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# On the Australasian Ground Spider Genera Anzacia and Adelphodrassus (Araneae, Gnaphosidae)

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#### **ABSTRACT**

The type species of the genera Anzacia Dalmas and Adelphodrassus Rainbow belong to a complex of very similar species that is widely distributed in Australasia. A revision of that group indicates that Adelphodrassus is a junior synonym of Anzacia, and that the group includes six species: A. perexigua (Simon) from New Caledonia; A. gemmea (Dalmas) from New Zealand and Philip Island; A. sarrita (Simon) from the Australian Cap-

ital Territory, Victoria, and Tasmania; A. mustecula (Simon) from Western and South Australia, Queensland, New Guinea, Cato Island, and Lord Howe Island; A. inornata (Rainbow) from Norfolk Island; and a new species, A. daviesae, from northeastern Queensland. The female of A. sarrita and the males of A. mustecula and A. inornata are described for the first time.

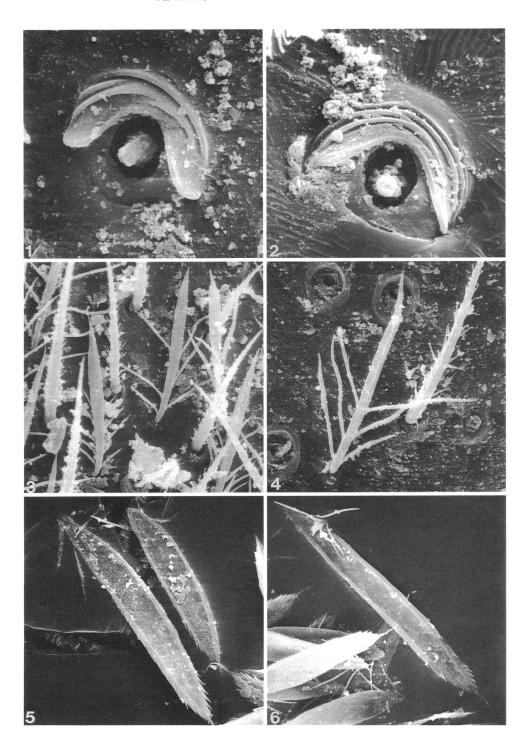
#### INTRODUCTION

The spider genus Adelphodrassus was established by Rainbow (1920) for A. inornatus, described on the basis of a single female collected on Norfolk Island by A. M. Lea. Since its description, no significant references

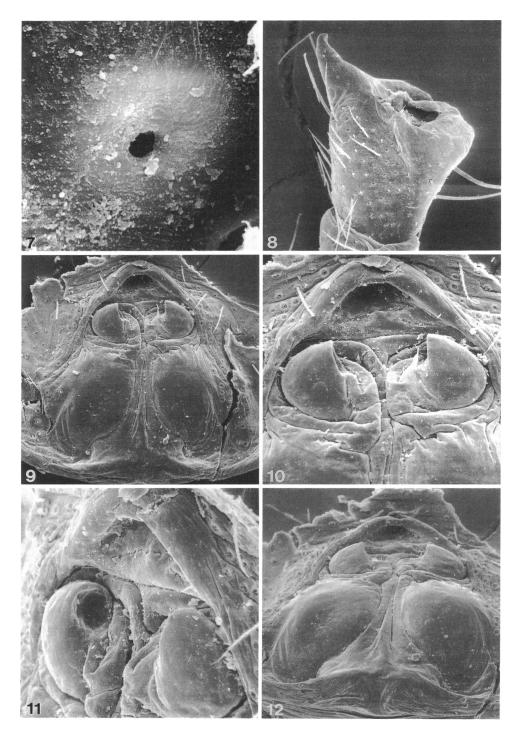
to the taxon have appeared, and its identity has remained obscure. The type specimen was deposited in the South Australian Museum, and through the courtesy of D. Hirst of that institution, we have recently been able to ex-

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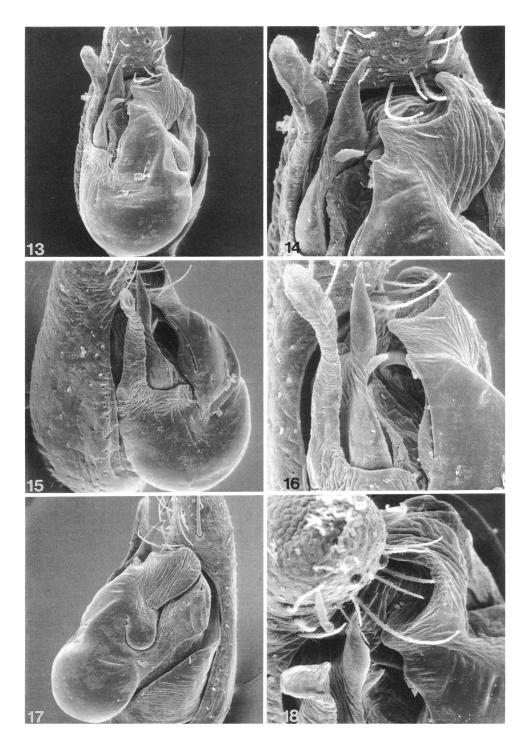
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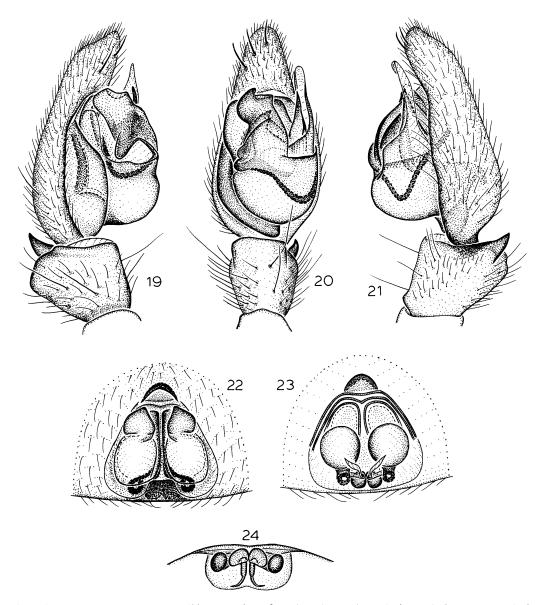
Figs. 1-6. Anzacia gemmea (Dalmas). 1. Trichobothrial base from tarsus I, dorsal view. 2. Trichobothrial base from metatarsus I, dorsal view. 3. Plumose setae from tibia I, dorsal view. 4. Plumose seta from metatarsus I, dorsal view. 5, 6. Abdominal lanceolate setae, dorsal view.



Figs. 7-12. Anzacia gemmea (Dalmas). 7. Tarsal organ of leg I, dorsal view. 8. Retrolateral tibial apophysis, retrolateral view. 9. Epigynum, ventral view. 10. Anterior portion of epigynum, hood and cups, ventral view. 11. Same, lateral view. 12. Epigynum, posterior view.



Figs. 13-18. Anzacia gemmea (Dalmas). 13. Right male palp, ventral view. 14. Anterior portion of male palp, ventral view. 15. Right male palp, retrolateral view. 16. Anterior portion of male palp, retrolateral view. 17. Right male palp, prolateral view. 18. Same, apical view.

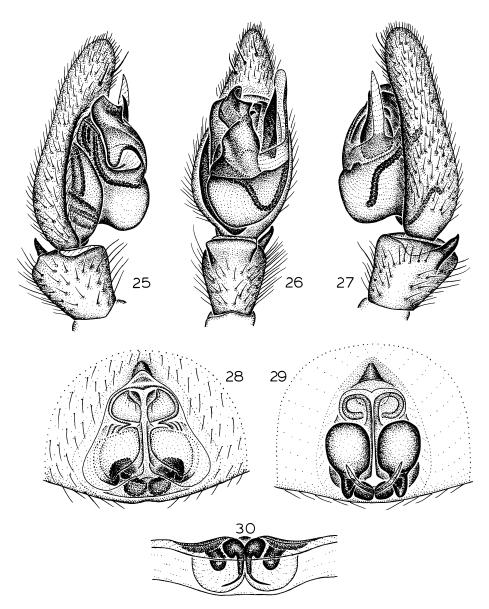


Figs. 19-24. Anzacia perexigua (Simon). 19. Left male palp, prolateral view. 20. Same, ventral view. 21. Same, retrolateral view. 22. Epigynum, ventral view. 23. Same, dorsal view. 24. Same, posterior view.

amine this female. To our surprise, the specimen proved to belong to the more widely known genus *Anzacia* Dalmas (1919).

The type species of Anzacia is Drassus perexiguus Simon (1880), originally described on the basis of a male from New Caledonia. The genitalia of both sexes of that species were later illustrated by Berland (1924). Forster (1979: 62-64) presented a detailed description and illustrations of the single species of *Anzacia* known from New Zealand. Although Forster assigned that species to *Anzacia gemmea* (Dalmas), he indicated that:

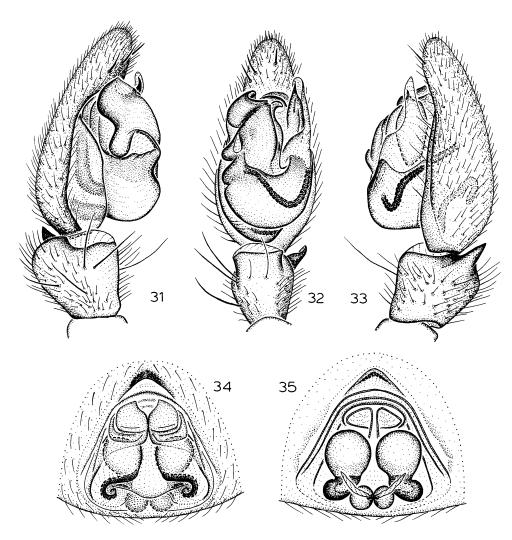
Anzacia is basically an Australian genus which extends to New Caledonia and New Hebrides. The sole New Zealand species seems to be very close to the



Figs. 25–30. Anzacia gemmea (Dalmas). 25. Left male palp, prolateral view. 26. Same, ventral view. 27. Same, retrolateral view. 28. Epigynum, ventral view. 29. Same, dorsal view. 30. Same, posterior view.

type species and the possibility must remain that the two species are synonymous and that A. gemmea is yet another introduced species. The descriptions and illustrations of the previously described species are not clear enough to establish any synonymies and I have not been able to secure adequate comparative material to reach any definite conclusion. . . . There is only one species of this genus in New Zealand found in practically every part of the country it has been looked for. . . . They are not found in forest. The

presence of a single widespread species of a genus otherwise represented by a number of species from Australia, New Caledonia and the New Hebrides suggests that the New Zealand spiders have been introduced. It has not been possible to make direct comparisons with species recorded from Australia but the illustrations given by Berland (1924) for Anzacia perexigua from New Caledonia suggest that this species is very close to, if not identical with the New Zealand species.

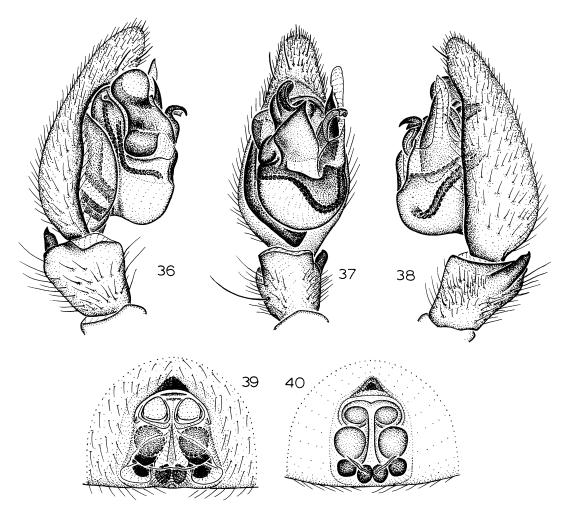


Figs. 31-35. Anzacia sarrita (Simon). 31. Left male palp, prolateral view. 32. Same, ventral view. 33. Same, retrolateral view. 34. Epigynum, ventral view. 35. Same, dorsal view.

Forster's mention of the New Hebrides refers to a species from there originally described as Leptodrassus insulanus Rainbow (1901) and transferred to Anzacia by Dalmas (1919); that species has subsequently been placed in the miturgid genus Hebrithele Berland by Platnick and Bonaldo (1995). Nevertheless, Forster's comments, and the discovery that Adelphodrassus inornatus does belong to this species complex, suggested that a reexamination of the group might be useful.

In addition to the misplaced Leptodrassus insulanus, Dalmas (1919) originally included

in Anzacia nine species, most of which had previously been included in Simon's Drassodes perexiguus species group (Simon, 1893: 361, 1908: 386). These include D. perexiguus (Simon) from New Caledonia, D. gemmeus Dalmas from New Zealand, D. sarritus Simon from Tasmania, D. dimotus Simon from Victoria, and "tout les Drassodes décrits d'Australie Occidentale par E. SIMON": D. respersus, D. petilus, D. nugatorius, D. micaceus, and D. musteculus. As indicated below, however, several of these taxa do not belong to the species complex that includes the type



Figs. 36–40. Anzacia mustecula (Simon). 36. Left male palp, prolateral view. 37. Same, ventral view. 38. Same, retrolateral view. 39. Epigynum, ventral view. 40. Same, dorsal view.

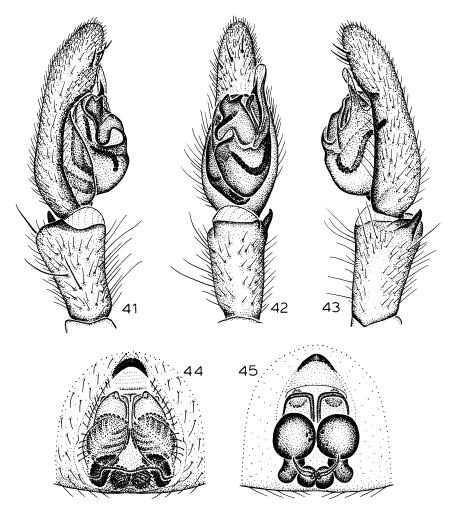
species of both Anzacia and Adelphodrassus, and the same is true for several other taxa that have subsequently been added to Anzacia.

The longstanding uncertainty about the limits of Anzacia is well reflected in its treatment in the catalogs of Bonnet (1955), who listed only six species in the genus (Bonnet apparently overlooked the comment by Dalmas about the five Simon species described from Western Australia), and Roewer (1955), who listed no fewer than 19 specific names, all originally described before 1939 (when Bonnet's coverage ended)! This uncertainty is probably due in part to the fact that Dal-

mas (1919) did not describe or illustrate any of these species in detail, and united them primarily on the basis of their having iridescent abdominal setae. As Forster (1979) demonstrated, however, lanceolate, iridescent abdominal setae are common among Australasian gnaphosids. Thus we survey here only those taxa that, by genitalic characters, can be considered close relatives of A. perexigua.

The format of the descriptions and standard abbreviations of morphological terms follow those of Platnick and Shadab (1975). All measurements are in millimeters.

We are deeply indebted to the Lincoln Ells-



Figs. 41-45. Anzacia inornata (Rainbow). 41. Left male palp, prolateral view. 42. Same, ventral view. 43. Same, retrolateral view. 44. Epigynum, ventral view. 45. Same, dorsal view.

worth Fund of the American Museum of Natural History for the financial assistance that has enabled our collaborative efforts in St. Petersburg and New York. Helpful comments on a draft of the manuscript were provided by Michael Gray of the Australian Museum, Mark Harvey of the Western Australian Museum, and Valerie Davies and Robert Raven of the Queensland Museum. We thank Mohammad U. Shadab and Peling Fong-Melville of the American Museum of Natural History for assistance with illustrations and scanning electron micrographs, and the various collectors and curators, listed below, who provided relevant specimens.

# **COLLECTIONS EXAMINED**

AMNH American Museum of Natural History, New York

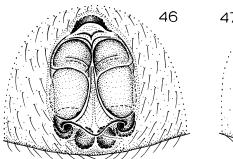
AMS Australian Museum, Sydney, M. R. Gray ANIC Australian National Insect Collection, Canberra, R. B. Halliday

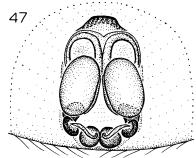
BMNH Natural History Museum, London, P. Hillyard

EDA Entomology Division, Dept. of Scientific and Industrial Research, Auckland, J. S. Dugdale

MCZ Museum of Comparative Zoology, Harvard University, H. W. Levi

MNHN Muséum National d'Histoire Naturelle, Paris, J. Heurtault





Figs. 46, 47. Anzacia daviesae, new species, epigynum. 46. Ventral view. 47. Dorsal view.

QMB Queensland Museum, Brisbane, R. J. Raven, V. E. Davies

SAM South Australian Museum, Adelaide, D. Hirst

ZMB Zoologisches Museum, Berlin, M. Moritz
 ZMH Zoologisches Museum, Hamburg, H.
 Dastych

#### SYSTEMATICS Anzacia Dalmas

Anzacia Dalmas, 1919: 249 (type species by original designation Drassus perexiguus Simon). Adelphodrassus Rainbow, 1920: 235 (type species by monotypy Adelphodrassus inornatus Rainbow). NEW SYNONYMY.

Note: The following diagnosis and description refer only to the six species, illustrated in detailed below, that belong to the perexigua complex. Other taxa that have been assigned to the genus are discussed under "Misplaced Species" below.

DIAGNOSIS: Specimens of the Anzacia perexigua group can be distinguished from other gnaphosids by the combined presence of slightly notched trochanters, a preening brush (but not a preening comb) on metatarsi III and IV, lanceolate, iridescent setae covering the dorsal surface of the carapace and abdomen (figs. 5, 6), a short, wide, distally directed embolus situated retrolaterally on the male palpal bulb, a narrow, membranous conductor, a wide terminal apophysis with two extensions, and a large, hooked median apophysis (figs. 13-18, 20, 26, 32, 37, 42), a conical retrolateral tibial apophysis that is slightly curved at its tip (figs. 8, 21, 27, 33, 38, 43), an elongated, triangular epigynal atrium in females, accompanied by a single large

hood, two anteriorly situated cups, a deep atrial midplace with narrow anterior and wide posterior portions (figs. 9–12, 39, 44), and large, globular or oval spermathecae (figs. 23, 35, 47).

DESCRIPTION: Total length 3.45–6.75. Carapace oval in dorsal view, slightly invaginated posteriorly, narrowed at level of palpi, widest behind coxae II, usually dark vellowish to pale brown, with short black setae and lanceolate, iridescent setae; cephalic area flattened, thoracic groove short, longitudinal. From above, anterior eye row recurved, posterior row slightly procurved; from front, anterior eye row slightly procurved, posterior row strongly procurved. AME circular, dark; PME irregularly rectangular or oval, light; other eyes oval, light; AME largest, PLE smallest; AME separated by roughly their diameter, very close to ALE; PME separated by their radius or diameter, by more than their diameter from PLE; lateral eyes of each side separated by their radius or less; MOQ roughly square. Clypeal height equal to or slightly greater than AME diameter. Chelicerae usually with 3-5 promarginal teeth and two retromarginal teeth. Mouthparts and sternum dirty white to light brown; endites parallel, longer than wide, widened distally, distinctly notched retrolaterally, with weak distal scopula; labium slightly elongate; sternum broad anteriorly, with long setae at margins, rebordered, with short extensions to and between coxae. Leg formula 4123, Typical leg spination pattern (only surfaces bearing spines listed): femora: I, II d1-0-0, p0-0-1; III d1-1-0, p0-1-1, r0-0-1; IV d1-1-0, p0-0-1, r0-0-1; patella III r0-0-0; tibiae: I v2-2-1p;

II v1r-1r-2; III d0-0-0, p1-1-1, v1-2-2, r0-1-1; IV d1-0-0, p2-1-1, v2-2-2, r1-1-0; metatarsi: I, II v2-0-0; III p1-1-2, v2-2-1p, r1-1-2; IV p1-1-2, v2-2-2, r1-1-2. Legs usually pale vellowish brown: tarsi lightly scopulate. with two dentate claws and small claw tufts: trochanters slightly notched; metatarsi III, IV with distoventral preening brush; tarsi with two rows of trichobothria, five in one row, three in second, metatarsi with five trichobothria in one row; trichobothrial bases on tarsi bearing 4-5 short, elevated ridges (fig. 1), on metatarsi bearing 5-6 long, elevated ridges (fig. 2); tarsal organ slightly elongate, with oval opening (fig. 7); femora, patellae, tibiae, and metatarsi with thick, plumose setae; metatarsal setae bearing 3 pairs of branches (fig. 4), setae on other segments bearing 3-5 pairs of branches originating from their ventral surface (fig. 3). Abdomen "silvery and shining in life but straw yellowish in spirit" (Forster, 1979: 62), dorsum usually dirty white to light brown or gray brown, covered by wide, lanceolate, iridescent setae bearing two pairs of thin branches originating from proximal part, distal part of seta narrowed, with serrate margins (figs. 5, 6); dorsum of some species with chevron pattern posteriorly; venter light; males with short. triangular anterior scutum. Male palp with embolus short, wide, straight, situated retrolaterally on bulb (figs. 13, 14, 20, 26, 32, 42); conductor straight, narrow, membranous, situated retrolaterally (figs. 14–16, 21, 27, 33, 38, 43); median apophysis well developed, long, hooked, bifurcate distally, lying under terminal apophysis and occasionally invisible in ventral view (figs. 15, 16, 32, 37, 42); terminal apophysis wide, distally with two extensions of various shapes, one medial, one prolateral (figs. 14-19, 25, 31, 36, 41). Retrolateral tibial apophysis conical, slightly curved at tip, directed anterodorsally (figs. 8, 21, 27, 33, 38, 43). Epigynum with single large atrial hood, two anterior, transparent projections or cups, oval anteriorly and laterally, with medial depression (figs. 9–12, 22, 34, 39, 44, 46); atrial midplace narrow anteriorly, widened posteriorly, with two lateral elevations (figs. 9, 12, 22, 28, 39, 44, 46); anterior portion of spermathecae large, globular or oval, posterior portions small, closely spaced, with short, posteriorly situated cop-

ulatory and fertilization ducts (figs. 23, 24, 29, 30, 35, 40, 45, 47).

SYNONYMY: According to the table of "Contents" of volume 1 of the Records of the South Australian Museum, volume 1 (number 3) of that journal, containing Rainbow's description of Adelphodrassus, was published on June 30, 1920. Bonnet's (1955) catalog indicates that Dalmas' description of Anzacia also appeared in 1920, raising the question of the relative priority of these two names. However, Roewer's (1955) catalog indicates that Dalmas' paper was published in 1919, and this appears to be one of the rare cases in which Bonnet's catalog is in error. We have found no internal evidence indicating that volume 25, number 4, of the Bulletin of the Muséum National d'Histoire Naturelle (for 1919) was not actually published in 1919, and Bonnet's catalog itself lists a paper by Berland, published in a later number (6) of volume 25, as having appeared in 1919. It is possible that Bonnet replicated an error from the Zoological Record for 1920, which erroneously listed Dalmas' paper as having appeared in the Museum's Bulletin for 1920 (perhaps confusing it with another paper by Dalmas that appeared in the Bulletin de la Société Entomologique de France for 1920). In any case, it seems clear that Dalmas' paper appeared before that of Rainbow, and that the name Anzacia has priority over Adelphodrassus.

MISPLACED SPECIES: Our studies of available type materials and additional specimens indicate that only five previously described species, illustrated in detail below, belong to the *perexigua* complex.

In addition to Adelphodrassus inornatus, Rainbow (1920) described two other gnaphosids, neither of which appear to belong to Anzacia. Drassodes signatus Rainbow (1920) was described on the basis of a male from Norfolk Island and later placed in Anzacia by Roewer (1955); the holotype should be in SAM and has not been examined, but two females and one male from Norfolk Island (that are erroneously labeled as cotypes, but were nevertheless presumably identified by Rainbow) are in AMS and have been examined. They belong to the gnaphosid genus Intruda Forster; if the holotype also belongs to Intruda the specific name will be a junior

secondary homonym (and possibly also a junior synonym) of *I. signata* (Hogg).

Similarly, *Drassodes excavatus* Rainbow (1920) was described on the basis of a female from Lord Howe Island and later placed in *Anzacia* by Roewer (1955); the holotype is in SAM and has been examined. It is not a gnaphosid, and has an epigynum typical of the genus *Clubiona* Latreille. In a survey of the spiders of Lord Howe, Gray (1974) reached the same conclusion, listing the species under the Clubionidae as *Clubiona excavata* (Rainbow).

Two species originally described by L. Koch (1872) were placed in *Anzacia* by Roewer (1955). Judging by the original description and illustrations, *Drassus invenustus* L. Koch might belong to another species group of *Anzacia*, but the type specimens have not been located in BMNH. The other species, *Drassus silaceus* L. Koch, was apparently based on a juvenile female that should also be in BMNH (not examined), and will thus remain unidentifiable until topotypical adults become available.

Drassus perelegans Rainbow (1894) was placed in Anzacia by Roewer (1955); the holotype has not been available for study, but Rainbow's description and figure of the dorsal aspect of spider (especially the eye arrangement), and the description and figure of the "silken cell" constructed in plant leaves suggest that, like D. excavatus Rainbow, the species might belong to Clubiona, rather than to Trachelas L. Koch, where it was placed by Simon (1897) and Bonnet (1959). To our knowledge, true Trachelas do not occur in Australasia.

The other species listed in Anzacia by Roewer (1955) probably belong to other genera, although it is possible that some may eventually prove to belong to additional species groups of Anzacia instead. In any case, the following taxa do not belong to the perexigua group: Drassus debilis Hogg (1900, female holotype from Macedon, Victoria, in BMNH, examined); Drassodes dimotus Simon (1908, male and female syntypes from Victoria, in MNHN, examined); Drassodes micaceus Simon (1908, female holotype from Dongarra, Western Australia, in ZMB, examined); Drassodes petilus Simon (1908, male syntypes from Fremantle, Obelisk Hill, and

Bunbury, Western Australia, in MNHN and ZMB, examined); Drassodes respersus Simon (1908, male syntype from Northampton, Western Australia, in ZMH, examined; female syntypes from the same locality in ZMB, examined, and Western Australian Museum, not examined; females from South Australia, in MNHN, examined); Drassodes nugatorius Simon (1908, male syntype from Albany, Western Australia, in ZMB, examined; male and female syntypes from Victoria, in MNHN, examined). This latter species was listed by Roewer (1951, 1955) as Anzacia simoni Roewer; the replacement name was unnecessary, because Roewer did not regard Simon's species as congeneric with *Drassodes* nugatorius (Karsch). Because the change was made before 1960, Roewer's name must now be used for the Simon species.

Finally, four species described by Urquhart were listed in Anzacia by Roewer (1955): Drassus pellus Urquhart (1893b) and Drassus brunneolus Urquhart (1893b), both from Tasmania, and Drassus scitulus Urquhart (1893a) and Clubiona viridicoma Urquhart (1892) from New Zealand. The type material of these species is not available, and is probably lost (R. R. Forster, in litt.); Urquhart's descriptions lack illustrations and are not very helpful. Bryant (1935) suggested that Clubiona viridicoma is a gnaphosid, and placed the species in *Anzacia*. Her illustrations (1935: figs. 5, 7, 12, 16) definitely show a species of Anzacia but were apparently not based on the holotype female from Mount Cook (Urguhart, 1892: 234); the female described by Bryant was instead from an unknown locality. We follow Forster (1979: 74) in considering these Urquhart names unidentifiable.

# Anzacia perexigua (Simon) Figures 19-24

Drassus perexiguus Simon, 1880: 173 (male syntype from Nouméa, New Caledonia, in MNHN, examined).

Drassodes perexiguus: Simon, 1893: 361.

Anzacia perexigua: Dalmas, 1919: 249. – Berland, 1924: 160, figs. 52, 52a, 53.

DIAGNOSIS: This species is very close to A. gemmea, and it is possible that larger samples may show the two names to be conspecific. The few specimens currently available from

New Caledonia can, however, be distinguished from those of A. gemmea (from New Zealand and Philip Island) in a few genitalic details. Males can be recognized by the distally narrow terminal apophysis with its two extensions almost equal in size, the relatively narrow embolus, the long, narrow conductor, and the short, wide, dorsally angular palpal tibia (figs. 19–24); females have a posteriorly narrow atrial midplace, widely spaced anterior cups with a slight depression medially, widely spaced, globular spermathecae, and medially directed copulatory ducts situated near the posterior portions of the spermathecae (figs. 22–24).

MALE: Described by Simon (1880).

FEMALE: Described by Berland (1924).

MATERIAL EXAMINED: New Caledonia: Cochcreau, Sarraméa, Jan. 8-9, 1970 (EDA), 19; Nouméa (MNHN), 58, 19 (including syntypes).

DISTRIBUTION: Known only from New Caledonia. Forster (1979) suggested that A. gemmea might be introduced in New Zealand, and one might easily guess that the same is true of A. perexigua in New Caledonia, as there are few available specimens and they seem all to belong to a single species (whereas the common New Caledonian gnaphosid genus, currently identified as Hypodrassodes Dalmas, has radiated extensively on the island). However, neither species has been found on the Australian mainland.

# Anzacia gemmea (Dalmas) Figures 1-18, 25-30

Drassodes gemmeus Dalmas, 1917: 345, figs. 19–22 (male syntype from Te Whaiti, North Island, New Zealand, and female syntype from Nelson, South Island, New Zealand, in MNHN, examined).

Anzacia gemmea: Dalmas, 1919: 249. – Forster, 1979: 62, figs. 157, 179, 266–269.

DIAGNOSIS: This species seems closest to A. perexigua but can be separated in males by the distally slightly widened terminal apophysis with enlarged prolateral and small medial extensions, the relatively wide, basally folded embolus, the short, narrow conductor, and the comparatively slender, elongated palpal tibia (figs. 8, 13–18, 25–27); females have a posteriorly wide atrial mid-

place, widely spaced anterior cups with a strong depression medially, approximate, globular spermathecae near posterolaterally directed copulatory ducts widely separated from the posterior portions of the spermathecae (figs. 9-12, 28-30).

MALE: Described by Dalmas (1917) and Forster (1979).

FEMALE: Described by Dalmas (1917) and Forster (1979).

MATERIAL EXAMINED: New Zealand: North Island: Te Whaiti, Dec. 30, 1912 (MNHN), 18 (syntype). South Island: Bealey Valley Trail, Arthur's Pass National Park, Mar. 18–21, 1980, elev. 840 m, Berlese, litter from subalpine beech forest (A. Newton, M. Thayer, AMNH), 18; Elbow Creek, near Roxborough, July 25, 1967, under stone (R. R. Forster, AMNH), 18; Makarora Bush, Jan. 1940 (T. Lomas, AMNH), 29; Mt. Aspiring Station, Matukituki Valley, Feb. 7, 1970 (C. L. Wilton, AMNH), 19; Nelson, Mar. 3, 1913 (MNHN), 19 (syntype). Philip Island: Moooo Beach, 29°07'S, 167°57'E, Nov. 20–24, 1984 (T. A. Weir, ANIC), 18, 19.

DISTRIBUTION: New Zealand and Philip Island. The Philip Island record is surprising, considering the proximity of that site to Norfolk Island, where the complex is represented by A. inornata.

### Anzacia sarrita (Simon) Figures 31–35

Drassodes sarritus Simon, 1908: 391 (two male syntypes from Launceston and Hobart, Tasmania, Australia, in MNHN, examined). Anzacia sarrita: Dalmas, 1919: 249.

DIAGNOSIS: This species resembles A. mustecula in having a widened basal branch on the male terminal apophysis, but can be separated in males by the much shorter prolateral extension of the terminal apophysis (figs. 31–33) and in females by the wide atrium with lateral longitudinal margins and contiguous anterior cups with a small depression medially (figs. 34, 35).

MALE: Described by Simon (1908).

FEMALE: Total length 5.25. Carapace 2.06 long, 1.50 wide. Femur II 1.43 long. Eye sizes and interdistances: AME 0.17, ALE 0.14, PME 0.13, PLE 0.12; AME-AME 0.06, AME-ALE 0.04, PME-PME 0.05, PME-PLE 0.14,

ALE-PLE 0.04; MOQ length 0.36, front width 0.35, back width 0.33. Leg spination: tibiae: II v1r-1r-1p; III v1p-1p-2; IV p1-1-1, v1p-2-2, r1-1-1; metatarsi: III v2-1p-1p; IV v1p-2-1p, r1-1-1. Epigynal atrium wide, with lateral longitudinal margins, atrial midplace posteriorly wide, anterior cups touching, oval laterally, with small depression medially (fig. 34); spermathecae globular, approximate, with wide, laterally directed copulatory ducts (fig. 35).

MATERIAL EXAMINED: Australia: Australian Capital Territory: 42 Wheadon St., Monash, Apr. 1983 (R. J. Moran, ANIC), 18, Aug. 5-6, 1983 (R. J. Moran, ANIC), 49. Tasmania: Georgetown, Nov. 1913 (J. Brumly, MCZ), 19; Hobart (MNHN), 18 (syntype); Launceston (MNHN), 18 (syntype). Victoria: "Interior," no specific locality (found together with syntypes of Drassodes nugatoria Simon, MNHN), 19.

DISTRIBUTION: Southeastern Australia and Tasmania.

# Anzacia mustecula (Simon) Figures 36–40

Drassodes musteculus Simon, 1908: 390, fig. 7D (female holotype from Boyanup, Western Australia, in ZMB, examined).

Anzacia mustecula: Dalmas, 1919: 249 (by inclusion).

DIAGNOSIS: This species seems closest to A. sarrita but can be separated in males by the very wide prolateral basal branch of the terminal apophysis, the very large, spoonshaped prolateral extension and smooth medial margin of the terminal apophysis, and the elongated conductor (figs. 36–38) and in females by the posteriorly widened atrial midplace, the oval anterior cups without a medial depression, the widely spaced, and globular spermathecae with wide, posteriorly directed copulatory ducts (figs. 39, 40).

MALE: Total length 4.28. Carapace 1.73 long, 1.20 wide. Femur II 1.20 long. Eye sizes and interdistances: AME 0.13, ALE 0.11, PME 0.11, PLE 0.10; AME-AME 0.10, AME-ALE 0.02, PME-PME 0.08, PME-PLE 0.11, ALE-PLE 0.04; MOQ length 0.32, front width 0.30, back width 0.31. Leg spination: tibiae: I v2-2-0; II v1r-2-1p; IV p1-1-1, v1p-2-2, r1-1-1; metatarsi IV v2-2-1. Palp with large,

spoon-shaped prolateral extension of terminal apophysis, medial extension as denticle on smooth medial margin, wide prolateral basal branch of terminal apophysis, strongly curved, distally bifurcated median apophysis, narrow embolus, long, wide conductor; retrolateral tibial apophysis slightly widened apically, sharply pointed at tip (figs. 36–38).

FEMALE: Described by Simon (1908).

MATERIAL EXAMINED: Australia: Cato Island: site at 23°15'S, 155°32'E, Nov. 22, 1982 (L. Hill, ANIC), 18, 19. Lord Howe Island: station 23, 31°33'S, 159°05'E, Feb. 1971, in grassy foredune (M. Gray, AMS), 18, 1983 (T. Kingston, AMS), 28. Queensland: Brookstead, southeastern Oueensland, Mar. 11, 1975 (QMB), 19; Kroombit Tops, Upper Dry Creek, 45 km SSW Calliope, Dec. 9–19, 1983, open forest (V. E. Davies, J. Gallon, QMB), 19; Laidley Creek bank, southeastern Queensland, June 23-July 21, 1981 (M. Grant, QMB), 18, 19. South Australia: Brooklyn Park, June 1, 1977 (H. Salman, AMS), 18. Western Australia: Boyanup (W. Michaelsen, R. Hartmeyer, ZMB), 18 (holotype). New Guinea: Mt. Ulur camp, Cromwell Mountains Morobe District, Huon Peninsula, Aug. 1964, elev. 7800 ft (H. M. Van Deusen, AMNH), 19.

DISTRIBUTION: Southwestern Australia to southeastern New Guinea, Cato Island, and Lord Howe Island.

### Anzacia daviesae, new species Figures 46, 47

Type: Female holotype from Davies Cr., northeastern Queensland, Australia (Nov. 28, 1972; N. C. Coleman), deposited in QMB.

ETYMOLOGY: The specific name is a patronym in honor of Dr. Valerie E. Davies of the Queensland Museum.

DIAGNOSIS: This distinctive species can be recognized by the wide epigynal hood, narrow epigynal atrium, closely spaced epigynal cups, and large, oval spermathecae (figs. 46, 47).

MALE: Unknown.

FEMALE: Total length 3.45. Carapace 1.43 long, 1.05 wide. Femur II 0.98 long. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.08, PLE 0.10; AME-AME 0.08, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.10,

ALE-PLE 0.02; MOQ length 0.25, front width 0.25, back width 0.24. Leg spination: femora: III p0-0-1; IV d1-0-0; tibiae: I v2-2-0; II v0-1p-0; III p1-0-1, v0-p1-p1; IV p1-1-1, v1p-2-2, r1-1-1; metatarsi: III v2-2-0, r0-0-2; IV v1p-2-2. Epigynal atrium narrow, with wide hood and wide, closely spaced, anteriorly oval cups (fig. 46); spermathecae large, oval, approximate, with narrow, posterolaterally directed copulatory ducts (fig. 47).

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Known only from north-eastern Queensland.

#### Anzacia inornata (Rainbow), new combination Figures 41-45

Adelphodrassus inornatus Rainbow, 1920: 236, pl. 28, figs. 16-18 (female holotype from Norfolk Island, in SAM, examined).

DIAGNOSIS: This distinctive species can easily be recognized in males by the long, narrow palpal tibia and cymbium and the greatly narrowed, short terminal apophysis (figs. 41–43) and in females by the well-developed, triangular anterior projections on the epigynal cups and the closely spaced, globular spermathecae with wide, posterolaterally directed copulatory ducts (figs. 44, 45).

MALE: Total length 6.75. Carapace 2.70 long, 1.95 wide. Femur II 2.10 long. Eye sizes and interdistances: AME 0.19, ALE 0.17, PME 0.15, PLE 0.15; AME-AME 0.13, AME-ALE 0.06, PME-PME 0.15, PME-PLE 0.20, ALE-PLE 0.08; MOQ length 0.46, front width 0.46, back width 0.43. Leg spination: femora: I d1-1-0, p0-1-1; II p0-1-1; III d1-1-1, r0-1-1; IV d1-1-1, p0-1-1, r0-1-1; tibiae: I v2-2-1p; II v1r-2-1p; III v1p-2-2; IV p1-1-1, r1-1-1; metatarsi III, IV v2-2-0. Palp with long, narrow cymbium and tibia, extremely narrow, short terminal apophysis with slightly enlarged medial extension, embolus widened basally, conductor narrow, slightly longer than embolus, retrolateral tibial apophysis elongate, hooked at tip (figs. 41–43).

Female: Described by Rainbow (1920).

MATERIAL EXAMINED: Australia: Norfolk Island: Red Road Trail, Norfolk Island National Park, 29°01'S, 167°57'E, Nov. 14-Dec. 2, 1984 (T. A. Weir, ANIC), 18, 39; Rocky Point Reserve, 29°03'S, 167°55'E, Nov. 14-Dec. 2, 1984 (T. A. Weir, ANIC), 49; South Spur Track, Norfolk Island National Park, 29°01'S, 167°56'E, Nov. 18, 1984 (L. Hill, ANIC), 19; no specific locality, Dec. 1915–Jan. 1916 (A. M. Lea, SAM), 19 (holotype).

DISTRIBUTION: Known only from Norfolk Island.

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