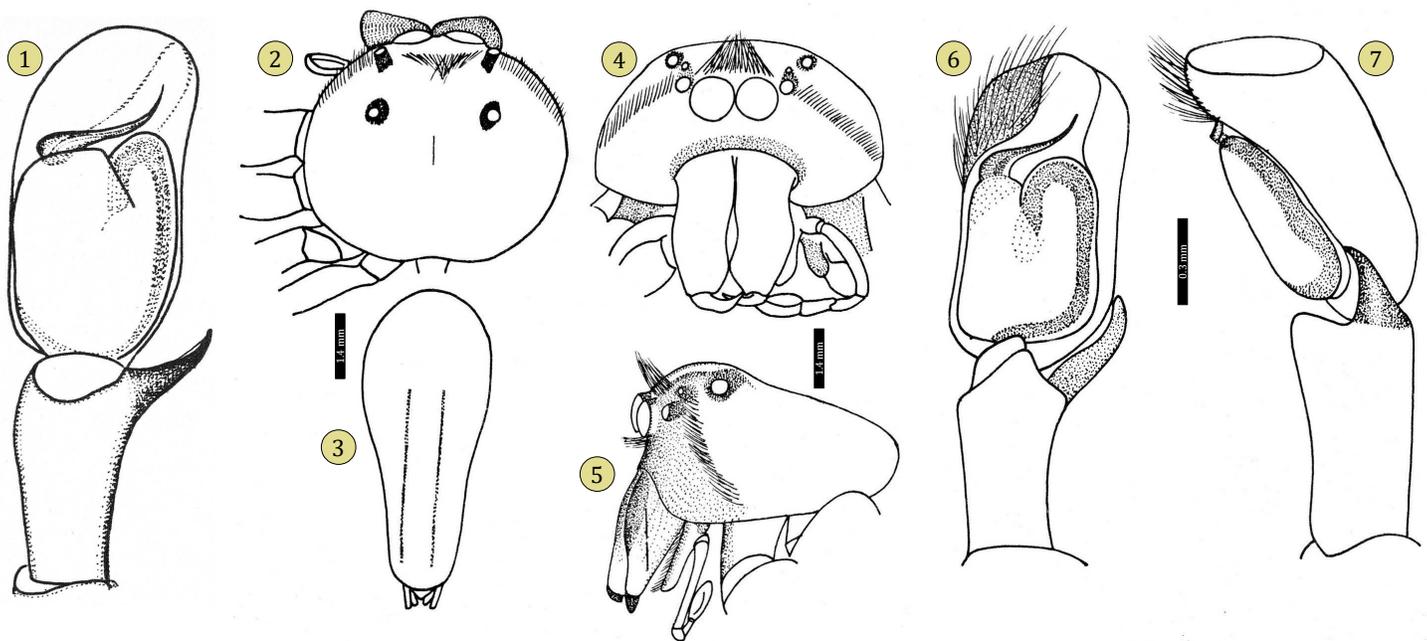


Figure 7. Prószyński's 1984 drawings of *Mopsus*. 1, Ventral view of the left pedipalp of a male specimen from the Vienna Museum that Prószyński thought might represent *Ascyrtus penicillatus* Karsch = *M. mormon*. The label that came with this specimen read *Gayndah /Australien/ 1884.I. 52*. 2-7, Definitive drawings of the male holotype for *M. mormon* Karsch 1878 (KATALOG NO. 2613. ZOOLOG. MUS. BERLIN). The label that came with this specimen read *MOPSUS MORMON. SEGAAR BAY - GAZELLAE*. 2, Dorsal view of prosoma. 3, Dorsal view of opisthosoma. 4, Face. 5, Lateral view of prosoma. 6-7, Ventral (6) and retrolateral (7) views of the left pedipalp.

The second specimen drawn by Prószyński (Figures 7.2-7.7), from the Berlin Museum, was clearly labeled as the male holotype for *M. mormon* Karsch 1878, also with the correct catalog number (2613) for that holotype. This was the first time that we had definitive drawings for this holotype, and it clearly supported Keyserling's 1983 correction.

Davies & Żabka (1989) recognized the *Mopsus penicillatus* figured by Mascord (1970) as *M. mormon*. Żabka (1991) later treated *Mopsus* as a monotypic genus containing only one species, *M. mormon*:

Gen. *Mopsus* Karsch, 1878. Niewielki, formalnie monotypowy rodzaj znany z tropikalnej Australii i Nowej Gwinei (Chrysanthus 1968, Prószyński 1984a, Davies, Żabka 1989). 144. *Mopsus mormon* (Karsch, 1878). 1878 *M. mormon* Karsch, Mitt. muench. enl. Ver., 2: 31. 1881 *Ascyrtus penicillatus* Keyserling, Arachn. Austral.: 1319. 1911 *Mopsus p.*: Rainbow, Rec. Austral. Mus., 9: 298. 1968 *M. m.*: Chrysanthus, Tijdschr. Ent., 111: 63. 1984 *M.m.*: Prószyński, Zesz. nauk. WSR-P, p. 167. 1989 *M. m.*: Davies, Żabka, Mem. Qd Mus., 27: 251. Rozmieszczenie. Queensland.

Genus *Mopsus* Karsch, 1878. A small, formally monotypic genus known from tropical Australia and New Guinea (Chrysanthus 1968, Prószyński 1984a, Davies & Żabka 1989). 144. *Mopsus mormon* (Karsch, 1878). 1878 — *M. mormon* Karsch, Mitteilungen des Münchener Entomologischen Vereins, 2: 31. 1881 — *Ascyrtus penicillatus* Keyserling, Arachniden Australiens, p. 1319. 1911 — *Mopsus p.*: Rainbow, Records of the Australian Museum, 9: 298. 1968 — *M. m.*: Chrysanthus, Tijdschrift voor Entomologie, 111: 63. 1984 — *M. m.*: Prószyński, Zeszyty Naukowe WSR-P, p. 167. 1989 — *M. m.*: Davies & Żabka, Memoirs of the Queensland Museum, 27: 251. Distribution: Queensland.

This is our current view. Since Keyserling actually observed a series of specimens supplied by Karsch, his 1883 correction can be taken as the "final" statement regarding the identity of the two species (*Ascyrtus penicillatus* and *Mopsus mormon*) named by Karsch in 1878. The differences between *Ascyrtus* and *Mopsus* highlighted by Prószyński (1984) are very significant, and it is almost certain that Keyserling recognized this when he determined that *Ascyrtus penicillatus* Karsch 1878 was not a *Mopsus*.

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