A prodidomine spider from Australia (Araneae, Gnaphosidae)

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Spiders of the genus Prodidomus and their relatives have generally been treated as a family (Prodidomidae), but Platnick and Shadab (1976) have argued that the group is merely a single lineage of the Gnaphosidae that has been separated from that family in the past only because its members show some striking autapomorphies, and that the group is closely related to such gnaphosids as the Echeminae. Molycriinae, and Anagraphinae. These spiders are rare in collections but very widespread; earlier (Platnick, 1976) I indicated that they are "notably absent from Europe, Australia, and New Zealand", but this statement is incorrect as Dalmas (1918) described one species, Prodidomus hispanicus, from southern Spain, and a new species of Prodidomus, described below, has now been found in Australia. To my knowledge, only three of the 40-odd described species of Prodidomus have been taken in the Pacific area: P. gulosus (Simon) from New Caledonia, P. imaidzumii Kishida from Japan, and P. singulus Suman from Hawaii. The first two of these belong to the rufus group (Dalmas. 1918; Cooke, 1964) of *Prodidomus*, as indicated by their broadly divergent chelicerae and acuminate endites; the last species was placed by Suman (1967) near P. latebricola Cooke from Tanzania, placed by Cooke (1964) in the amaranthinus species group because of its short embolus, free only at its tip. The Australian species described below belongs to neither of these groups as the chelicerae are not divergent. the endites are not acuminate, and the embolus is long and free for its entire length; the male seems closest to those of the nigellus group, but the embolus is much narrower and the female lacks the epigynal septum characteristic of nigellus group females. The widespread distribution and high endemicity of the prodidomines makes them a group well suited to biogeographic analysis, but a thorough study of their phylogenetic interrelationships

(including a survey of the internal female genitalia, much neglected in this group) will be necessary before this can be seriously attempted; it is doubtful that all 11 genera now recognized (particularly the monotypic ones) represent valid monophyletic groups.

A detailed description of *P. imaidzumii* has been presented elsewhere (Platnick, 1976); only differences from that species are noted below. The illustrations are by Dr M. U. Shadab.

Prodidomus beattyi, sp.n. (Figs. 1-4)

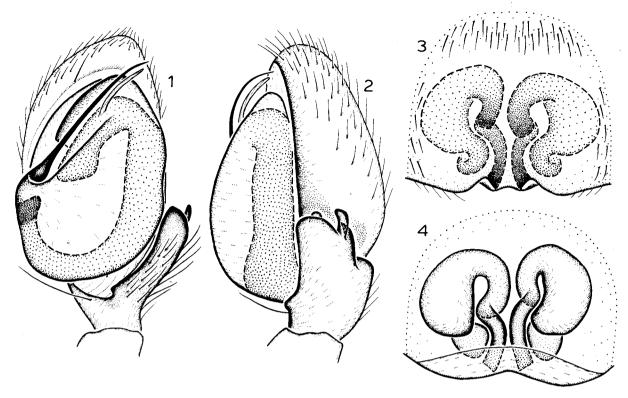
Types. Male holotype and female paratype collected under rocks at Shoal Bay Road, a few miles northeast of Darwin, Northern Territory, Australia (23 June 1973; J. A. Beatty), deposited in the Queensland Museum, Fortitude Valley, Queensland, Australia.

Etymology. The specific name is a patronym in honour of the collector of the type specimens.

Diagnosis. Males of *P. beattyi* may be easily recognized by the long, thin embolus (Fig. 1), and wide, quadrifid retrolateral tibial apophysis (Fig. 2), females by the wide, recurved epigynal ducts and posterior openings (Figs. 3, 4).

Female. As in P. imaidzumii except for the following: Total length, not including chelicerae, 3.46 mm. Carapace 0.95 mm long, 0.72 mm wide, yellow, with few erect dark setae. Four eyes of each side virtually contiguous; posterior median eyes separated by one-third their long diameter. Median ocular quadrangle longer than wide. Chelicerae light yellow, protruding forward distance equal only to about oneninth of carapace length, only slightly divergent. Mouthparts and sternum yellow, endites not convergent or sharply pointed distally. Sternum not protruding anteriorly. Femur II 0.56 mm long. Legs yellow; tibia III with apical prolateral, tibia IV with apical pair, metatarsi III and IV with apical prolateral spine. Abdomen white, with scattered short recumbent dark setae. Anterior spinnerets separated by one-third their width. Epigynum with posterior openings (Fig. 3) and wide sinuous ducts (Fig. 4).

Male. As in female except for the following: Total length, not including chelicerae, 1.76 mm. Carapace 0.80 mm long, 0.58 mm wide. From above, anterior eye row almost straight. Posterior median eyes separated by one-sixth their long diameter. Femur II



Figs. 1-4: Prodidomus beattyi, new species. 1 Palp, ventral view; 2 Palp, retrolateral view; 3 Epigynum, ventral view; 4 Vulva, dorsal view.

0.54 mm long. Anterior spinnerets separated by one-half their width. Palp with long free embolus and short translucent conductor (Fig. 1). Retrolateral tibial apophysis large, wide, with four terminal processes (Fig. 2).

Distribution. Known only from the type locality.

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