

ON THE SPIDER GENUS *ODONTODRASSUS* (ARANEAE, GNAPHOSIDAE)

Norman I. Platnick

Department of Entomology
The American Museum of Natural History
Central Park West at 79th Street
New York, New York 10024

ABSTRACT

Zelotes javanus (Kulczyński) from Java and *Drassodes ciusi* Berland from New Caledonia are transferred to the genus *Odontodrassus* Jézéquel, previously known only from West Africa. The latter species is newly synonymized with the former, which is newly recorded from the Philippine, Solomon, and Marshall Islands, and from Jamaica. Other records greatly increase the known range of *Odontodrassus* in continental areas.

INTRODUCTION

While engaged in a continuing series of revisionary studies of American Gnaphosidae, a few specimens of a peculiar species were first encountered among spiders collected in Jamaica by the late Dr. A. M. Chickering. It was immediately obvious that this species does not belong to any of the genera previously recorded from the New World. Although other gnaphosid genera are known to be endemic to the West Indies (for example, the gnaphosine genus *Microsa* Platnick and Shadab), the absence of any American group with which the Jamaican species might be considered to be closely related suggested that the species may be introduced. This possibility was greatly enhanced when additional specimens of the species were found in a collection of gnaphosids from Eniwetok Atoll in the Marshall Islands made available by Dr. J. A. Beatty.

A subsequent survey of available Old World gnaphosid material has revealed (1) that the Jamaican specimens belong to a species which is widespread in the Pacific and which has been described at least twice in genera to which it does not belong, (2) that the species is congeneric with the type species of *Odontodrassus*, described from West Africa by Jézéquel (1965), and (3) that *Odontodrassus* is an extremely widespread (and easily recognizable) genus that will probably prove to contain numerous species previously described in the various "wastebasket" groups (like *Drassodes*) which currently contain large numbers of unrelated species. It is hoped that this paper will lead arachnologists to discover *Odontodrassus* specimens in collections of (and species in the large, if not particularly useful, literature on) Old World gnaphosids.

Material has been studied from the collections of the American Museum of Natural History (AMNH), Dr. J. A. Beatty (JAB), the British Museum (Natural History) courtesy of Mr. F. R. Wanless (BMNH), the California Academy of Sciences courtesy of Dr. D. H. Kavanaugh (CAS), and the Museum of Comparative Zoology courtesy of Dr. H. W. Levi (MCZ). The illustrations are by Dr. M. U. Shadab of the American Museum.

Odontodrassus javanus (Kulczyński), new combination

Figs. 1-4

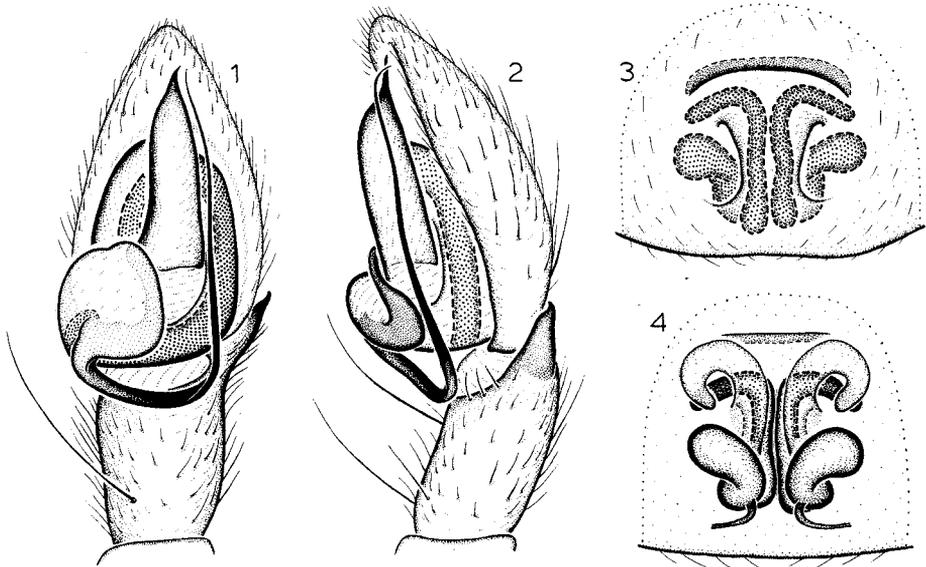
Scotophaeus javanus Kulczyński 1911:470, Figs. 21, 24 (female holotype from Buitenzorg [= Bogor], West Java, Java, may be in Polska Akademia Nauk, not examined).

Drassodes ciusi Berland 1924:192, Figs. 54-56 (male holotype from Ciu, New Caledonia, may be in Muséum National d'Histoire Naturelle, not examined), 1929:393, Figs. 3, 4; Marples 1960:385. NEW SYNONYMY.

Zelotes javanus: Reimoser 1927:1, 1929:1; Mohr 1930:295.

Discussion.—Detailed descriptions of this medium sized (length up to 5 mm) species have been provided by Kulczyński and Berland and will not be duplicated here. The previous placements of the species are not defensible. Kulczyński (1911) indicated that his assignment of the species to *Scotophaeus* was highly questionable, and Berland (1929) admitted that it is unlikely that any true *Drassodes* occur in the Australian area. Reimoser (1929) justified his transfer of the species to *Zelotes* by reference to the eye arrangement and cheliceral dentition, but neither the metatarsal preening comb nor the type of genitalia characteristic of *Zelotes* are present.

Placement of the species in *Odontodrassus* is supported by the structure of both the male and female genitalia. The type species of *Odontodrassus*, *O. nignitibialis* Jézéquel (1965:296, Figs. 3, 4a-c), resembles *O. javanus* in having males with a greatly enlarged embolar base and an extremely elongate, basally originating, and retrolaterally directed



Figs. 1-4.—*Odontodrassus javanus* (Kulczynski), specimens from Jamaica: 1, left male palp, ventral view; 2, left male palp, retrolateral view; 3, epigynum, ventral view; 4, epigynum, dorsal view.

embolar tip which fits along the retrolateral edge of a large, flat functional conductor that occupies most of the ventral surface of the palpal bulb (Figs. 1, 2); females of both species have an epigynum with a wide median ridge (separating two lateral atria leading to the copulatory pores) that covers two large and externally visible median longitudinal ducts with transverse anterior extensions and rounded posterior connections to small, medially situated spermathecae (Figs. 3, 4). These characters are diagnostic of the genus, although judging from Jézéquel's illustrations (1965: Figs. 5, 6) it is unlikely that *O. bicolor* Jézéquel (the only other species currently assigned to the genus) actually belongs to *Odontodrassus*. Specimens of *O. javanus* can be easily distinguished from *O. nigritibialis* by having only a single retrolateral tibial apophysis in males and only a single anterior epigynal hood in females.

No significant differences have been detected among males of this species from Jamaica and Eniwetok. Females vary in the degree of coiling of the ducts connecting the spermathecae with the median longitudinal ducts, and hence in the orientation of the spermathecae themselves. This variation occurs among females collected at the same place and time, and sometimes between the right and left sides of an individual. Although no specimens of the species have been available from either type locality (or to confirm the records from islands off the coasts of Sumatra and New Caledonia reported by Reimoser and Berland, respectively), the illustrations published by Kulczyński and Berland are sufficiently detailed to allow placement of their material well within the range of variation shown by available females.

There are at least four additional species of *Odontodrassus* from South Africa (CAS), Algeria (AMNH), Israel (MCZ), and Nepal (CAS). All can be easily distinguished from *O. javanus* by their epigynal hood, which is curved almost into a semicircle and situated more posteriorly than in that species. It seems likely that these (and other) species of the genus have already been described from various localities; for example, the South African specimens may belong to *Drassodes ereptor* Purcell (1907:310, Figs. 16, 17), and the Nepalese to *Drassodes himalayensis* Tikader and Gajbe (1975:274, Figs. 1-5).

Distribution.—Pacific islands from Java and the Philippines east to New Caledonia and Niue; Jamaica. Parts of this range are probably due to human introductions.

Material Examined.—JAMAICA: *St. Andrew*: Old Hope Road, Liguanea, 8 October 1957 (A. M. Chickering), 1 female (MCZ); *St. Catherine*: 1.5 mi. SW Spanishtown, 10 October 1957 (A. M. Chickering), 4 males, 3 females (MCZ, AMNH). MARSHALL ISLANDS: *Eniwetok Atoll*: Japtan Islet (grass clumps in *Ipomea*-sedge-grass community), 5 July 1968 (J. W. Berry), 1 male, 3 females (JAB, AMNH). NIUE: no specific locality, in open plantation (B. J. Marples), 1 female (BMNH). SOLOMON ISLANDS: *Guadalcanal*: Lunga River region (F. E. Samson), 1 female (AMNH). PHILIPPINE ISLANDS: *Luzon*: no specific locality, June-July 1945 (R. B. Burrows), 1 female (AMNH).

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