



A new subalpine peacock spider species (Araneae: Salticidae: Euophryini: *Maratus* Karsch, 1878) from Victoria, Australia

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Abstract

A new species of peacock spider, *Maratus alpinus* **sp. nov.**, is described from subalpine to alpine grassland in the Victorian Alps, south-eastern Australia. The species is assigned to the *Maratus anomalus* group on the basis of its genitalic structure and gross morphology, and is the first member of the group recorded from subalpine or alpine habitat. A key to males of all currently recognised species of the *anomalus* group is provided, along with a map of known records incorporating type locality data, research-grade iNaturalist records, and unpublished field observations.

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Introduction

The peacock spiders, *Maratus* Karsch, 1878 (family Salticidae), are one of the most speciose and morphologically diverse jumping spider radiations in Australia, with new species regularly being described (e.g. Schubert, 2021; Otto & Hill, 2025). Adult males are distinguished by elaborate courtship displays that typically combine extension and waving of the elongated third pair of legs with elevation of an often intricately patterned dorsal opisthosomal plate, or 'fan' (Girard et al., 2011). Many species have been assigned informally to species groups on the basis of shared male ornamentation and

courtship behaviour (Otto & Hill, 2021), not all of which have subsequently proven monophyletic under molecular analysis (Girard et al., 2021). The *anomalus* group, however, is well-resolved and strongly supported as monophyletic by phylogenomic (ultraconserved element, UCE, and restriction-site-associated DNA sequencing, RAD-seq) data (Girard et al., 2021).

Presently, eleven species of the *anomalus* group are recognised: *Maratus albus* Otto & Hill, 2016, *Maratus anomalus* (Karsch, 1878), *Maratus aurantius* Otto & Hill, 2017, *Maratus cinereus* Otto & Hill, 2017, *Maratus julianae* Baehr & Whyte, 2016, *Maratus lentus* Otto & Hill, 2017, *Maratus inaquosus* Schubert, 2020, *Maratus*

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michaelorum Baehr & Whyte, 2016, *Maratus neptunus* Otto & Hill, 2017, *Maratus sceletus* Otto & Hill, 2015, and *Maratus vultus* Otto & Hill, 2016.

Here we describe a new species in the *anomalus* group discovered in subalpine to alpine grassland in the Victorian Alps, separated from congeners by a marked shift in elevation, climate, and vegetation. We also provide an identification key to males of the *anomalus* group.

Methods

Field collection

The material examined for this paper was collected during a project led by Dr Nick Porch (Deakin University) surveying terrestrial invertebrate diversity and endemism across the Australian Alps. Three sweep-net grids (five one-minute sweeps each, fifteen sweep-samples per site) were conducted at each survey site, with invertebrates collected using a field aspirator and stored in 80% ethanol. The material described here comes from a single site near McFarlane's Saddle on the Wellington Plains, Victoria, sampled on 11 February 2024. The studied specimens are deposited in the Museums Victoria Research Institute, Entomology and Arachnology Collection, Carlton, Victoria (Collection Manager: Simon Hinkley).

Taxonomic methods

Live spiders were photographed using a Canon EOS 70D fitted with an EF100mm f/2.8L Macro IS USM lens, a Godox TT350c Mini TTL Speedlight flash, and a custom diffuser. Preserved specimens were examined using a Leica M165C stereo microscope, photographed with a Leica K5C camera attachment, and processed with Leica Application Suite X software. Morphological descriptions follow the conventions of Schubert (2021). Epigynes were dissected and cleared for four hours in lactic acid. Abbreviations used in descriptions: ALE anterior lateral eyes; AME anterior medial eyes; AS anterior spermatheca; CD copulatory duct; CO copulatory opening; CEA converging embolic apices; ED embolic disc; F fossae; FD fertilisation duct; LTS lamella on tegular shoulder; MS median septum; PLE posterior lateral eyes; PME posterior medial eyes; PS posterior spermathecae; RSDL retrolateral sperm duct loop; RTA retrolateral tibial apophysis; TL tegular lobe. All measurements are given in millimetres. Carapace length is measured from the median anterior margin to the median posterior margin, and carapace width between the lateral margins at the midpoint in dorsal view. Opisthosoma length is measured from the anterior to the posterior margin along the dorsal midline, excluding setae and spinnerets; opisthosoma width is not recorded, as this dimension varies with feeding state and reproductive condition.

Distribution records

Records of known occurrences for all species of the *anomalus* group were compiled from three sources: (1) coordinates given for holotype and paratype specimens

in each species' original description; (2) observations of each species downloaded from iNaturalist (iNaturalist.org) with a "research grade" quality rating (iNaturalist's highest confidence category, assigned when an observation includes a photograph, date, and location, and has an identification agreed upon by multiple users); and (3) unpublished field observations by the authors. Records lacking precise geographic coordinates, or with an iNaturalist quality grade lower than research grade, were excluded. Coordinates reported in the literature as degrees, minutes, and seconds were converted to decimal degrees (WGS84 datum) prior to plotting. Where type material was associated with two or more candidate collection sites reported without further specificity in the original description, all candidate sites were retained and plotted separately. Maps of known records were produced in Python (v3.12) using the geopandas, rasterio, and matplotlib libraries, with state and territory boundaries and a shaded-relief topographic basemap (Natural Earth, 50 m resolution) used to provide geographic and elevational context. To improve legibility where records of multiple species overlapped, points were plotted in descending order of record count per species, such that species represented by fewer records were drawn above (and are therefore more visible than) those with more records.

Discussion

Species of the *anomalus* group show a broadly disjunct distribution: a western component in south-western Western Australia and coastal to inland South Australia extending into far-western Victoria (*M. albus*, *M. vultus*), and an eastern component centred on grassland and grassy woodland habitats of coastal and inland Queensland and New South Wales (*M. anomalus*, *M. aurantius*, *M. cinereus*, *M. julianneae*, *M. lentus*, *M. michaelorum*, *M. neptunus*, *M. sceletus*) (Otto & Hill, 2016, 2017). *Maratus anomalus* is the most widely recorded species, with most records along the east coast, though isolated records extend inland to the Murray River region of South Australia and to the Australian Capital Territory. Victorian records of the group were, until recently, restricted to lowland mallee and heath in the state's far west, where *M. albus*, *M. vultus*, and *M. inaquosus* have each been recorded (Schubert, 2020a, b). Both components otherwise occupy comparatively low-elevation coastal, sub-coastal, or inland tableland habitat, and no member of the group had previously been recorded from subalpine or alpine habitat.

Maratus alpinus **sp. nov.** is, to our knowledge, the first confirmed member of the *anomalus* group recorded from subalpine or alpine habitat. Subalpine and alpine habitat is not, however, unoccupied by the genus as a whole: *Maratus amabilis*, *M. calcitrans* Otto & Hill, 2012, *M. harrisi* Otto & Hill, 2011, and *M. pavonis* (Dunn, 1947) are all known from in or near Kosciuszko National Park, New South Wales, *M. amabilis* additionally from Mount Hotham, Victoria, and *M. harrisi* from the Alpine Nation-

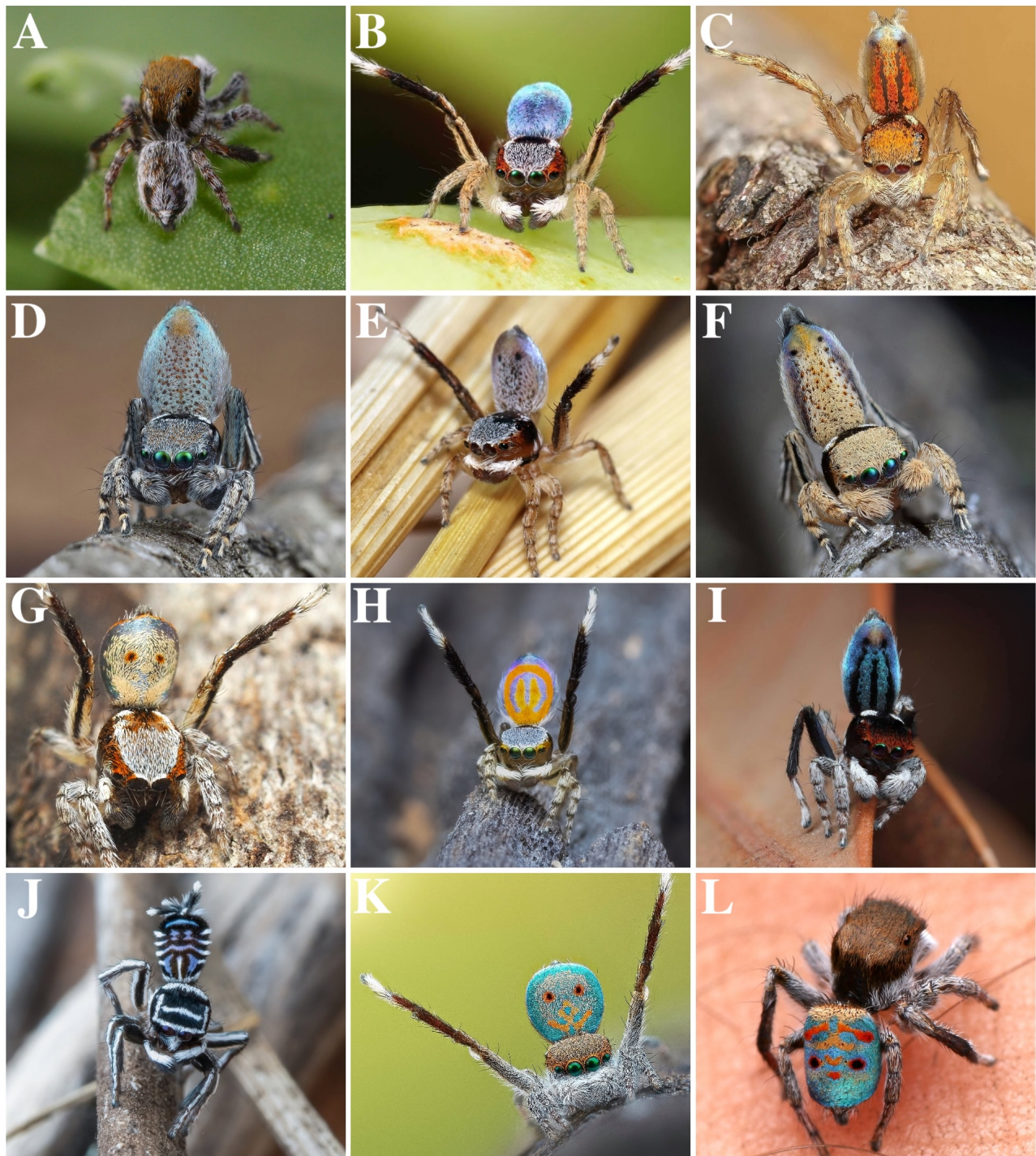


Figure 1. Representative live males of the *anomalus* group. A *M. albus*; B *M. anomalus*; C *M. aurantius*; D *M. cinereus*; E *M. julianneae*; F *M. lentus*; G *M. inaquosus*; H *M. michaelorum*; I *M. neptunus*; J *M. sceletus*; K *M. vultus*; L *M. alpinus* **sp. nov.** Photographs A, B, G by J. Schubert; C by M. Duncan; E, F, I by M. Doe; H, J by W. Winnington-Martin; K by M. Lun; L by D. Kurek. All used with permission.

al Park, Victoria (J. Schubert & D. Kurek, unpubl. data). Each of these four species is, however, considerably more widespread at lower elevations elsewhere in south-eastern Australia (see Otto & Hill, 2021), and their high-elevation records more plausibly represent the upper margin of a broad elevational range than a genuine restriction to alpine habitat of the kind suggested by the two records of *M. alpinus* **sp. nov.** presently known. All other described members of the *anomalus*

group occupy comparatively low-elevation habitat: coastal heath and dune vegetation in the case of the south-western *M. albus* and *M. vultus* (Otto & Hill, 2016), lowland mallee and heath for the far-western Victorian records of *M. vultus* and *M. inaquosus* (Schubert, 2020a, b), and inland grassland or grassy woodland below about 900 m for the eastern 'grassland' clade and for *M. anomalus* itself (Otto & Hill, 2017; Baehr & Whyte, 2016). The type locality of *M. alpinus* in the McFarlane

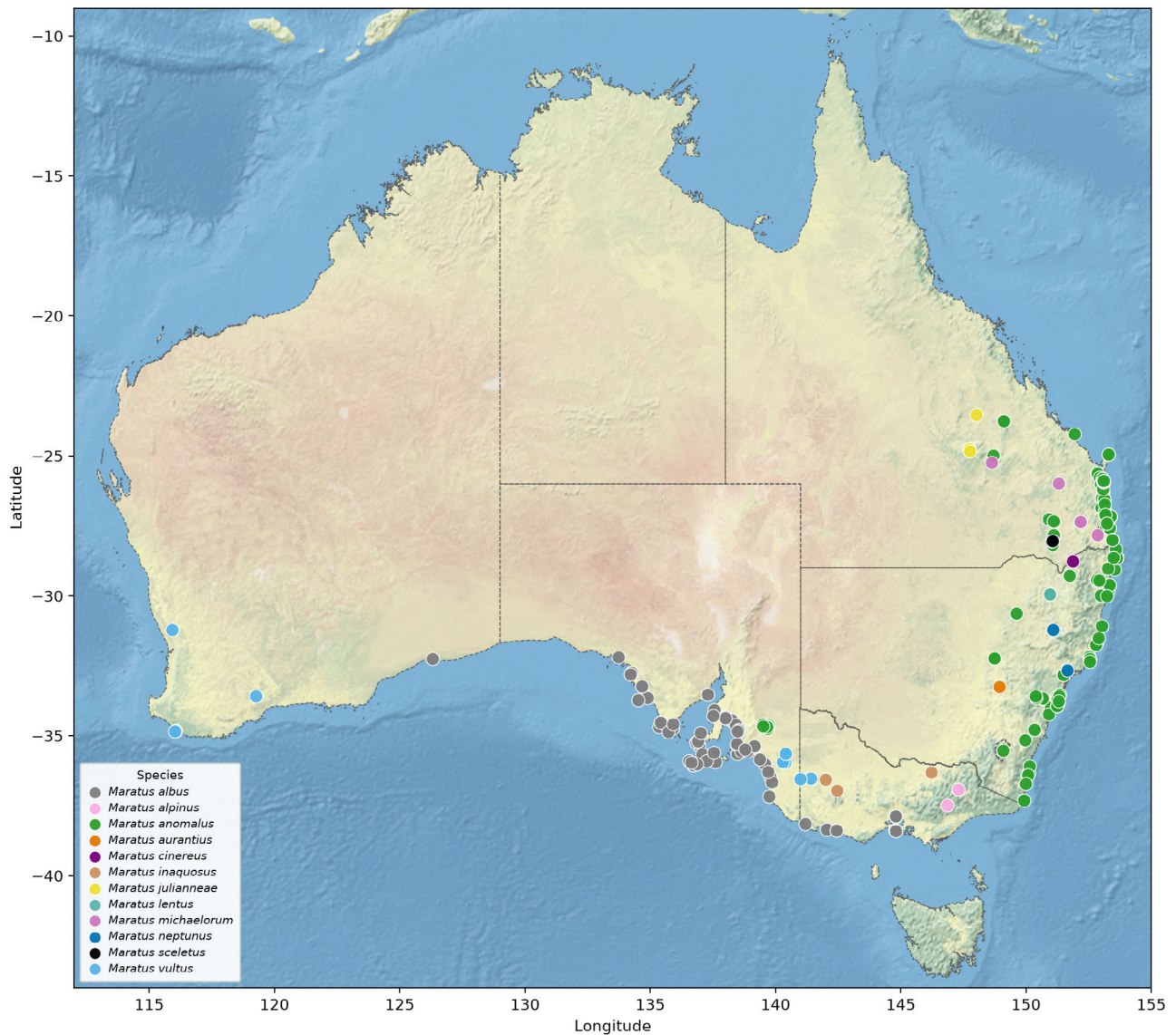


Figure 2: Distribution of records for species of the *Maratus anomalus* group. Localities are compiled from holotype and paratype collection data given in each species' original description, research-grade observations from iNaturalist, and unpublished field observations by the authors (*M. albus*, n = 98; *M. alpinus*, n = 2; *M. anomalus*, n = 191; *M. aurantius*, n = 1; *M. cinereus*, n = 1; *M. inaequosus*, n = 3; *M. julianneae*, n = 5; *M. lentus*, n = 1; *M. michaelorum*, n = 6; *M. neptunus*, n = 2; *M. sceletus*, n = 5; *M. vultus*, n = 12). Species with fewer records are plotted above those with more to prevent obscuring rarer occurrences where distributions overlap.

Saddle, together with the photographic record from the vicinity of Falls Creek some 90 km to the north-east, both lie within subalpine to alpine country of the Victorian Alps, well above the elevational range occupied by any other named species in the *anomalus* group. Whether this reflects a genuinely restricted, high-elevation distribution, or is instead an artefact of the very limited historical collecting effort for peacock spiders in Victoria's mountain country relative to its coastal and inland lowlands, cannot yet be resolved with only two known populations. Targeted survey work across the Alpine National Park and adjoining regions, and at intermediate and lower elevations nearby, is an obvious next step.

Adult male *M. alpinus* **sp. nov.** have so far been recorded between December and February, during the Australian summer. *Maratus* are seasonal breeders, typically maturing in Spring (Girard & Endler, 2014). The occurrence of adult *M. alpinus* several months after this window raises the possibility of a phenology shifted to track conditions at high elevation, where snow cover can persist into spring. Two, not mutually exclusive, explanations seem plausible. Females may lay eggs in autumn before the ground is covered by snow, with development of the young arrested or slowed over winter such that the final moult to adulthood is delayed until early-to-mid summer rather than spring. Alternatively, juveniles could overwinter directly beneath the insulating subnivean snowpack, resuming development once temperatures rise, again pushing maturation later



Figure 3. Subalpine grassland habitat at the type locality of *Maratus alpinus* sp. nov., near McFarlane's Saddle, Victorian Alps, Victoria, showing open tussock grassland with scattered fire-affected snow gum woodland in the background. D. Kurek sampling low vegetation by sweep net. Photograph by N. Porch, used with permission.

than in lowland populations that experience no comparable winter constraint. Distinguishing between these (and other) explanations will require repeated seasonal survey of the same population(s), ideally combined with rearing of immatures under conditions that mimic the extended, snow-affected cold season of the Victorian Alps.

The description of *M. alpinus* brings the *anomalus* group to twelve confirmed members and reinforces a pattern already evident in the group: species are typically known from one, or a very small number of, disjunct localities (Otto & Hill, 2016, 2017; Schubert, 2020a), a pattern of apparent short-range endemism that recurs throughout *Maratus* as a whole (Girard et al., 2021, and references therein). If *M. alpinus* does prove to be restricted to subalpine and alpine grassland in the Victorian Alps, its conservation status would warrant assessment given the sensitivity of Australian alpine and subalpine ecosystems to fire and to climate-driven habitat contraction. This is a consideration that, in our view, adds further weight to the value of the kind of targeted, elevation-stratified survey work suggested above.

Key to males of the *Maratus anomalus* group

The species described herein is assigned to the informal *Maratus anomalus* species-group within *Maratus*, first recognised by Otto & Hill (2016) for *M. albus*, *M. anom-*

alus, and *M. vultus*, and later expanded by Otto & Hill (2017) to include a clade of eastern Australian 'grassland peacock spiders' (*M. aurantius*, *M. cinereus*, *M. julianneae*, *M. lentus*, and *M. neptunus*), and by Schubert (2020a) with the addition of *M. inaquosus*. Males of the group are categorised by a bifurcated or blunt outer apex of the palpal embolus above a smaller, pointed inner apex, a pair of lateral white bands on the posterior slope of the carapace in place of a single median thoracic band, and, in most species, a pair of small black spots toward the rear of the dorsal opisthosomal plate (fan).

The monophyly of the *anomalus* group (as *M. albus*, *M. anomalus*, *M. aurantius*, *M. cinereus*, *M. inaquosus*, *M. julianneae*, *M. lentus*, *M. michaelorum*, *M. neptunus*, *M. sceletus* and *M. vultus*) is independently supported by phylogenomic (UCE and RAD-seq) data in Girard et al. (2021), who recovered it as a well-supported subgeneric clade within *Maratus*. Girard et al.'s (2021) recovery of *M. sceletus* Otto & Hill, 2015 (originally placed in the *calcitrans* group by Otto & Hill (2015)) is supported by the embolic structure of the male pedipalp, and we agree with Girard et al.'s findings. *Maratus kochi* (Žabka, 1987) is also associated with this clade by Girard et al. (2021) but is omitted from the key below, as it is known only from a female and full redescription of the type is pending. Females of this group are highly morphologically conservative and are thus excluded from the key below.

This key relies primarily on external morphological and colour characters, both of which are readily observable in the field and in photographs.

- 1 Clypeus bearing a prominent fringe of long white setae extending from the clypeus to between the AME, together with elongated spinnerets that are extended and prominently displayed during courtship (Fig. 1J) ***Maratus sceletus***
- 1 Clypeus without such a fringe of setae between the AME; spinnerets not conspicuously elongated or displayed during courtship **2**
- 2 Dorsal opisthosoma densely covered with coloured scales (Fig. 1B–I, K, L) **3**
- 2 Dorsal opisthosoma lacking coloured scales, instead covered with long, white setae, the cuticle beneath dark brown (Fig. 1A) ***Maratus albus***
- 3 Opisthosoma elongate, distinctly longer than wide, the fan laterally fringed with a row of long, pale setae along its margins (Fig. 1C–F, H, I) **4**
- 3 Opisthosoma shorter and compact, rounded, without a lateral fringe of long setae along the margins of the fan (Fig. 1B, G, K, L) **9**
- 4 Fan marked with three black longitudinal stripes (one median, one on each side) on a background of blue scales (Fig. 1I) ***Maratus neptunus***
- 4 Fan not marked with three longitudinal black stripes on a background of blue scales (Fig. 1C–F, H) **5**
- 5 Fan marked with a median longitudinal band of orange scales flanked on each side by a narrow iridescent band of blue scales, in turn flanked by a lateral band of red-orange scales (Fig. 1C) ***Maratus aurantius***
- 5 Fan marked otherwise (Fig. 1D, E, F, H) **6**
- 6 Fan light blue, bordered by a broad orange annular (ring-like) tract running around most of the margin, enclosing a pair of longitudinal orange to golden tracts centrally (Fig. 1H) ***Maratus michaelorum***
- 6 Fan without an orange annular border of this kind; a pair of small, dark ocellate spots is usually present (though sometimes indistinct) near the posterior margin of the fan (Fig. 1D, E, F) **7**
- 7 Pedipalp covered dorsally with a band of bright white setae that contrasts sharply with the dark ventral bulb; leg III black, heavily fringed with black setae from the femur to the proximal metatarsus, white only distally (Fig. 1E) ***Maratus julianneae***
- 7 Pedipalp covered dorsally with setae concolorous with, or only slightly paler than, the general body colour, not sharply contrasting with the ventral bulb; leg III not black-fringed along its length (Fig. 1D, F) **8**
- 8 Carapace and fan grey to blue-green or purple; eye region covered with brown to grey scales; lateral margins of fan without a broad grey band (Fig. 1D) ***Maratus cinereus***

- 8 Carapace and fan orange to dull orange; eye region covered with orange to light-brown scales; lateral margins of fan marked with a broad grey band (Fig. 1F) ***Maratus lentus***
- 9 Fan uniformly iridescent blue to purple, marked only with a single pair of black ocellate spots (sometimes indistinct or absent) (Fig. 1B) ***Maratus anomalus***
- 9 Fan marked anteriorly with a distinctive orange to golden figure, in addition to a pair of black ocellate spots in the posterior half of the fan (Fig. 1G, K, L) **10**
- 10 Ocular quadrangle region densely covered with white or grey scales with distinctive tracts of red-orange scales extending from the outer lateral margins of the AMEs to the PLEs; anterior region of fan covered with tan scales and not distinctly marked (Fig. 1G) ***Maratus inaequosus***
- 10 Ocular quadrangle region densely covered with red-orange scales; anterior region of the fan distinctly marked with a figure comprised of orange scales (Fig. 1K, L) **11**
- 11 Anterior marking of the fan comprised of a central rhomboidal (diamond-shaped) figure comprised of orange scales with two narrow, tapering posterolateral spurs extending outward from its anterolateral vertices; area between black, ocellate spots unmarked (Fig. 1K) ***Maratus vultus***
- 11 Anterior marking of the fan comprised of a pair of broad, transverse bands comprised of red-orange scales situated directly above a distinct, bisinuate, transverse bar comprised of tan-orange scales; two discrete patches of red-orange scales between or below black, ocellate spots (Fig. 1L) ***Maratus alpinus***

Taxonomy

Genus *Maratus* Karsch, 1878

Type species: *Maratus amabilis* Karsch, 1878, designated by monotypy.

Maratus alpinus sp. nov.

(Figs 1L; 4–6)

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Holotype. ♂, Australia: Victoria: McFarlane Saddle, 0.47 km S of McFarlane Saddle campground, -37.4789, 146.8496, 1495 m elevation, 11 February 2024, N. Porch & D. Kurek leg. (Museums Victoria, K-16541).

Paratypes. 1♂ (Museums Victoria, K-16542), 1♀ (Museums Victoria, K-16543), both same data as holotype.

Diagnosis. This species belongs to the *anomalus* group (*sensu* Otto & Hill, 2016, 2017, 2019b; Schubert, 2020a;

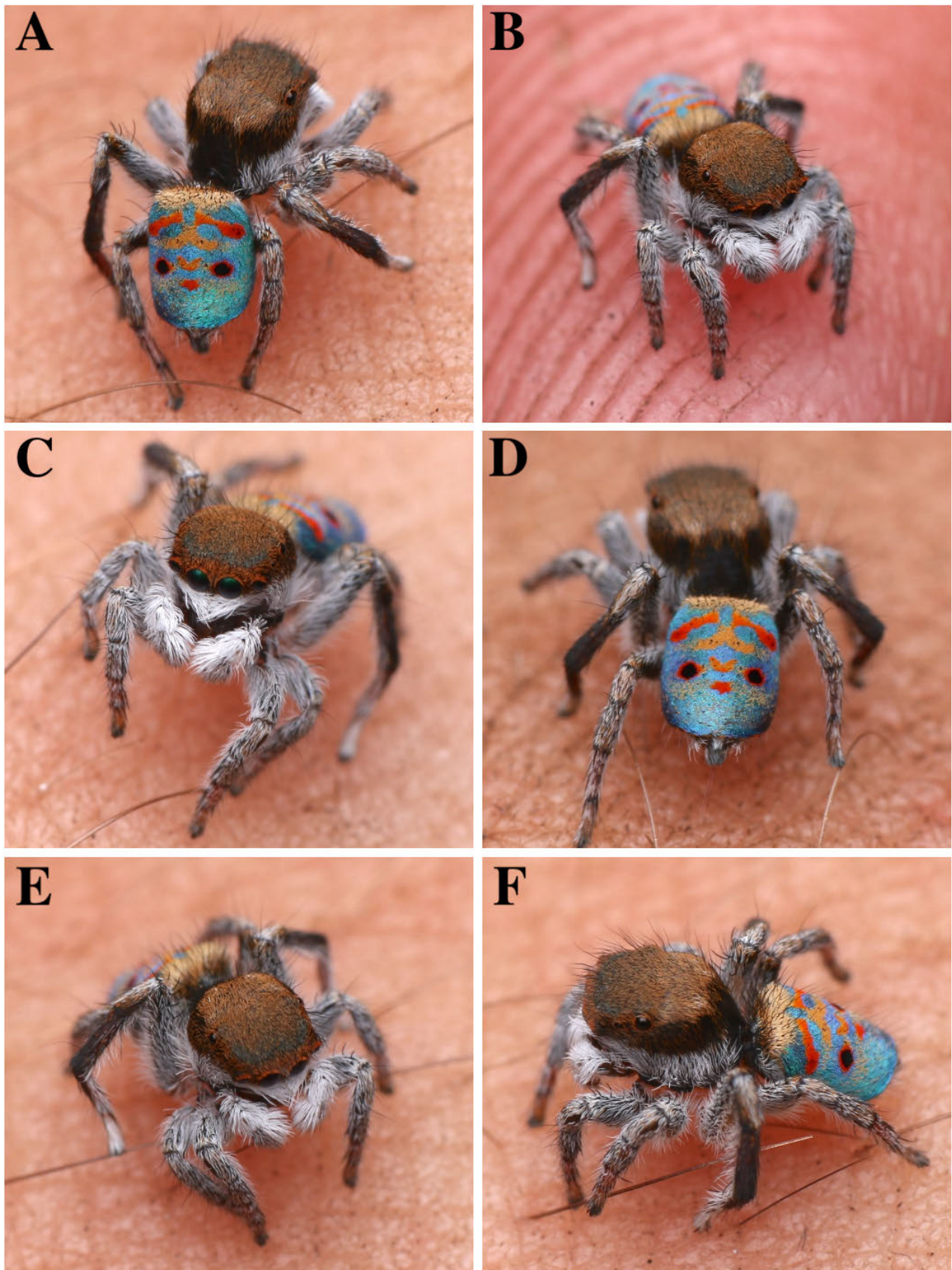


Figure 4 (A-F). Living male *Maratus alpinus* sp. nov. from the type locality. Photographs by D. Kurek.

Girard et al., 2021) based on its genitalic structures (Figs 5D-F; 6C, D). Males of *Maratus alpinus* sp. nov. can be distinguished from all other species of the *anomalus*

group by the unique arrangement of orange scale patterns marking the largely iridescent blue to green dorsal opisthosoma (Figs 4A-F; 5A-C): the anterior region of

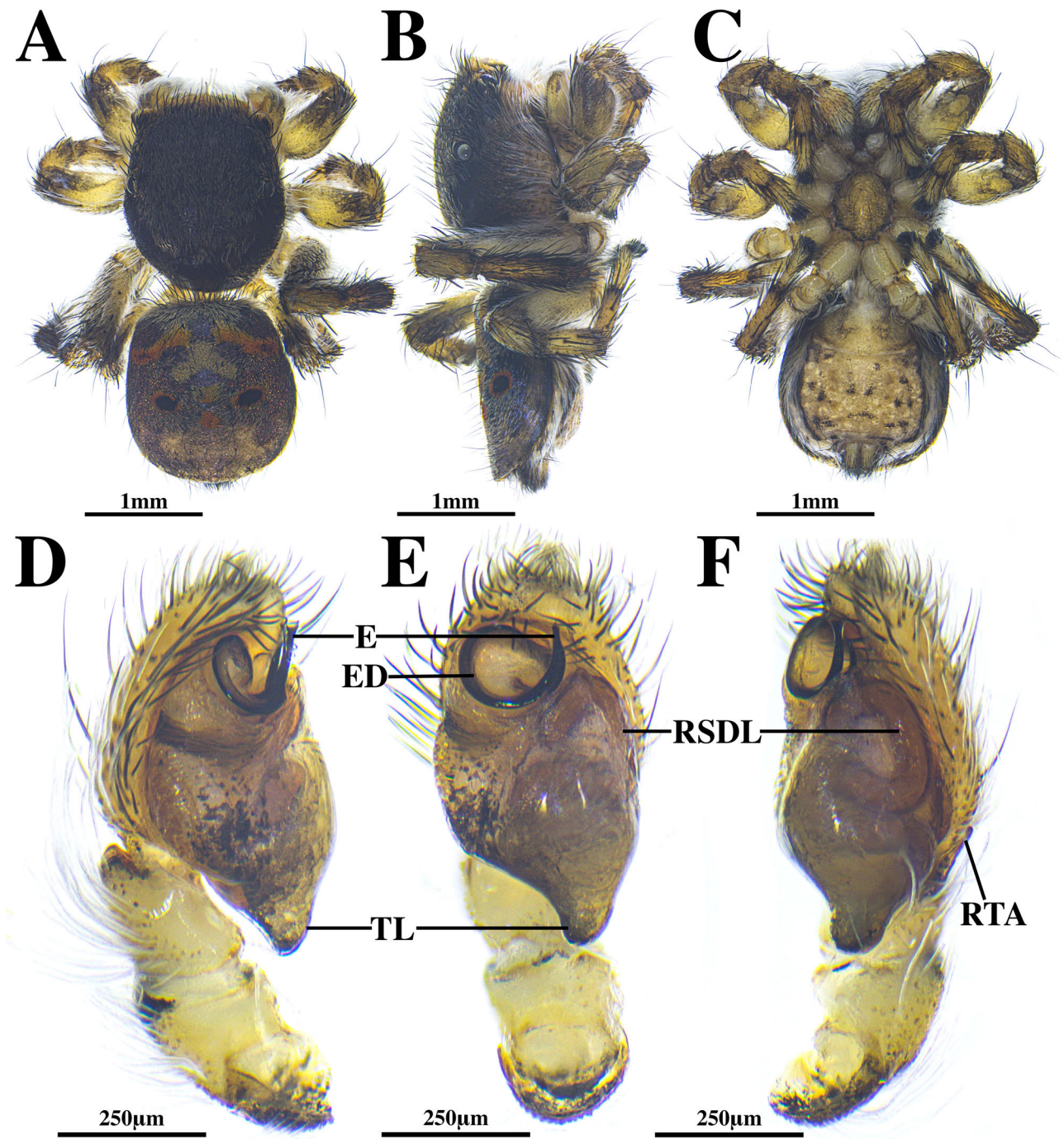


Figure 5. Preserved holotype male *Maratus alpinus* sp. nov. (Museums Victoria, K-16541). **A** dorsal view; **B** lateral view; **C** ventral view (scale bars: 1 mm). **D** prolateral view of left pedipalp; **E** ventral view of left pedipalp; **F** retrolateral view of left pedipalp (scale bars: 0.25 mm). Abbreviations: ED = embolic disc, E = embolus, LTS = lamella on tegular shoulder, RTA = retrolateral tibial apophysis, RSDL = retrolateral sperm duct loop, TL = tegular lobe.

the opisthosomal plate is marked by a compound figure consisting of a pair of broad, transverse bands comprised of red-orange scales situated directly above a distinct, bisinuate, transverse bar comprised of tan-orange scales. It features two distinct, isolated midline patches of red-orange scales between and below the dark posterolateral ocellate spots: an anterior, prominent chevron situated directly on the medial axis between the two spots, and a smaller sub-triangular spot on the caudal midline. Males most closely resemble *Maratus*

vultus (Fig. 1K), however, in males of *M. vultus* the anterior region of the dorsal opisthosoma is instead marked by a medial rhomboidal (diamond-shaped) figure comprised of orange scales, with two narrow, tapering posterolateral spurs extending outward from its anterolateral vertices (Fig. 1K). Furthermore, *M. vultus* lacks the isolated medial chevron and posterior triangular spot, instead featuring a continuous swath of iridescent blue and gold scales extending down the central axis.

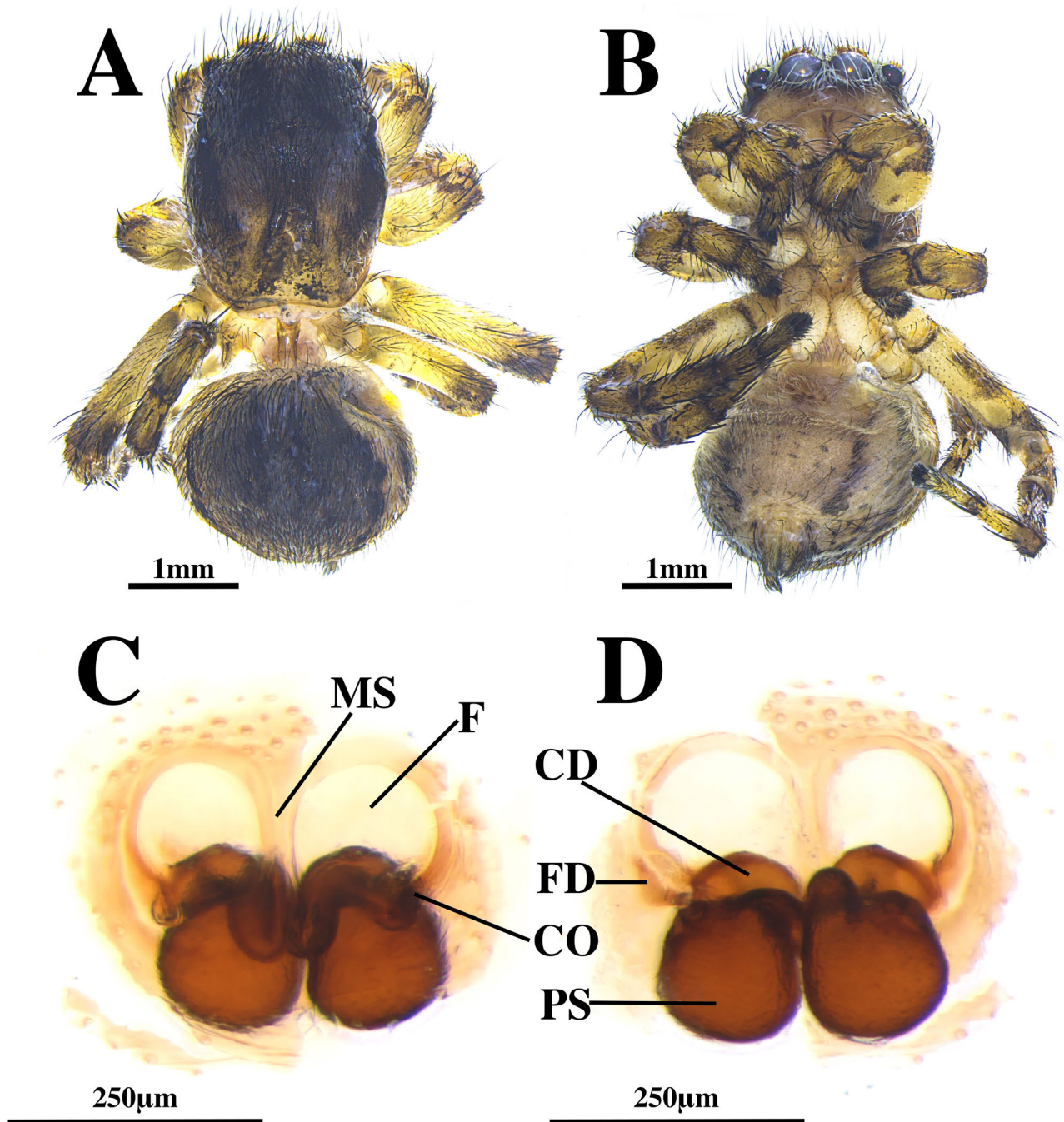


Figure 6. Preserved paratype female *Maratus alpinus* sp. nov. (Museums Victoria, K-16543). **A** dorsal view; **B** ventral view (scale bars: 1 mm). **C** ventral view of dissected epigyne; **D** dorsal view of dissected epigyne (scale bars: 0.25 mm). Abbreviations: CD = copulatory duct, CO = copulatory opening, F = fossa, FD = fertilisation duct, MS = median septum, PS = posterior spermatheca.

As in other members of the *anomalus* group, the male pedipalp of *M. alpinus* sp. nov. shows the bifurcated or blunt outer embolic apex diagnostic of the group as a whole, readily distinguishing it from congeners outside the *anomalus* group. Within the group, however, this genitalic structure is highly conservative and does not differ appreciably between species, and is therefore not useful for distinguishing *M. alpinus* sp. nov. from its congeners within the *anomalus* group; species-level identification instead relies on the dorsal opisthosomal colour

pattern described above, which remains discernible in ethanol-preserved material.

The gross morphology and genitalic structure of females in the *M. anomalus* group are highly conservative, and like other members of the group, identification of the female *M. alpinus* sp. nov. may not be possible without association with the male or with the aid of molecular data.

Male (Holotype Museums Victoria, K-16541).

Cephalothorax. L = 1.70, W = 1.39. Ocular quadrangle densely covered with red-brown scales, this covering extending over the dorsal half of the carapace's lateral slopes and continuing posteriorly beyond the ocular quadrangle to the point where the carapace slopes steeply downward. Posterior slope otherwise dark brown to black, largely glabrous, with only scattered red-brown scales. Broad bands of white scales run the full length of the lateral carapace margin below the ALEs, covering the ventral half of the lateral slopes. All eyes encircled by red-brown scales, though the anterior eye row is bordered ventrally by white scales. Clypeus bearing a dense fringe of long white setae directed ventromedially, forming a triangular patch beneath the AMEs. Sternum light brown, clothed in fine dark brown and off-white setae. Coxae, labium, and endites paler brown, clothed in fine off-white setae. (Figs 4A–F; 5A–C).

Opisthosoma. L = 1.58. Dorsal plate (fan) rounded, compact, not fringed, densely covered with vibrant, iridescent blue-green to turquoise scales lightly interspersed with golden pigmented scales. Anterior region of the opisthosomal plate marked by a figure consisting of a pair of broad, transverse bands comprised of red-orange scales situated directly above a distinct, bisinuate, transverse bar comprised of tan-orange scales. A pair of ocellate spots comprised of black scales and haloed by red-orange scales is situated in the posterior half of the dorsal opisthosoma on either side of the midline. A prominent chevron (pointing posteriorly) comprised of red-orange scales is present between the ocellate spots, and a smaller patch of red-orange scales is situated posterior to this at the midline. Anterior margin uniformly covered with a transverse band of tan-coloured scales. Colular tuft of white setae present anteriorly to the black spinnerets. Similar tufts of longer white setae present on either side of the spinnerets. Spinnerets moderately covered in short, grey-white setae. Opisthosoma ventrolaterally and ventroposteriorly fringed with longer white setae that encircle the margin ventral view, though not visible dorsally. Cuticular surface of ventral opisthosoma otherwise light brown and sparsely setose, marked with a series of distinct dark brown spots posterior to the epigastric furrow. (Figs 4A–F; 5A–C).

Legs. Leg III distinctly the longest, leg IV shorter, and legs I and II the shortest. Legs I, II, and IV uniformly dark brown, densely clothed in long grey-white setae, becoming progressively more sparsely setose from tibia to tarsus, with the cuticular surface also becoming paler brown-orange distally. Tibia of leg III distinctly dark brown to black, covered with dark brown to grey setae. Femur, patella, and metatarsus of leg III covered with grey-white setae; tarsus covered with bright white setae. (Figs 4A–F; 5A–C).

Pedipalps. Dorsal surfaces of cymbium and palpal tarsus densely clothed in long white setae. Patella and

femur dark brown to black, mostly glabrous. Palpal bulb relatively large, bearing a retrolateral sperm duct loop and a large, angular retrobasal tegular lobe; retrolateral tibial apophysis narrow, finger-like, distally serrated, bearing a projection at the tip. Embolic disc with embolus coiled anticlockwise (left pedipalp). Embolus narrow, with a prominent outer ring terminating in two apices and a short inner ring bearing a pointed apex; tegulum heavily sclerotised prolaterally below the embolic disc. (Figs 5D–F).

Female (Museums Victoria, K-16543).

Carapace. L = 2.30mm, W = 1.84mm. Ocular quadrangle region dark brown to black and densely covered with grey scales. Two tracts of paler brown cuticle lightly covered with grey-white scales extend posteromedially from the PLEs toward the posterior margin of the carapace. Lateral slopes of carapace dark brown to black and scattered with grey scales. AMEs and ALEs ringed dorsally with brown-orange scales, ventrally with white scales. Several long, fine, black setae extend anteriorly from behind the AMEs and ALEs to beyond the anterior margin of the carapace. Cuticular surface of the clypeus distinctly paler brown than that of the dark brown cuticular surface of the anterior eye row. Clypeus bears a relatively sparse fringe of long, white setae which project ventromedially. Sternum light brown, clothed in fine off-white setae. Coxae, labium, and endites paler brown, clothed in fine off-white setae. (Fig. 6A, B).

Opisthosoma. L = 1.96mm. Dorsal opisthosoma dark brown and covered with dark brown setae or scales suffused with cream-coloured setae or scales. A distinctive tract of paler brown cuticle covered with cream-coloured scales extends from each anterolateral edge of the dorsal opisthosoma, running following the lateral and posterolateral edges and meeting the spinnerets. Ventral opisthosoma pale brown and lightly covered with fine, off-white setae, and several but more sparsely distributed longer, black setae. A series of faint, darker brown spots mark the ventral cuticular surface posterior to the epigastric furrow. A dark brown, narrow tract marking the cuticle extends from each anterolateral margin of the ventral opisthosoma, converging posteriorly toward, but not meeting the spinnerets. Spinnerets light brown and covered with short, black setae. (Fig. 6A, B).

Legs. Leg I and II subequal in length, leg III and IV longer, leg III longest. Each leg light brown with incomplete cover of off white and brown setae. The cuticle and setation of each leg joint is distinctly darker brown. Several irregularly shaped patches of darker cuticle mark the femora of each leg, most prominently so on leg III. Pedipalps light brown and translucent with incomplete cover of black setae suffused with finer off-white setae. (Fig. 6A, B).

Epigyne. Epigyne bears a pair of large, ovate fossae separated by a median septum. Posterior spermathecae (so

named for their position relative to the fossae) round and roughly subequal in size to the fossae, positioned posterior to each fossa. Copulatory openings at the posterolateral edges of the fossae, leading into short copulatory ducts that arch medially over the anteromedial margins of the posterior spermathecae before turning laterally; ducts are visible in both dorsal and ventral view. (Fig. 6C, D).

Distribution & habitat. *Maratus alpinus* **sp. nov.** is known from two localities in the Victorian Alps (Fig. 2). The type material was swept from subalpine to alpine grassland vegetation (Fig. 3) at the type locality near McFarlane's Saddle, at approximately 1495m elevation. An individual we have identified as *M. alpinus* has been photographed and posted to iNaturalist from the vicinity of Falls Creek, Victoria (36.91647° S, 147.29478° E; iNaturalist observation 329299645), approximately 90 km north-east of the type locality and within the same subalpine-to-alpine grassland/herbfield belt of the Victorian Alps. Together these two records suggest a genuine, if presently narrowly known, association of *M. alpinus* with high-elevation grassland habitat across the Victorian Alps, rather than a single anomalous occurrence. This is the first record of the *anomalus* group from subalpine or alpine habitat, and extends the known range of the group into eastern Victoria, disjunct from the southwestern Australian and far-western Victorian records of *M. vultus* (Otto & Hill, 2016; Schubert, 2020b), the western Victorian record of *M. inaquosus* (Schubert, 2020a), and the eastern lowland records of *M. anomalus* and the grassland clade (Otto & Hill, 2017).

Etymology. The specific epithet (*alpinus*, Latin, m., adjective, English translation: alpine) refers to the subalpine to alpine habitat in which this species has, to date, only been found.

Disclosures

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