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REVISION OF THE GENERA OF PLATYPODIDAE (COLEOPTERA)

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ABSTRACT.— A search for characters to make the generic classification of Platypodidae more nearly objective resulted in the discovery of new anatomical features that appear to reflect patterns in phylogeny for this family. The Platypodidae are members of the Curculionoidea and are very closely allied to Scolytidae. Three subfamilies of Platypodidae are recognized: (1) Coptonotinae, containing Coptonotini (*Coptonotus* Chapuis, *Protohylastes* Wood, *Scolytotarsus* Schedl), Mecopelmini (*Mecopelmus* Blackman, *Protoplatypus* Wood), and Schedlarini (*Schedlarius* Wood [=*Chapuisia* Dugès]); (2) Tesserocerinae, containing Diapodini (*Diapus* Chapuis, *Genyocerus* Motschulsky [=*Diacavus* Schedl]), and Tesserocerini (*Platytarsulus* Schedl, *Notoplatypus* Lea, *Tesserocranulus* Schedl, *Tesserocerus* Saunders [=*Damicerus* Spinola, *Tesseroplatypus* Schedl, *Tesserocephalus* Schedl]), *Spathidicerus* Chapuis, *Periommatus* Chapuis [=*Asetus* Nunberg, *Setanus* Nunberg], *Chaetastus* Nunberg [=*Symmerus* Chapuis], *Cenocephalus* Chapuis, and *Mitosoma* Chapuis [=*Platypicerus* Nunberg, *Coecephalonus* Schedl]); and (3) Platypodinae, containing Platypodini (*Platypus* Herbst [=*Cylindra* Illiger, *Stenoplatypus* Strohmeyer, *Platypinus* Schedl, *Austroplatypus* Browne], *Treptoplatypus* Schedl, *Crossotarsus* Chapuis, *Trachyostus* Schedl, *Neotrachyostus* Browne, *Platyscapulus* Schedl [=*Platyscapus* Schedl, *Costaroplatus* Nunberg], *Baiocis* Browne, *Cylindropalpus* Strohmeyer, *Triozastus* Schedl, *Mesoplatypus* Strohmeyer, *Doliopygus* Schedl [=*Scutopygus* Nunberg, *Pygodolius* Nunberg, *Mixopygus* Nunberg, *Mesopygus* Nunberg], and 11 genera named as new to science derived from the genus *Platypus* of Schedl 1972. The following are new genera and their type-species: *Peroplatypus* (for *Platypus truncatipennis* Schedl), *Dinoplatypus* (for *Platypus cupulatus* Chapuis), *Myoplatypus* (for *Bostrichus* or *Platypus flavicornis* Fabricius), *Oxoplatypus* (for *Scolytus* or *Platypus quadridentatus* Olivier), *Platyphysus* (for *Platypus obtusus* Chapuis), *Megaplatypus* (for *Platypus dentatus* Dalman), *Euplatypus* (for *Bostrichus* or *Platypus parallelus* Fabricius), *Epiplatypus* (for *Platypus desceptor* Wood), and *Teloplatypus* (for *Platypus concinnus* Blandford). The archaic "sektionen" used by Schedl in his 1972 classification of this family are eliminated. A key for the identification of genera, a discussion of characters, and remarks on phylogeny are included.

Key words: Platypodidae, Coleoptera, Platypus, *revision, taxonomy.*

During prepartion of the recent world catalog that included the family Platypodidae (Wood & Bright c1992), it was learned with considerable surprise that a systematic review of genera for this family did not exist. This contribution is written in an attempt to at least partially remedy that situation.

The group had its origin in systematics literature when Fabricius (1792:364) named *Bostrichus cylindrus* from Germany and assigned it to the non-Linnaean Xylophaga in the family Bostrichidae. A year later Herbst (1793:128) recognized the uniqueness of this species and erected the genus *Platypus* for it. *Platypus* was transferred by Latreille (1807:277) to his newly erected subfamily Scolytarii (currently Scolytidae) of his family Curculionites. Shuckard (1840 [reprinted 1861:64]) established the family Platypodidae for it. The group has received a tribe, subfamily, or family designation in virtually all treatments of the group since 1840. The family now contains slightly over 1400 species, almost all of which are tropical in distribution.

By 1864 approximately 17 species had been assigned to Platypodidae in *Platypus*, *Tesserocerus*, and *Genyocerus*. Chapuis (1865) added seven genera (*Cenocephalus, Crossotarsus, Diapus, Mitosoma, Periommatus, Spathidicerus, Symmerus* [=*Chaetastus*]) and about 220 species to the family in his classical Monographie des Platypides. This monograph (Chapuis 1865:22–23) contained the first key to genera used in the family. It was based largely upon mouthparts, eyes, and features of the prothorax. Species in the larger genera were divided into several archaic, non-Linnaean species-groups that were perpetuated by Strohmeyer (1912, 1914b), Schedl (1939, 1972) and, to a lesser extent, by other authors.

Strohmeyer (1912) broadened the family to include the subfamily Chapuisiinae for *Chapuisia* Dugès (=*Schedlarius*), but he later placed it in a separate family, Coptonotidae

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(Strohmeyer 1914a), a change followed only by Schedl (1939). Strohmeyer (1914b:18) divided the 323 known species of Platypodidae into two subfamilies based on the divided (Tesserocerinae) or undivided (Platypodinae) maxilla. The Tesserocerinae he then divided into tribes Tesserocerariae (*Tesserocerus, Periommatus, Spathidicerus*), Symmerariae (*Symmerus*), Cenocephalariae (*Cenocephalus, Mitosoma*), and Diapodariae (*Diapus*) based on procoxal, occular, and funicular characters. The Platypodinae were divided into tribes Platypodariae (*Platypus, Cylindropalpus, Notoplatypus*) and Crossotarsariae (*Crossotarsus, Stenoplatypus, Mesoplatypus*) based on characters of abdominal sternum 8. Strohmeyer perpetuated and expanded the non-Linnaean species-groups of Chapuis in his classification of the larger genera.

Schedl (1939) proposed a superfamily Scolytoidea in which he placed the families Scolytidae, Coptonotidae (for *Coptonotus, Scolytotarsus, Chapuisia*), Platytarsulidae (for *Platytarsulus, Notoplatypus*), and Platypodidae, with no subfamilies indicated, containing tribes Platypodini, Tesserocerini, Cenocephalini, Crossotarsini, Periomatini [*sic*], and Diaporini [*sic*]. Schedl's (1972) Monographie der Familie Platypodidae elevated the Crossotarsinae, Platypodinae, Periommatinae, and Diaporinae [*sic*] from tribal to subfamily rank, but reduced to subfamily rank the Platytarsulinae. The Tesserocerini and Cenocephalini were grouped within his Platypodinae. Schedl (1962) treated in his family Coptonotidae the genera *Coptonotus, Schedlarius* (=*Chapuisia*), and *Mecopelmus*. In his treatment of Platypodidae, Schedl (1939, 1972) perpetuated the use of the non-Linnaean species-groups of Chapuis with only minor modifications.

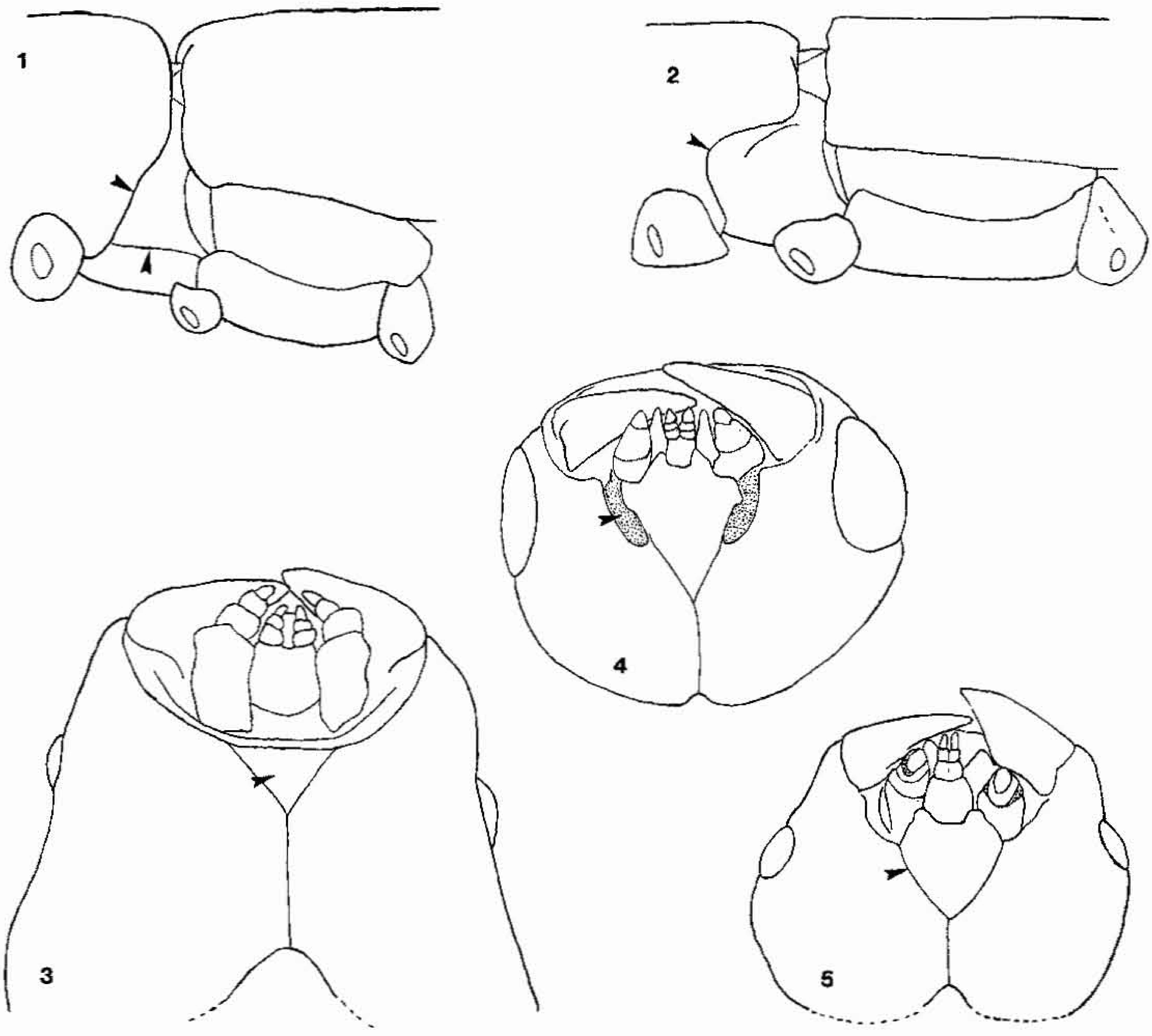
Wood (1973, 1986) included the Coptonotinae (Coptonotini, Mecopelmini, Schedlarini) in Platypodidae. Wood (c1992 *in* Wood & Bright) recognized the subfamilies Coptonotinae (tribes Coptonotini, Mecopelmini, Schedlarini), Tesserocerinae (tribes Diapodini, Tesserocerini), and Platypodinae (tribe Platypodini). A dendrogram that indicates possible phylogenetic relationships among these groups to one another and to Scolytidae appears in Wood (1982:43), except that the Tesserocerinae and Platypodinae are not divided.

While attempting to organize a reasonable arrangement of genera for the world catalog, I observed that some obviously related species had been grouped by Schedl (1972) in entirely different subfamilies, while other unrelated species had been clustered into the same genus, and I recognized that a serious generic revision has not been published on this taxon since the family was first recognized. The archaic classification then in use was unreasonable, unwieldy, and based as much on the whims of the taxonomist using it as on phylogeny or evolutionary relationships of the included taxa. This led to a search for characters that might be usable in a new classification.

REVIEW OF CHARACTERS

The Platypodidae are members of the superfamily Curculionoidea (Crowson 1955, 1968). They share many characters with other members of this group (Wood 1973, 1986). Within the Curculionoidea they are very closely allied to the Scolytidae with which they share the same broad ecological niche and many similar behavioral patterns. Together these two families share a conspicuous pregular sclerite (as defined by Hopkins 1909, 1911) that is clearly marked by sutures on both sides (Figs. 3–5) and is not similarly marked in any other family of Curculionoidea. Additional characters shared by these two families and those features that distinguish them from allied families are reviewed by Wood (1973, 1986). The feature most familiar to coleopterists and the one most widely employed in family keys for separating Platypodidae from Scolytidae is the length of tarsal segment 1 compared to segments 2–5. In Scolytidae segments 1, 2, and 3 are subequal in length, while in Platypodidae segment 1 is usually about as long as segments 2–5 combined (Wood 1986:11, fig. 9). However, in *Protoplatypus* (Mecopelmini) segments 1, 2, and 3 are subequal in length, while in *Mecopelmus* (Mecopelmini) segment 1 is as long as 2–5 combined. The remaining species of Coptonotinae are intermediate in their expression of this character (Schedl 1939:381, fig. 3).

The pregula sclerite in Coptonotinae (Fig. 3) is comparatively small as it is in Scolytidae; in Tesserocerinae (Fig. 4) and Platypodinae



Figs. 1–5. Platypodidae spp., males: 1, *Schedlarius mexicanus* (Chapuis), lateral aspect of thorax showing straight posterior margin of prothorax (upper arrow) and anapleural suture of mesothorax (lower arrow); 2, *Tesserocerus dewalquei* Chapuis, lateral aspect of thorax showing strongly procurved posterior margin of prothorax (arrow) and absence of a mesothoracic anapleural suture; 3, *Schedlarius mexicanus*, ventral aspect of head showing the small pregula (arrow) with its marginal sutures and transverse carina; 4, *Tesserocerus dewalquei*, ventral aspect of head showing the deep cleft (stippled area at arrow) between the large pregula and margin of the oral fossa; and 5, *Euplatypus parallelus* (Fabricius), ventral aspect of the head showing absence of the cleft (arrow).

(Fig. 5) it is much larger and very conspicuous. In Tesserocerinae there is a conspicuous cleft (Fig. 4, arrow) between the lateral margin of the pregula and the margin of the oral fossa (into which the maxilla moves). The depth of this cleft is usually equal to at least half the length of the pregula (Fig. 4). In Platypodinae this cleft is very shallow to nonexistent and is always equal in depth to less than one-fourth the length of the pregula (Fig. 5). The presence of this cleft is apparently correlated with the division of the maxilla into separate lacinia and galea lobes (Wood 1986:8, fig. 6); its absence appears to be correlated with the fusion of the lacinia and galea into one element. Due to the paucity of specimens available for study, *Platytarsulus* and *Notoplatypus* were assigned to Tesserocerinae on the basis of the presence of the cleft and were not dissected to determine the character of the maxilla.

In the Tesserocerinae the eye exhibits a departure from the usual subcircular, hemispherical shape. In *Platytarsulus*, *Spathidicerus*, and *Periommatus* the eye may be very large and reniform (Schedl 1939:384, fig. 4). In *Mecopelmus* (Coptonotinae) there is a slight modification in that direction (Blackman 1944:figs. 3–5).

Antennal characters appear to be significant in the early phyletic history of the Platypodidae. The antennal club is weakly marked by two strongly procurved sutures in *Coptonotus*; in the remainder of the family there is no evidence of sutures on the club. *Coptonotus* has the antennal funicle 7-segmented (Schedl 1939:380, fig. 2), a feature also shared with *Protohylastes* and *Scolytotarsus*. Because seven is the maximum number of segments in the funicle found in Curculionoidea (Crowson 1955, 1968), that number is assumed to exhibit the primitive character; any reduction from that number should represent specialization. In *Protoplatypus* and *Schedlarius* the funicle is 5-segmented, in *Mecopelmus* and *Notoplatypus* 3-segmented, in *Platytarsulus* 2-segmented, and in all other Tesserocerinae and in all Platypodinae it is 4-segmented (Schedl 1939:380, fig. 2). In *Coptonotus* and *Protohylastes* the antennal club is more slender and less strongly flattened than in other representatives of the family.

In Coptonotinae the posterior margin of the prothorax (as seen from a lateral aspect) is dorsoventrally straight to very weakly procurved; the mesepisternum is moderately large and almost flat (Fig. 1). In Tesserocerinae (Fig. 2) and Platypodinae the posterior margin of the prothorax is strongly procurved in the pleural area, the mesepisternum is inflated, or in specialized genera it may be impressed and variously carinate.

In all Coptonotinae and in Diapodini, *Tesserocerus*, and *Tesserocranulus* of the Tesserocerinae, the mesotergum is normal, that is, transversely flat or weakly, transversely convex. In all other Tesserocerinae and all Platypodinae it is armed by a conspicuous, strongly elevated, median carina. The presence of this carina represents an obvious specialization. In Scolytidae and Coptonotinae the mesothoracic anapleural (pleurosternal) suture is consistently present. This anapleural suture is largely (Tesserocerinae) or entirely (Platypodinae) eliminated in the higher Platypodidae.

Characters that might be used to indicate phylogenetic trends in Platypodinae are limited in number. A feature, apparently used here for the first time, is the presence of a groove or impression on the posterior portions of the metasternum and metepisternum for the reception of the metafemur. In the African genera *Cylindropalpus*, *Triozastus*, *Mesoplatypus*, and *Doliopygus*, the anterior margin of this impression is continuously carinate (or nearly so). In more than half (mostly American species) of what has previously been designated as *Platypus*, the anterior margin of this impression is marked by a series of minute spines, and in the remaining half of *Platypus* (mostly African and Indo-Australian species) the impression is weak to absent and spines are absent. Except for females of a few American species, this character appears to be a reliable indicator of relationship.

The visible abdominal sterna in Platypodidae exhibit rather limited, but remarkable, variation. The primitive structure appears to be five horizontal, unarmed segments that rise little, if any, to meet the apex of the elytral declivity. As the male declivity shortens (or atrophies) in some groups, the abdomen ascends gradually to abruptly to accommodate the change. In Diapodini (*Diapus, Genyocerus*) this ascent is almost entirely accomplished by visible sternum 5 as it becomes vertical and moderately to remarkably concave (This enables males of these genera forcefully to expel frass from the entrance hole 2 m or more from the host tree). In *Mesoplatypus* and *Doliopygus* a pronounced transverse carina occurs on visible sternum 2 (Schedl 1972:149, fig. 39); this enables sterna 3–5 (at least in *Doliopygus*) to become vertical and concave and to function much as does sternum 5 in the Diapodini. Less remarkable and less extensive variations occur on sterna 3, 4, or 5 where a transverse pair of moderate to elaborate spines (Wood 1966:47 [fig. 6], 67 [figs. 22–24]) arm one of these segments (sternum 3 in *Myoplatypus*, sternum 4 in *Oxyplatypus*, sternum 5 in *Platyscapulus*).

The protibia is somewhat uniform in the family except in primitive genera. It characteristically has a terminal mucro and is armed on the posterior (or lateral) face by one or more transversely carinate, coarse rugae. In female *Crossotarsus*, *Trachyostus*, and *Neotrachyostus*, and in at least two species of American *Megaplatypus*, these rugae are broken up and reorganized into numerous, confused granules. The socketed denticles (derived from setae) found in most Scolytidae (Wood 1986:11, fig. 10) are unknown in Platypodidae. The tibial denticles of Platypodidae are true spines that function in gripping tunnel walls. The simplest form appears to be that of *Protohylastes* (Wood 1973:86, fig. 25). Other Coptonotinae may have one lateral spine or carinate ruga; higher genera have two to nine rugae (Wood 1973:86, figs. 25–33, Schedl 1939:379, fig. 1). The rugae are not always consistent in position and form in the higher genera and must be used in classification with caution.

Tarsal segment 3 is slender and cylindrical in almost all Platypodidae (Wood 1986:11, fig. 9). In the Coptonotinae genera *Coptonotus, Protohylastes, Scolytotarsus,* and *Schedlarius* segment 3 (Schedl 1939:381, fig. 3) is broad and strongly bilobed as in primitive Curculionoidea.

The spines arming the male elytral declivity are truly remarkable and almost endlessly diverse within the Platypodidae. However, as groups are segregated on the basis of other characters, the constancy and usefulness of these spines and patterns of spines become apparent. Greater knowledge of Platypodidae pairing and mating behavior would probably increase our understanding of the significance of size and position of these spines.

It is generally understood that all Platypodidae (except *Protoplatypus*) are monogynous, and in all species the male initiates the formation of a new parental gallery system. The female, consequently, assumes the primary responsibility for the identification and acceptance of a male. Presumably, for this reason, the male posterior extremities exhibit remarkable characters, while the females exhibit few, often very subtle, distinguishing features. Perhaps the most remarkable female features are the dehiscent mandibular appendages of the Diapodini (Roberts 1993) that are used briefly for tactile communication with the male at pairing and/or mating and are then discarded. A few other females that possess remarkable frontal characters apparently use those features in caring for the eggs or larvae (Wood 1986:4, fig. 2). This is an area where very little factual information is available. The mycetangia pores on the pronotum of many female (and a few male) Platypodidae appear to follow distinguishable patterns in some groups. These patterns appear more constant and less diverse than previous usage might suggest.

The three genera of Coptonotinae studied in the field by me have habits more nearly like Scolytidae than like other Platypodidae. In *Schedlarius* (Wood 1957), parent adults make long egg tunnels in the xylem; egg niches are randomly formed on all sides of the tunnel into which the eggs are placed, one in each niche, and packed in frass. The larvae form long, independent, winding tunnels in the xylem. Although fungal decay in the vicinity of boring activity of both adults and larvae was obvious, there was no ambrosial mycelium growth on the walls of adult or larval mines. Adult *Mecopelmus* form a simple cave tunnel, about 1 cm in diameter and 1–2 mm deep, at and slightly below the cambium region of their host. In the frass of this chamber the female deposits a cluster of one or two dozen eggs. The first- and second-instar larvae feed on this frass and then bore individual mines in the cambium region as they radiate out from the central chamber. There was no evidence of mycelial growth in the mines at 20X magnification. *Protoplatypus* parent adults formed radiate tunnels (with 3–5 egg galleries in each, similar to those of *Pityophthorus*) in the cambium of their host, complete with nuptial chamber, egg galleries, egg niches, and individual larval mines. Mycelial growth was not evident at 20X magnification. All other observed Platypodidae (Tesserocerinae and Platypodinae) are xylomycetophagous.

PHYLOGENY

The Platypodidae and Scolytidae are very closely related to one another, so much so that four of the six genera of Coptonotinae could be assigned to either family without serious conflict. The most closely allied groups within the Scolytidae to the Coptonotinae, however, appear to be in or near the Carphodicticini or possibly the Dryocoetini of the Scolytidae, rather than the superficially similar tribes in what has been regarded as the more primitive Hylesininae. The Platypodidae appear to be the first of eight phyletic lines within the Platypodidae-Scolytidae group to adopt the xylomycetophagous habit. This shift in adaptive specialization had a profound impact on form and function within the Platypodidae that separated them rather sharply from the Scolytidae.

Few detailed anatomical studies have been based on members of the Platypodidae, and, for the most part, those that have been made were based on the accessible, more specialized representatives.

It is almost universally agreed that the Platypodidae-Scolytidae are members of the Curculionoidea (Crowson 1955, 1968:154–166, Wood 1973, 1986). Exactly where these families fit within the Curculionoidea has been the subject of much discussion and disagreement. Their traditional placement within (Crowson 1955, 1968, as subfamilies) or adjacent (as families) to Curculionidae is questioned by me (Wood 1973, 1986). Their placement among the higher Curculionoidea is substantiated by the presence of only one median, gular suture (Wood 1986:6, 8); however, the very short length of this suture in Platypodidae is a departure from most other Curculionoidea and could have significance. The comparative positions of the mandibular condyles, including conspicuous reduction of the hypostomal area, also sets the Platypodidae-Scolytidae apart from other Curculionoidea, particularly the Cossoninae (Curculionidae) to which they are supposed to be closely related (Wood 1986:10, fig. 8). The truly unique character of the Platypodidae-Scolytidae is the conspicuous pregular sclerite that is clearly marked on both sides by sutures (Figs. 3–5), a feature that is shared by no other family (Wood 1986:6–8). In Anthribidae and Nemonychidae the lacinia and galea form separate elements on the maxilla. Among those Curculionoidea having only one gular suture, the maxilla is similarly divided only in some Attelabidae, some Rhynchitidae, and the subfamily Tesserocerinae of the Platypodidae (Wood 1986:8, fig. 6). No member of the Curculionidae shares this character. The loss of the mesothoracic anapleural suture in Tesserocerinae (Fig. 2) and Platypodinae appears to have occurred entirely within the Platypodidae because it is present in all Coptonotinae (Fig. 1) and in all Scolytidae. Browne (1972) reported urogomphi-like structures in larvae of two species of African Platypodidae; if correct, this would be the only known occurrence of these structures in Curculionoidea. The true homology of a labrum-like structure in *Chaetastus* (Wood 1986:4, fig. 2) and other female Tesserocerini has not been clarified. Evolution within the Curculionoidea is obviously much more complex than published simplistic explanations acknowledge. Obviously many unanswered questions remain that must be answered before reasonable explanations are found.

To summarize the above, it appears that the Platypodidae-Scolytidae represent a distinct phyletic line of Curculionoidea having one gular suture and that this line is independent from the Brenthidae-Rhynchitidae-Curculionidae line of specialization.

Phyletic trends within the Platypodidae are somewhat unclear. The six genera of Coptonotinae (represented by nine rare species scattered on four tropical contenents and New Guinea) appear to represent relict remains of a once much larger group. All lack the median mesonotal carina once thought to characterize all representatives of this family, and all have the anapleural suture on the mesopleuron. Four of these genera (*Coptonotus*, *Protohylastes*, *Scolytotarsus*, *Schedlarius*) have tarsal segment 3 broad and bilobed. None of the six has the antennal funicle 4-segmented as it is in all but two genera of the remainder of the family. However, none of these six genera has the maxilla divided into separate lacinia and galea. The three genera for which habits are known all lack the xylocycetophagous habit. Of these six genera, *Coptonotus* and *Protohylastes* are closely allied to one another and approach the Scolytidae more closely in structural detail than do the other four. *Schedlarius* appears to be the most closely allied to other Platypodidae of these six. *Protoplatypus* and *Mecopelmus* are allied to one another but appear to represent an independent evolutionary experiment with no close alliance to any other group.

The Tesserocerinae are characterized by the division of the maxilla into separate lacinia and galea elements (Wood 1986:8, fig. 6) and by the accompanying cleft between the pregula and margin of the oral fossa (Fig. 4). This feature suggests a relationship to the most primitive Curculionoidea families. Within the subfamily, the Diapodini (*Diapus*, *Genyocerus*), *Tesserocerus*, and *Tesserocranulus* lack a median carina on the mesotergum. The Diapodini also have the procoxae widely separated, a primitive feature, but the mycetangia pores on the pronotum and the highly specialized abdominal sternum 5 represent extreme specialization. *Platytarsulus* (2-segmented) and *Notoplatypus* (3-segmented) have a reduced number of segments in the antennal funicle. These six genera have the protibia more slender and with fewer transverse, carinate rugae on the posterior (or lateral) face. They probably represent the more primitive element of the family after family characters were firmly fixed.

The (a) Diapodini, *Platytarsulus*, and *Notoplatypus* are exclusively Indo-Australian in distribution (except for one species of *Diapus* recently introduced through modern commerce into Africa) and each is without a close living relative; (b) *Spathidicerus* (Indo-Australian) and *Periommatus* (African) are obviously derived from a common ancestor and are closely related to one another; (c) *Tesserocerus* and *Tesserocranulus* (both tropical American) are also allied to one another; (d) *Chaetastus* (African), *Mitosoma* (Madagascaran), and *Cenocephalus* (tropical American) are also allied to one another, but are quite distinct from other Tesserocerini. It appears that groups a, b, and c have evolved entirely since the early Tertiary separation of Africa and South America. Only group d exhibits a phyletic imprint of pre-Tertiary development. It is concluded, therefore, that the evolution of the Tesserocerinae has been rapid and that pre-Tertiary representatives of this subfamily must have been radically different from modern taxa.

In the Platypodinae (Platypodini) four lines of development are seen: (a) *Platypus* (largely African to Indo-Australian), *Treptoplatypus* (Indo-Australian, Oriental, NW North American), *Peroplatypus* (Indo-Australian), *Dinoplatypus* (Indo-Australian); (b) *Crossotarsus* (Indo-Australian), *Trachyostus* (African), *Neotrachyostus* (tropical American); (c) *Platyscapulus* (tropical American), *Myoplatypus* (American), *Oxoplatypus* (American), *Platyphysus* (tropical American), *Megaplatypus* (tropical American), *Euplatypus* (mostly American, some African, Madagascaran), *Baiocis* (Indo-Malayan), *Epiplatypus* (tropical American), *Teloplatypus* (tropical American); (d) *Cylindropalpus* (mostly African, 1 Madagascaran), *Triozastus* (African), *Mesoplatypus* (African), *Doliopygus* (African). Group a occurs primarily in the Indo-Australian area, with slight, recent invasion of Africa, and one species of uncertain affinity in tropical America. Group b appears to have occupied the Indo-Australian, African, and South American areas before the separation of Africa and South America and suggests a pre-Tertiary origin. Group c is primarily American except for *Baiocis* that is of uncertain affinity, and *Euplatypus* that appears to have had early interaction with Madagascar and a later exchange from Madagascar to Africa [The modern circumtropical extension through commerce of *parallelus* from America is ignored]. Group d is exclusively African except for one species that reached Madagascar from Africa rather recently. Based on these data, it appears that evolution of the Platypodinae has been rapid since the early Tertiary separation of Africa and South America and that pre-Tertiary taxa must have been structurally very different from modern species. Pre-Tertiary Platypodinae must have resembled the Coptonotinae much more than has previously been supposed and suggests an origin no earlier than that of flowering plants (Lower Cretaceous).

SYSTEMATIC SECTION

Because this represents the first real examination of generic classification in Platypodidae since the family was established, some radical departures from previous treatments are recommended. Foremost among these is the abandonment of the archaic practice of employing undefinable species-groups or infrageneric groups below the genus level and above the species rank. Schedl (1972) employed 62 of these groups in his treatment of the genus *Platypus*. This change made it necessary to retrieve a number of generic names that had previously been placed in synonymy and to name several others. Although this will cause some initial confusion, it should ultimately enhance communication on this family.

The treatment of genera following the key is brief except in the tribe Platypodini (subfamily Platypodinae) because of the significant changes introduced there. The treatment of the six genera of Coptonotinae is virtually unchanged from previous usage. The significant changes in Tesserocerinae include (1) the transfer of *Platytarsulus* and *Notoplatypus* into this subfamily from Platypodinae, and (2) the restoration of *Chaetastus, Cenocephalus,* and *Mitosoma* to full generic rank.

This study was based on my personal collection of over 400 species of Platypodidae and my examination of more than 400 other species. Because approximately half of the known species in the family were not seen by me, it is obvious that adjustments in the proposals made here will be needed in the future.

The monobasic genera *Crossotarsinulus* Schedl (1972:84–87) and *Spathicranuloides* Schedl (1972:71) are unknown to me and, consequently, were not included in this study.

Key to the Genera of Platypodidae

1. Posterior margin of prothorax (as seen from lateral aspect) straight to weakly procurved in pleural area (Fig. 1); mesepisternum moderately large, almost flat; mesotergum flat to broadly, transversely arched, without a conspicuous, acute, median carina, scutellum rising abruptly to elytral surface; pronotum never with mycetangia grooves or pores; pregula small, bearing a transverse carina; eyes sometimes large, elongate, flat; antennal scape slender, club-shaped; procoxae smaller, usually on middle third of prosternum length; tarsal segment 1 short (except elongate in *Mecopelmus, Schedlarius*); anapleural suture on mesothorax present (Fig. 1); xylophagous or phloeophagous; (Coptonotinae) 2

— Posterior margin of prothorax strongly procurved in pleural area (Fig. 2); mesepisternum large, usually inflated (concave in some Tesserocerinae); pronotum often with conspicuous grooves or pores extending into mycetangia; mesotergum usually bearing a conspicuous median carina (absent in four genera), scutellum, if present, rising gradually, usually carinate and apically pointed; procoxae enlarged, occupying posterior half of segment; pregula moderately to very large, usually flat, never with a transverse carina; antennal scape variously modified; eyes usually rounded, hemispherical; tarsal segment 1 always elongate, usually longer than segments 2–5 combined; anapleural suture on mesothorax largely or entirely absent (Fig. 2); xylomycetophagous......7

2(1). Antennal funicle 7-segmented, club slender, small; profemur more slender, at least 2.6 times as long as wide, protibia more slender and almost as long as femur; pregula with a higher median carina arising from low transverse carina and terminating cephalad in a small, blunt spine; species larger than 3.5 mm, stouter, darker in color; (Coptonotini)...3

— Antennal funicle 3–5-segmented, club larger, broader, more strongly flattened; profemur stouter, less than 2.0 times as long as wide (except slender in *Schedlarius*); protibia stouter, conspicuously shorter than femur; pregula without a median carina or spine; either pale species smaller than 2.0 mm or very slender..5

3(2). Eye very large, flat, subreniform; antennal club inconspicuously marked by two strongly procurved, subangulate sutures, these weakly indicated by grooves and setae; color almost black; tropical America; 3.2 or 9.0 mm ....***Coptonotus* Chapuis**

— Eye short, subcircular to oval in outline, less than 1.5 times as long as wide; antennal club unmarked by sutures; Africa or Australia... 4

4(3). Eye oval, about 1.5 times as long as wide; protibia very slender, its apex armed by a small median spine, a minor spine on each side near apex; body and pronotum hylesinine in form; Australia; 9.8 mm......................
....***Protohylastes* Wood**

— Eye, subcircular, hemispherical; protibia distorted by a large spine near its middle; body and pronotum platypodine; Africa and Australia; 4.5–4.9 mm.........***Scolytotarsus* Schedl**

5(2). Protibia small, with a terminal mucro and with or without one spine on lateral margin; tarsal segment 3 narrow, cylindrical; elytra simple, declivity convex, unarmed; pale species, body less than 2.0 mm; (Mecopelmini) 6

— Protibia larger, subapically armed on lateral face immediately above tarsal insertion by one transverse, coarse, costate ruga; tarsal segment 3 very broad, deeply bilobed; antennal funicle 5-segmented; elytral declivity obliquely subtruncate, its margin costate on lower half, armed above by a row of several small spines, its face on interstriae ornamented by numerous small, white scales; Mexico to Panama; xylophagous in *Bursera* spp.; 4.0–7.0 mm; (Schedlarini)........
....***Schedlarius* Wood**

6(5). Antennal funicle 5-segmented, posterior face of club glabrous; eye smaller, finely faceted; abdomen horizontal, costal margin of elytra horizontal or descending to apex; tarsal segment 1 short, subequal in length to 2 or 3; adults polygynous, parental tunnels radiate, in cambium, first-instar larvae form individual tunnels in cambium; New Guinea; 1.2–1.5 mm.........................***Protoplatypus* Wood**

— Antennal funicle 3-segmented, club pubescent on both faces; eye larger, coarsely faceted; abdomen distinctly ascending behind, costal margin of elytra ascending on apical one-fifth; tarsal segment 1 as long as 2–5 combined; adults monogynous, parental chamber a simple cave, third-instar larvae form independent tunnels radiating from central chamber in *Serjania* spp.; Panama; 1.4–1.6 mm .... ***Mecopelmus* Blackman**

7(1). Maxilla with mesal element clearly divided into separate lacinia and galea; pregula separated on each side from margin of oral fossa by a deep cleft (into which maxilla moves) equal to at least one-half pregula length, visible pregula caudad from cleft comparatively small; (Tesserocerinae) 8

— Maxilla with lacinia and galea combined into one mesal element; pregula large to very large, cleft between pregula and oral fossa nonexistent to shallow, equal to less than one-fourth pregula length; (Platypodidae, Platypodini) 18

8(7). Procoxae widely separated, each coxa very large, longer than tibia; mesonotum flat or evenly, transversely arched, without a conspicuous median carina; scutellum rather large, broad; male abdominal sternum 5 subvertical, usually concavely excavated; (Diapodini) 9

— Procoxae contiguous, each coxa shorter than tibia; mesonotum with a conspicuous, acute, median carina (except flat, without a carina, in *Tesserocerus, Tesserocranulus*), scutellum small, slender, pointed; (Tesserocerrini) 10

9(8). Anterior face of antennal club with a small area or line smooth, shining, often weakly elevated; base of female pronotum (occasionally also male) with a band of many mycetangia pores or grooves; scutellum smaller, narrower, often depressed; frons more sparsely pubescent in both sexes; newly emerged female usually with dehiscent mandibular appendages; Africa to Taiwan and Australia; 1.8-5.0 mm ....***Diapus* Chapuis**

— Antennal club uniformly pubescent to base; base of pronotum ornamented in median area by few coarse mycetangia pores, never with grooves; scutellum larger, broader, higher; female frons usually ornamented by tufts of very long setae; female dehiscent mandibular appendages usually absent; India to Philippines and New Guinea; 1.7–4.0 mm ....***Genyocerus* Motschulsky**

10(8). Antennal funicle 2–3-segmented, club with large procurved, glabrous, basal area extending at least one-half length of club, margins and apical area minutely, closely pubescent; protibiae armed by lateral spine at tarsal insertion and one additional subapical spine or ruga; elytral declivity gradual, weakly armed; pronotum and elytra reticulate 11

— Antennal funicle 4-segmented, club either pubescent to base or glabrous area much smaller (basal one-fourth); protibia usually more elaborately armed 12

11(10). Antennal funicle 2-segmented; eye elongate, reniform, at least 2.0 times as long as wide; protibia with one transverse ruga above lateral spine; Borneo to Malaya; 4.5 mm ....***Platytarsulus* Schedl**

— Antennal funicle 3-segmented; eye subcircular, as wide as long, entire; protibia with a small tubercle on margin above lateral spine; Australia; *Eucalyptus* spp.; 5.5–6.3 mm ....***Notoplatypus* Lea**

12(10). Eye elongate, 1.5 or more times longer than wide, almost flat; mesepisternum flattened to concavely excavated, its upper (and sometimes anterior) margin armed by a fine, conspicuous carina (carina absent in some *Spathidicerus*); anterior margin of mesocoxal cavity acutely carinate, carina curving cephalad and ending in margin of mesepisternum; pronotum more slender, 1.4–4.0 times as long as wide; precoxal piece on prosternum acutely pointed 13

— Eye subcircular, little if any longer than wide, hemispherical; mesepisternum convex, never armed by a carina; anterior margin of mesocoxal cavity never continued cephalad as a carina; pronotum stouter, 1.0–1.3 times as long as wide; precoxal piece on prosternum obtusely pointed; pronotum and elytra rarely reticulate 16

13(12). Mesonotum almost flat, never marked by a median carina; eye shorter, oval to subtriangular in outline, 1.2–2.0 times as long as wide, anterior margin entire; Neotropical species 14

— Mesonotum conspicuously armed by a strongly elevated, acute, median carina; eye very large, reniform, its anterior margin broadly emarginate, often two or more times longer than wide; African and Indo-Australian species 15

14(13). Small, exceedingly slender species, body at least 8.0 times as long as wide; lateral margin of pronotum acute, lateral margin of posterior one-third of prosternum acute, a deep, longitudinal, pleural groove between notal and sternal margins; female scape remarkably flattened and broadly extended mesad, dorsad, and caudad, pedicel inserted one-third scape length from base; Costa Rica to Cayenne; 4.0–4.2 mm ....***Tesserocranulus* Schedl**

— Larger, stouter species, 3.0–4.5 times as long as wide; pronotum narrowly to subacutely rounded on lateral margins, prosternum never with lateral margin costate, without a narrow, pleural groove between these margins; female scape slender, with pedicel attached near its apex, a slender, elongate extension in a few species; Mexico to Argentina; 3.0–11.0 mm .... ***Tesserocerus*** **Saunders**

15(13). Mesepisternum flat and unarmed by a carina (larger species) or concavely excavated and its margin armed by a carina (smaller species); pronotal constriction (in which protibia moves) shallow, its posterior portion gradual, not extended ventrad, pleural impression mostly below pronotal margin; protibia armed by only two coarse, transverse rugae; Indonesia to New Guinea and Philippines; 4.0–12.0 mm .... ***Spathidicerus*** **Chapuis**

— Mesepisternum always concavely excavated, its margin armed by a carina; pronotal constriction much deeper, its posterior portion abrupt, with notum extending more ventrad; protibia armed by three coarse, transverse rugae; Africa; 2.2–5.0 mm .... ***Periommatus*** **Chapuis**

16(12). Posterior one-third of pronotum with a transverse band of numerous, small, closely placed mycetangia pores; anterior face of metatibia armed by only one transverse ruga; striae more distinctly impressed, punctures clearly visible; female frons impressed from eye to eye, central two-thirds of impressed area abruptly, deeply excavated on a circular area; elytral declivity convex, rather steep, spines short, rather inconspicuous; larger, stouter species; Africa; 3.9–7.0 mm .... ***Chaetastus*** **Nunberg**

— Pronotal punctures uniform throughout, mycetangia pores not discernible; anterior face of metatibia armed by three or more transverse rugae; striae weakly if at all impressed, punctures evident or not; female frons variously impressed from eye to eye, without an abrupt, deep, central excavation; smaller, more slender species 17

17(16). Male elytral declivity usually convex, very steep, usually not excavated, spines smaller, if evident; base of male declivity usually not armed by spines; Central and South America; 2.5–4.2 mm .... ***Cenocephalus*** **Chapuis**

— Male elytral declivity usually obliquely truncate and variously excavated, spines much larger; base of male declivity usually armed by spines; Madagascar; 3.7–4.0 mm .... ***Mitosoma*** **Chapuis**

18(7). Metasternum and metepisternum near metacoxa usually weakly or not impressed for reception of femur, anterior margin of impressed area never continuously carinate or armed by a row of small spines (one coarse nodule present on metepisternum in male of some large *Crossotarsus*), surface of impressed area with at least some setae; protibia of male armed by about four or more coarse, transverse rugae, female either similar to male or sometimes mostly covered by small, confused granules and usually one or two weak rugae near tarsal insertion; if present on female pronotum, mycetangia pores numerous 19

— Metasternum and metepisternum near metacoxa impressed for reception of femur, anterior margin of impressed area either continuously carinate or armed by a series of small spines (absent in occasional females and in American allies of *Euplatypus longulus*), surface of impressed area glabrous; protibiae of males and females similarly armed by rugae; spines on one or more abdominal sterna (couplet 27) a common feature; mycetangia pores variable............ 25

19(18). Male and female protibiae similarly armed by rows of transverse rugae 20

— Male protibia armed by transverse rugae, female protibia largely granulate, with no more than one or two weak rugae near apex 23

20(19). Suture at apex of male elytral declivity entire, declivity variously convex, with or without armature of tubercles and spines; if present, female mycetangia pores on pronotum numerous; worldwide in most tropical and subtropical areas, only 1 species in America; 2.5–10.5 mm .... ***Platypus*** **Herbst**

— Male declivity abruptly truncate, its margin obtuse to very acutely costate on almost a complete circle, apex sometimes strongly, attenuately narrowed, declivital face usually concave; mycetangia pores variable............ 21

21(20). Elytral apex of male moderately to exceedingly attenuate, strongly narrowed to true base of declivity, dehiscence of suture sometimes small, obscure, basal margin of declivity usually more gradual, sometimes rounded; India and Australia to Japan and NW North America; 2.4–6.0 mm .... ***Treptoplatypus*** **Schedl**

— Male elytral declivity much more broadly truncate, declivital base almost as wide as base of elytra, basal margin abrupt, obtusely to very acutely margined 22

22(21). Male sutural apex of declivity usually entire, slightly dehiscent in one species; male elytra not distinctly constricted before declivity, costa at base of declivity obtuse to subacute, interstrial rows sometimes indicated on upper portion, at least a few setae present, declivital face largely dull in most species, shining in one; Malaya to New Guinea; 2.8–4.5 mm .... ***Peroplatypus*** **Wood**

— Male sutural apex modestly to very strongly, very broadly emarginate; margin at base of male declivity moderately to strongly acute, face of declivity smooth, shining, glabrous, striae and interstriae never indicated; male declivity with a distinct constriction slightly anterior to declivital base; India and Japan to Australia and Micronesia; 2.8–5.5 mm ...... ***Dinoplatypus*** **Wood**

23(19). Male declivity very short to absent, usually subvertical, a row of spines usually arms base of declivity, venter of abdomen rising abruptly to meet elytra; male metepisternum of larger species often armed near posterior end by one rounded nodule; India and Australia to Taiwan and Hawaiian Islands; 3.6–10.5 mm .... ***Crossotarsus*** **Chapuis**

— Male elytra strongly, more gradually declivous, venter of abdomen more nearly horizontal on segments 2–5; metepisternum never armed by a nodule 24

24(23). Ventrolateral margin of male elytral declivity evenly rounded, never serrate or dentate, its basal margin weakly armed, never dentate; male declivity usually convex, surface dull; female pronotum never with mycetangia pores; Africa; 4.8–9.5 mm .... ***Trachyostus*** **Schedl**

— Ventrolateral margin of male declivity variously serrate, dentate, or emarginate, its basal margin variously carinate or armed by spines; male declivital surface subconcavely excavated; female pronotum with a pair of mycetangia pores near median line on basal half; S Mexico to Brazil; 5.0–7.5 mm .... ***Neotrachyostus*** **Browne**

25(18). Anterior margin of impression on metasternum and metepisternum for reception of femur armed by a series of small, pointed spines (sometimes obscure or absent in female *Euplatypus*); American or Madagascar species, four from Africa 26

— Anterior margin of impression on metasternum and metepisternum armed by a complete or interrupted costa, rarely reduced to one (somewhat pointed) subcostate spine; African species 34

26(25). Male visible abdominal sternum 3, 4, or 5 armed by a pair of widely (transversely) separated coarse spines 27

— Male abdominal sterna 3–5 never armed by spines 29

27(26). Visible male abdominal sternum 5 armed by a pair of widely separated spines; male elytral declivity shorter, steeper, its ventrolateral angles poorly developed and projecting little if any; male interstriae on posterior half of disc usually carinate; pronotum never with mycetangia pores in either sex; small species, 1.9–3.5 mm; Mexico to Argentina .... ***Platyscapulus*** **Schedl**

— Visible male abdominal sternum 3 or 4 armed by a pair of widely separated spines; male elytral declivity more gradual, ventrolateral angles more strongly produced; discal interstriae in male never carinate; pronotum on basal half often with a pair of mycetangia pores in female or in both sexes 28

28(27). Visible male sternum 3 armed by a pair of spines; male declivity often steeper, shorter; mycetangia pores on pronotum often present in female or in both sexes; SE USA to Venezuela; 2.0–5.5 mm .... ***Myoplatypus*** **Wood**

— Visible male sternum 4 armed by a pair of spines; male pronotum without mycetangia pores, female with 1 pair of unusually large pores; *Quercus* spp.; S USA to Chihuahua and Nyarit in Mexico; 3.5–4.5 mm .... ***Oxoplatypus*** **Wood**

29(26). Male elytra rather strongly declivous on posterior one-third, declivity variously convex or obliquely impressed, with or without armature; venter of male abdomen rising only slightly to meet apex of elytra 30

— Male elytra descending little if any before apex, declivity short, subvertical, if evident; venter of male abdomen rising more than one-half distance to meet apex 32

30(29). Venter of male abdomen horizontal to sternum 5, sternum 5 moderately to strongly inflated, its apical one-fourth ascending rather abruptly to meet apex of elytra; male elytral declivity strongly convex, steep, unarmed or with small denticles on interstriae 3, 7, 9, none on apical margin; mycetangia pores on pronotum never present in either sex; Costa Rica to Brazil; 2.3–4.0 mm .... ***Platyphysus*** **Wood**

— Venter of male abdomen rising almost one-half distance to meet apex of elytra, declivity descending moderately, often variously impressed and armed by spines 31

31(29). Male declivity with ventrolateral angles usually formed and modestly produced, their apices never exceeding apical margin at suture, margin between ventrolateral angles frequently armed by one or more pairs of denticles or serrations; mycetangia pores on pronotum uncommon in female, rare in male, when present, consisting of one pair or paired small clusters; Mexico to Argentina; 2.3–10.0 mm......***Megaplatypus*** **Wood**

— Male declivity with ventrolateral angles more strongly produced, usually exceeding apical margin at suture, projecting process usually more slender and often with its apex bi- or tridently armed, never with serrations or denticles on apical margin between processes; pronotum often with one pair of mycetangia pores in female, less common in male; mostly Mexico to Argentina, a few in Africa and Madagascar, *parallelus* circumtropical; 2.3–7.0 mm................***Euplatypus*** **Wood**

32(29). Male declivity not descending, unarmed; male abdominal sternum 5 concave; small, reticulate, very slender species, 5.0 or more times as long as wide, upper surfaces usually reticulate; numerous mycetangia pores on pronotum, if present; sexual dimorphism obscure; Australia to Malaya; 1.7–2.4 mm..... ....***Baiocis*** **Browne**

— Less slender species; sexual dimorphism conspicuous, male declivity always with small spines; when present, mycetangia pores limited to one pair; American species...33

33(32). Male declivity with two pairs of serrations on ventrolateral margin, these serrations usually connected by a carina, median pair (often both) on apical margin; one pair of mycetangia pores on pronotum often present; Costa Rica to Brazil; 2.8–4.5 mm........... ....***Epiplatypus*** **Wood**

— Male declivity with only one pair of serrations on ventrolateral margin, a carina extending dorsad from this spine to a spine on interstriae 3 at base of declivity, basal margin at apex of disc usually armed by small spines on interstriae 1, 3, 5; mycetangia pores on pronotum never present; S Mexico to Argentina; 2.2–4.2 mm................. ....***Teloplatypus*** **Wood**

34(25). Male abdomen with sternum 2 normal, sterna gradually ascending from 1–5, unarmed; declivity descending slightly to moderately; female frons often variously concave 35

— Male abdomen with sternum 2 abnormally long, armed or abruptly angled on 2, ascending from 3–5; female frons often densely pubescent..............................36

35(34). Male abdomen with sterna 1–5 transversely convex, with normal setation; elytral declivity convex, descending about one-half distance to meet ascending abdomen; declivital tubercles small, inconspicuous; female frons broadly and shallowly to strongly concave; Africa, Madagascar; 2.5–5.5 mm.................. ....***Cylindropalpus*** **Strohmeyer**

— Male abdomen broadly concave, both transversely and longitudinally, from base of sternum 1 to apex of 5, impressed area often elaborately pubescent; declivity descending very slightly, its margin armed by spines, interstriae 1 near its apex diverging laterad moderately and descending slightly before its apex; female frons with a pair of small to moderately large concavities in lateral areas between base of mandibles and antennal insertions; Africa; 3.0–4.0 mm....................... ....***Triozastus*** **Schedl**

36(34). Male abdominal sternum 2 often armed by a pair of coarse, blunt spines, 3–5 ascending and sometimes armed on one or more of these segments by small spines; male declivity descending moderately, armature rather inconspicuous; female frons concavely impressed; Africa; 3.5–4.5 mm.................. ....***Mesoplatypus*** **Strohmeyer**

— Male abdominal sternum 2 transversely carinate, carina moderately to extremely, strongly elevated and either continuous or interrupted near median line; declivity usually armed on its basal margin by dorsoventrally flattened costae, these costae interrupted at strial intervals, declivity below these spines weak to nonexistent; female frons variously sculptured, often elaborately ornamented by setae; Africa; 2.5–7.0 mm ....***Doliopygus*** **Schedl**

COPTONOTINAE

The classification of Coptonotinae remains as presented in Wood *in* Wood & Bright (c1992), containing the following: Coptonotini (*Coptonotus* Chapuis, 2 Neotropical species; *Protohylastes* Wood, 2 Australian species; *Scolytotarsus* Schedl, 1 African and 1 Australian species); Mecopelmini (*Mecopelmus* Blackman, 1 species from Panama; *Protoplatypus* Wood, 1 species from New Guinea); and Schedlarini (*Schedlarius* Wood, 1 species from Mexico). *Mecopelmus zeteki* Blackman is known only from specimens collected within 2 km of the Panama Canal. It is quite probable that this species was introduced from another part of the world, possibly New Guinea where the only known relative occurs.

TESSEROCERINAE

The Tesserocerinae are divided into two tribes as presented in Wood *in* Wood & Bright (c1992): Diapodini (*Diapus* Chapuis, 39 species from India to Australia; *Genyocerus* Motschulsky [=*Diacavus* Schedl], 24 species from India and Sri Lanka to Philippines and New Guinea); and Tesserocerini.

A divided maxilla into separate lacinia and galea lobes occurs in the primitive Curculionoidea (Anthribidae, Nemonychidae) having two gular sutures (Crowson 1955, 1968, Wood 1986). Among the higher Curculionoidea, those with only one gular suture, divided lacinia and galea lobes occur only in parts of Attelabidae, Rhynchitidae, and Platypodidae (Tesserocerinae; Wood 1986:8, fig. 8). In all three of these families the taxon containing all species with separate lacinia and galea is given subfamily status. Strohmeyer (1912, 1914b) appreciated this fact and recognized the subfamily Tesserocerinae. Schedl (1972) was not a student of evolution and did not acknowledge the existence of this character in Platypodidae.

To the Tesserocerini of Strohmeyer (1912, 1914b) two genera are added here, *Platytarsulus* Schedl and *Notoplatypus* Lea, on the basis of the deep cleft between the pregula and the margin of the oral fossa (specimens for dissection of the maxilla were not available). The Tesserocerini now contain (Wood *in* Wood & Bright c1992) the following: *Platytarsulus* Schedl (8 species from Malaya and Borneo); *Notoplatypus* Lea (1 species from Australia); *Tesserocranulus* Schedl (1 species from Costa Rica to Cayenne); *Tesserocerus* Saunders (=*Damicerus* Spinola, *Tesseroplatypus* Schedl, *Tesserocephalus* Schedl) (30 species from southern Mexico to Argentina); *Spathidicerus* Chapuis (7 species from Sumatra to Philippines and New Guinea); *Periommatus* Chapuis (=*Asetus* Nunberg, *Setanus* Nunberg) (52 species from tropical Africa); *Chaetastus* Nunberg (=*Symmerus* Chapuis) (7 species from tropical Africa); *Cenocephalus* Chapuis (13 species from southern Mexico and Hispanola to Brazil); and *Mitosoma* Chapuis (=*Platypicerus* Nunberg, *Coecephalonus* Schedl) (26 species from Madagascar).

Schedl (1972) did not recognize the Tesserocerinae as a subfamily, but fragmented the group into his Diaporinae [*sic*], Periommatinae, and Platypodinae.

PLATYPODINAE

Introduced here are radical changes in the classification of Platypodinae that were found too late for inclusion in Wood & Bright (c1992). Foremost among these is the abandonment of the genus "sektionen" of Chapuis (1865), Strohmeyer (1912, 1914b), and Schedl (1972). This non-Linnaean category was apparently below the rank of subgenus but above the rank of species and was used liberally by Schedl with little objectivity. These "sektionen" are here replaced by a new classification of genera.

The Platypodinae, as presented here, appear to represent a recent, active, evolutionary explosion in which sharply delineated generic groups do not exist. For this reason all are placed in one tribe, Platypodini. Schedl's (1972:83) attempt to characterize his Crossotarsini as distinct from his Platypodinae was based on a character (sexual dimorphism of the protibiae) that did not occur throughout the group he attempted to characterize, nor was it limited to his Crossotarsini. Another set of characters was needed to divide his Platypodinae.

On the posterior portions of the metasternum and metepisternum of some Platypodini is a feeble to very strong, often glabrous impression for the reception of the metafemur. The anterior and lateral margins of this impression may be armed by (1) a continuous carina (African species) or (2) a series of minute spines (American species, with a few eastern hemisphere exceptions). Those Platypodini that lack this impression and its carina or spines also share other features generally not found in the other group. It should be mentioned that occasional females (American species) and about a dozen species allied to *Euplatypus longulus* (Chapuis) (all are American species) lack the impression and spines even though they (otherwise) clearly belong to the generic group with the impression and spines. Conversely, several of the largest species of *Crossotarsus* have one small, rounded nodule on the male metepisternum although they clearly belong to the generic group without the impression or spines. Among those groups treated here as genera that lack the impression and its armature, all (mostly females) that have mycetangia pores on the pronotum have numerous pores. Among those genera with the impression and spinelike armature, most of those species (primarily females) with mycetangia pores on the pronotum have only one pair, although a few large *Megaplatypus* have several, and the few

Baiocis with pores have many. All of those species with mycetangia pores on the pronotum and also with a carina on the metasternum-metepisternum impression (African species) have many pores.

Platypus Herbst

The genus *Platypus* Herbst (=*Cylindra* Illiger, *Stenoplatypus* Strohmeyer, *Platypinus* Schedl) as defined here is greatly reduced in the number of included species from that listed by Schedl (1972:169–242) and Wood & Bright (c1992). To these synonyms is added *Austroplatypus* Browne (1971:49), *new synonymy*. It also appears that *Dendroplatypus* Browne (1955:365) belongs here (only females were available for study). *Neotrachyostus quadrilobus* (Blandford) is here transferred from *Neotrachyostus* back to *Platypus*. *Platypus taxicornis* Schedl belongs here, not in *Treptoplatypus* where it was placed by Schedl (1972:245).

DESCRIPTION.—*Platypus* Herbst is a member of the Platypodini, as defined in the above key to genera, in which the posterior portions of the metasternum and metepisternum are not impressed or armed (key couplet 18a) and the protibiae are not sexually dimorphic (key couplet 19a). The male sutural apex on the elytral declivity is not dehiscent. Mycetangia pores when present on the pronotum (mostly females) are numerous.

CONTENTS.—Included here in this group are the following "sektionen" of *Platypus* as listed by Schedl (1972:169–242): *Platypi apicali* (1 sp., Fiji), *Platypi geminati* (3 spp., New Guinea), *Platypi hirtelli* (22 spp., India to Australia and Philippines), *Platypi lunati* (15 spp., India to Australia), *Platypi mesoadjuncti* (3 spp., Malaya to New Guinea), *Platypi paraspinulosi* (5 spp., Africa), *Platypi pseudospinulosi* (12 spp., Malaya and China to New Guinea), *Platypi punctati* (2 spp., India to New Guinea), *Platypi semiopaci* (9 spp., Australia to New Guinea), *Platypi spinulosi* (13 spp., Africa), *Platypi sulcati* (60 spp., Europe, India, and Japan to Australia). This reduces the 808 species of *Platypus* listed in Wood & Bright (c1992) to 121 species.

DISTRIBUTION.—Europe and Africa to Japan and Australia, 1 species (*quadrilobus* Blandford) of dubious affinity in Costa Rica.

Treptoplatypus Schedl

The genus *Treptoplatypus* Schedl was based on *Crossotarsus trepanatus* Chapuis. Schedl (1972:245) also included *circulicauda* Browne, *fischeri* Strohmeyer, *multiporus* Schedl, *quadriporus* Schedl, and *subaplanatus* Schedl, all (five) of which are unknown to me. As indicated above, *Treptoplatypus taxicornus* (Schedl) is here transferred back to *Platypus*.

DESCRIPTION.—A member of the Platypodini near *Platypus*, *Treptoplatypus* is distinguished by the strongly narrowed male elytral declivity that is rather abruptly, obliquely truncate and dehiscent at the sutural apex. The male elytral apex is usually strongly attenuate, and the male declivity is usually concave. Mycetangia pores on the female pronotum are numerous.

CONTENTS.—In addition to *trepanatus*, I here transfer from *Platypus* to *Treptoplatypus* the species *abietis* (Wood), *australis* (Chapuis), *biflexuosus* (Schedl), *micurus* (Schedl), *solidus* (Walker), and *wilsoni* (Swaine). It is probable that some (not all) species placed by Schedl (1972:197–199) in *Platypi oxyuri* should also be transferred here, as well as *longipennis* Montrouzier (Schedl 1972:196). Additional studies are needed to determine exactly which species should and should not be added to this genus.

DISTRIBUTION.—India and Japan to Australia and NW North America.

Peroplatypus, n. g.

DIAGNOSIS.—This genus is a member of the Platypodini near *Treptoplatypus*, but it is distinguished from that genus by the broad elytral declivity that is obliquely truncate, with the suture entire (slightly dehiscent in one species). It is distinguished from *Dinoplatypus* by the absence of an elytral constriction immediately cephalad from the declivity, and by the presence of setae on the face of the male declivity.

DESCRIPTION.—Metasternum and metepisternum without an impression or armature for reception of the metatibia. The male elytral declivity is broadly, obliquely truncate, not preceded by a transverse constriction; the suture is entire (one slight exception); the declivital face is ornamented by setae (either hairlike or scalelike); the costa at the base of the male declivity is obtuse to subacute, and the interstrial rows are sometimes indicated on the upper portion. The male declivital face is usually dull (shining in one species).

CONTENTS.—Type-species: *Platypus truncatipennis* Schedl. Included here are the *Platypi sulcato-truncati* (5 spp., Borneo, New Guinea) and *Platypi truncatipenni* (6 spp., Borneo, Sumatra, New Guinea) of Schedl (1972:211–212). Of these, only *platypoides* (Browne), *truncaticauda* (Schedl), *truncatigranosus* (Schedl), and *truncatipennis* (Schedl) were at hand for study.

DISTRIBUTION.—Malaya to New Guinea.

Dinoplatypus, n. g.

DIAGNOSIS.—The genus *Dinoplatypus* is distinguished from *Peroplatypus* Wood, above, by the subvertical, obliquely truncate male elytral declivity with the sutural apex modestly to very strongly, very broadly emarginate, and with the subvertical face moderately to strongly concave, brightly shining, and without punctures or setae; the upper margin of the male declivital face is usually acute, and there is a distinct constriction immediately cephalad from its base.

DESCRIPTION.—The male elytral declivity is subvertically truncate; its upper margin is acute; its face is broadly, subcircularly concave; its surface is brightly shining, impunctate, glabrous, with a substantial, often elaborate, emargination at the sutural apex. The male declivity has a distinct, transverse constriction immediately cephalad from its base. The female pronotum has numerous mycetangia pores.

CONTENTS.—Type-species: *Platypus cupulatus* Chapuis. Included here are the *Platypi cupulati* (29 spp.) of Schedl (1972:208–211).

DISTRIBUTION.—India and Japan to Australia and Micronesia.

Crossotarsus Chapuis

The genus *Crossotarsus* Chapuis, as treated here, is essentially as listed in Schedl (1972:96–112) and Wood & Bright (c1992), although it may become necessary to add to it all or part of *Carchesiopygus* Schedl (not seen) and *Crossotarsinulus* Schedl (not seen).

DESCRIPTION.—*Crossotarsus* is a member of the Platypodini, near *Platypus*, except that (key couplet 19) the protibiae are sexually dimorphic (male with the usual transverse rugae, female with most of the basal rugae replaced by confused granules). The male declivity is moderately reduced to almost absent (a row of dorsoventrally flattened spines arms its basal margin); the abdomen ascends rather strongly to meet the apex. The males of several of the larger species have a rounded nodule on the metepisternum. The female pronotum has numerous mycetangia pores.

CONTENTS.—Included here are the following groups as listed by Schedl (1972:96–112): *Crossotarsi alternante-depressi* (1 sp., Philippines), *Crossotarsi angulati* (4 spp., India, Japan, New Guinea), *Crossotarsi barbati* (11 spp., Malaya to Philippines and Australia), *Crossotarsi coleoptrati* (12 spp., India to Japan and New Guinea), *Crossotarsi subdepressi* (20 spp., India to Taiwan and Australia), *Crossotarsi genuini* (20 spp., India to Philippines and Australia), *Crossotarsi nitiduli* (4 spp., Malaya to New Guinea), *Crossotarsi ventricorni* (14 spp., India to Japan and New Guinea), *Crossotarsi incertae sedis* (3 spp., Java to Philippines, 1 sp. of doubtful affinity in Africa).

DISTRIBUTION.—India to Japan and Australia, *externedentatus* has extended its range through modern commerce to Hawaii and has been intercepted in additional areas.

Trachyostus Schedl

This genus is allied to *Crossotarsus*, but it is confined to Africa and Madagascar.

DESCRIPTION.—*Trachyostus* is allied to *Crossotarsus* as indicated by the similarly sexually dimorphic protibiae. The male elytral declivity is usually convex (rarely flattened), evenly rounded, never serrate or dentate, and the surface is usually dull. The venter of the abdomen ascends little, if any, to meet the elytral apex. Mycetangia pores are never present on the pronotum.

CONTENTS.—Included here are the 13 species from tropical Africa and Madagascar that were listed by Schedl (1972:88–89) and Wood & Bright (c1992).

DISTRIBUTION.—Tropical Africa and Madagascar.

Neotrachyostus Browne

The genus *Neotrachyostus* Browne, as used here, is essentially as listed in Schedl (1972:90–92) and Wood & Bright (c1992) except that *Platypus quadrilobus* Blandford is here transferred back to *Platypus*.

DESCRIPTION.—The sexually dimorphic protibiae of *Neotrachyostus* suggest a close relationship to *Trachyostus*. The male elytral declivital surface is never dull; it is variously impressed or excavated, with the ventrolateral margin serrate, dentate, or emarginate; its base is variously carinate or armed by spines. The female pronotum has one pair of mycetangia pores.

CONTENTS.—Schedl (1972:92) and Wood & Bright (c1992) list 14 species.

DISTRIBUTION.—Southern Mexico to Brazil.

Platyscapulus Schedl

The genus *Platyscapulus* Schedl (=*Platyscapus* Schedl 1939:397, 399, *Costaroplatus* Nunberg 1963:109) contains a group of American species formerly assigned to *Platypus*. *Platyscapulus* is here removed from synonymy with *Platypus* and is given full generic rank.

DESCRIPTION.—As defined here *Platyscapulus* contains those species formerly assigned to *Platypus* that have the metasternum-metepisternum impression armed on its anterior margin by a series of small spines and also have a pair of spines that arm visible male abdominal sternum 5 (Schedl 1972:195, fig. 49). The male elytral declivity is usually short, steep, and has the ventrolateral angles rather poorly developed, projecting little, if any. The male elytral interstriae are usually carinate on the posterior half of the disc. The pronotum never has mycetangia pores in either sex.

CONTENTS.—Included here are Schedl's (1972:235) *Platypi costellati* (13 spp., S Mexico to Brazil), *Platypi abdominales* (Schedl 1972: 195) (3 spp., Costa Rica to Guyana), and *Platypi neocostellati* (Schedl 1972:195) (2 spp., Venezuela and Guyana to Brazil).

DISTRIBUTION.—Southern Mexico to Brazil.

Myoplatypus, n. g.

DIAGNOSIS.—This genus is distinguished from the closely allied *Oxyplatypus* Wood, below, by the occurrence of a pair of large spines on male visible abdominal sternum 4, and by the absence of spines on other sterna.

DESCRIPTION.—This genus is a member of the Platypodini that have a metasternum-metepisternum impression armed by small spines and a transverse pair of spines on male visible abdominal sternum 4. The pronotum usually has one pair of mycetangia pores in the female; they are sometimes present in the male.

CONTENTS.—Type-species: *Bostrichus flavicornis* Fabricius. Included here are *flavicornis* (Fabricius) (S USA to Cuba) and Schedl's (1972:220) *Platypi bilobati* (5 spp., Mexico to Costa Rica).

DISTRIBUTION.—Southeastern USA and Cuba to Mexico and Venezuela.

Oxoplatypus, n. g.

DIAGNOSIS.—This genus is a member of the Platypodini near *Platyscapulus*. It is distinguished from *Platyscapulus* by the presence of a transverse pair of large spines that arm male visible abdominal sternum 3, and by the absence of spines on sternum 5.

DESCRIPTION.—This genus is established to contain one known species. It is a representative of the Platypodini with the metasternum-metepisternum impression armed by small spines on the anterior margin, and male visible abdominal sternum 3 is armed by a transverse pair of large spines. The female pronotum bears one unusually large pair of mycetangia pores; the male pronotum is without pores.

CONTENTS.—Type-species: *Scolytus quadridentatus* Olivier. One species is known, *quadridentatus* (Olivier) (=*blanchardi* Chapuis, *disciporus* Chapuis).

DISTRIBUTION.—Southeastern USA to northern Mexico, in *Quercus* spp.

Platyphysus, n. g.

DIAGNOSIS.—This genus is a member of the Platypodini having the metasternum-metepisternum impression armed on its anterior margin by small spines, but none of the visible male abdominal sterna is armed by spines. *Platyphysus* is distinguished from allied genera by the strongly convex, steep male elytral declivity that is almost unarmed, and by the horizontal venter of the abdomen with visible sternum 5 inflated, its posterior one-fourth ascending rather abruptly to meet the apex of the elytra.

DESCRIPTION.—In this genus visible male abdominal sternum 5 is strongly inflated (moderate in female), with its posterior one-fourth ascending to meet the apex of the elytra. The elytral declivity is convex, steep, and descends further than in related genera; male armature is sparse and rather small. The metasternum-metepisternum impression is armed by small spines as in related genera.

CONTENTS.—Type-species: *Platypus obtusus* Chapuis. Also included here are Schedl's (1972:187) *Platypi declivi* (4 spp., Brazil) and *Platypus pouteriae* Wood.

DISTRIBUTION.—Costa Rica to Venezuela, in *Pouteria* spp.

Megaplatypus, n. g.

DIAGNOSIS.—This large group of American species, formerly placed in *Platypus*, is diverse and is distinguished with some difficulty. From *Euplatypus* Wood, below, it is distinguished by the more poorly formed and much less strongly produced posterolateral angles of the male elytra (key couplet 31); one or two pairs of small denticles sometimes arm the apical margin between these angles. Mycetangia pores are uncommon (female) or rare (male) but may consist of one pair or a pair of clusters of pores (perhaps 4 to 12 on each side).

DESCRIPTION.—This is a genus of Platypodini having the metasternum-metepisternum impression armed by small spines; they lack spines on the visible male abdominal sterna. The male declivity descends at least half the distance to meet the abdomen, its lateral angles are rather poorly produced (usually they do not exceed the apex of the suture), and the apical margin between these angles sometimes is armed by one or two pairs of small denticles. The pronotum usually is without mycetangia pores, but one pair or multiple pores are sometimes present (particularly in the female).

CONTENTS.—Type-species: *Platypus dentatus* Dalman. Also included here are Schedl's (1972:238-242) *Platypi plicati* (82 spp., S Mexico to Argentina), Schedl's (1972:186–189) *Platypi discoidales* (4 spp., S Mexico to Brazil), Schedl's (1972:184) *Platypi punctatosulcati* (1 sp., Guatemala to Panama), Schedl's (1972:229) *Platypi pseudocaudati* (4 spp., Guyana to Brazil), *Platypus nudatus* Wood (Colombia), *P. pernudus* Schedl (Guyana), and *P. simpliciformis* Wood (Costa Rica).

DISTRIBUTION.—Mexico to Argentina.

Euplatypus, n. g.

DIAGNOSIS.—This genus is distinguished from *Megaplatypus* Wood, above, by the much more strongly produced ventrolateral angles of the male declivity that exceed the level of the sutural apex.

DESCRIPTION.—This genus is a member of the Platypodini having the metasternum-metepisternum impression armed on its anterior margin by small spines. None of the visible abdominal sterna are armed by spines. The male ventrolateral angles of the declivity are extended caudad into a pair of processes that exceed the sutural apex (apices of each of these processes are usually bi- or tridentate, and never with serrations or denticles on the apical margin between these processes). The pronotum often has one pair of mycetangia pores in the female or in both sexes.

CONTENTS.—Type-species: *Bostrichus parallelus* Fabricius. Also included here are Schedl's (1972:230–234) *Platypi trispinati* (39 spp., USA to Argentina, Madagascar, tropical Africa, Australia, Sri Lanka, etc.) and Schedl's (1972:205) *Platypi caudati* (19 spp., S Mexico to Argentina). Some of the *caudati* group from tropical America lack the small spines that arm the metasternum-metepisternum impression in one or both sexes.

DISTRIBUTION.—Southern USA to Argentina, a few in Africa, Madagascar. *Euplatypus parallelus* (Fabricius) has been carried through modern commerce worldwide in tropical areas (Wood & Bright c1992: 1664–1668). It has also been intercepted in Australia and India in recent months.

Baiocis Browne

The genus *Baiocis* Browne as treated here is essentially as it was established by Browne (1962:651) and listed by Wood & Bright (c1992), except that *Platypus kuntzeni* Schedl apparently belongs in *Crossotarsus*.

DESCRIPTION.—This genus is a member of the Platypodini having the metasternum-metepisternum impression armed on its anterior margin by small spines. The species are small, usually reticulate, very slender, with sexual dimorphism obscure. The male elytral declivity is unarmed and it descends feebly, if at all. The visible male abdominal sternum 5 is concave. Mycetangia pores, when present on the pronotum, are numerous.

DISTRIBUTION.—Australia to Malaya.

Epiplatypus, n. g.

DIAGNOSIS.—This genus is a member of the Platypodini having the metasternum-metepisternum impression armed by small spines on its anterior margin. It is distinguished in the male from *Megaplatypus* Wood, above, and *Teloplatypus* Wood, below, by the unique structure of the male elytral declivity.

DESCRIPTION.—This genus is allied to *Teloplatypus* but is distinguished by the presence of two pairs of serrations on the ventrolateral margin of the male elytral declivity; these serrations are usually connected by a carina; the median pair (often both pairs) is on the apical margin. One pair of mycetangia pores is often present on the female pronotum or on both sexes.

CONTENTS.—Type-species: *Platypus desceptor* Wood. Also included here are *Platypus annexus* Wood, *P. applanatus* Wood, *P. deplanatus* Wood, *P. eugestus* Wood, *P. eximius* Wood, *P. filaris* Wood, *P. jamacensis* Bright, *P. secus* Wood, *P. spectus* Wood, *P. vegestus* Wood, and apparently most of Schedl's (1972:213–214) *Platypi complanati.*

DISTRIBUTION.—Costa Rica to Brazil.

Teloplatypus, n. g.

DIAGNOSIS.—This genus is distinguished from *Epiplatypus* Wood, above, by the unique structure of the male elytral declivity as defined in the above key to genera.

DESCRIPTION.—This genus is a member of the Platypodini having the metasternum-metepisternum impression armed on its anterior margin by small spines. The male elytral declivity has only one pair of serrations on the ventrolateral margin, with a carina extending dorsad from this spine to a spine on interstriae 3 located at the base of the declivity; the declivity descends only slightly, and its basal margin is usually armed by small spines on interstriae 1, 3, and 5. Mycetangia pores are never present on the pronotum in either sex.

CONTENTS.—Type-species: *Platypus concinnus* Blandford. Included here is Schedl's (1972:218–219) *Platypi terminati* (16 spp.).

DISTRIBUTION.—Southern Mexico to Argentina.

Cylindopalpus Strohmeyer

The genus *Cylindropalpus* Strohmeyer, as treated here, is essentially as listed by Browne (1962:650, 655), Schedl (1972:131–134), and Wood & Bright (c1992).

DESCRIPTION.—This genus is a member of the Platypodini having the anterior margin of the metasternum-metepisternum impression continuously costate. The abdomen ascends gradually and moderately to meet the elytra. The male visible abdominal sterna are transversely convex, sternum 2 is not enlarged or modified. The male elytral declivity is convex; moderately steep, and with tubercles small and inconspicuous. The female frons is broad and shallowly to moderately concave.

CONTENTS.—Wood & Bright (c1992) list 14 species.

DISTRIBUTION.—Africa to Madagascar.

Triozastus Schedl

The genus *Triozastus* Schedl, as treated here, is essentially as listed by Schedl (1972:246–248) and Wood & Bright (c1992). There appears to be considerable confusion in this genus on how to interpret individual and populational variability into taxonomic categories.

DESCRIPTION.—This genus is distinguished from *Cylindropalpus* Strohmeyer by the male abdomen being broadly concave (both transversely and longitudinally) from the base of visible sternum 1 to the apex of 5, this concave area being often elaborately pubescent. The male elytral declivity descends only slightly, and its basal margin is armed by spines; interstriae 1 near its apex diverges laterad moderately then descends slightly before its apex. The female frons bears a pair of small to rather large concavities in the lateral areas between the bases of the mandibles and the antennal insertions.

CONTENTS.—Wood & Bright (c1992) list 7 species.

DISTRIBUTION.—Tropical Africa.

Mesoplatypus Strohmeyer

As treated here, the genus *Mesoplatypus* Strohmeyer is based on Wood & Bright (c1992) and on Schedl (1972:165–168).

DESCRIPTION.—This genus is a member of that portion of the Platypodini having a costate anterior margin of the metasternum-metepisternum impression and having visible male abdominal sterna 2, 3, or 4 armed by spines. In some members male sternum 2 bears at least a partial transverse carina that is reminiscent of *Doliopygus.* The female frons is concavely impressed (in all species?).

CONTENTS.—Wood & Bright (c1992) list 17 species.

DISTRIBUTION.—Tropical Africa.

Doliopygus Schedl

The genus *Doliopygus* Schedl (=*Scutopygus* Nunberg, *Pygodolius* Nunberg, *Mixopygus* Nunberg, *Mesopygus* Nunberg), as treated here, is essentially as listed by Schedl (1972:143–164) and by Wood & Bright (c1992).

DESCRIPTION.—This genus is allied to *Mesoplatypus* Strohmeyer but is sharply distinguished by characters of the male abdomen. Male visible abdominal sternum 2 has a strongly developed, transverse carina that is sometimes divided at the median line. The sternum caudad from this carina ascends abruptly in union with sterna 3, 4, and 5 to form a subvertical, strongly concave, subcircular face that functions in the removal of frass from the gallery entrance hole. The male declivity is reduced to obsolete; its basal margin is armed by a row of dorsoventrally flattened costae (derived from spines) that are interrupted at the strial intervals. The female frons is variously sculptured and may be elaborately ornamented by setae in some species. Mycetangia pores on the pronotum are absent.

CONTENTS.—Wood & Bright (c1992) list 142 species.

DISTRIBUTION.—Tropical Africa.

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PARTIAL CHECKLIST OF PLATYPODINAE

As an aid to the interpretation of the above changes, the following list of valid names in Platypodinae is presented. Only valid generic and specific names are included. Synonyms and other subfamilies and genera not included here are listed in Wood & Bright (1992).

Platypus
- *andrewesi* Strohmeyer
- *apicalis* (White)
- *arduus* Schedl
- *arisannensis* Murayama
- *arrogans* Schedl
- *bajulus* Schedl
- *balanocarpus* Schedl
- *barbatulus* Schedl
- *beilschmidiae* Schedl
- *biconiger* Schedl
- *biformis* Chapuis
- *bihamatus* Schedl
- *caryophyllatus* Schedl
- *conjunctus* Schedl
- *cornutus* Schedl
- *crassus* Strohmeyer
- *curtus* Chapuis
- *cylindrus* (Fabricius)
- *darjeelingensis* Schedl
- *diffidens* Schedl
- *dignus* Schedl
- *effetus* Schedl
- *emdeni* Schedl
- *enormis* Schedl
- *fracticostis* Schedl
- *fulmeki* Schedl
- *geminatus* Chapuis
- *gerstaeckeri* Chapuis
- *grayi* Schedl
- *hinchuachani* Schedl
- *hirtellus* Schedl
- *histrix* Schedl
- *horishensis* Murayama
- *hybridus* Schedl
- *impressus* Strohmeyer
- *inermis* Sampson
- *insularis* Strohmeyer
- *intermedius* (Schedl)
- *jansoni* Chapuis
- *juvencus* Schedl
- *kalshoveni* Schedl
- *kiushuensis* Murayama
- *klapperichi* (Schedl)
- *latedeclivis* Schedl
- *lineellus* Schedl
- *lucasi* Chapuis
- *lunatipennis* Schedl
- *lunifer* Schedl
- *luzonicus* Schedl
- *minutissimus* Schedl
- *mjobergi* Schedl
- *modestus* Blandford
- *morigerus* Schedl
- *multiporus* Schedl
- *neoplicatus* Schedl
- *niijimai* Murayama
- *obtusipennis* Schedl
- *omissus* Schedl
- *opacideclivis* Schedl
- *opacifrons* Schedl
- *orientalis* Strohmeyer
- *ornaticeps* Schedl
- *ovatus* Strohmeyer
- *pahangensis* Schedl
- *partitus* Schedl
- *pasaniae* Schedl
- *pedum* Sampson
- *pennatus* Schedl
- *perrisi* Chapuis
- *picinus* Schedl
- *politus* Chapuis
- *porcellus* Schedl
- *praeteritus* Schedl
- *pseudocurtus* Schedl
- *pseudoselysi* Schedl
- *puerulus* Schedl
- *quadricinctus* Schedl
- *queenslandi* Schedl
- *quercicola* Schedl
- *quercinus* Schedl
- *quercivorus* Murayama
- *rimulosus* Schedl
- *rufescens* Strohmeyer
- *sampsoni* (Schedl)
- *schenklingi* (Strohmeyer)
- *secretus* Sampson
- *selysi* Chapuis
- *semiermis* Schedl
- *semigranosus* (Sampson)
- *semiopacus* Strohmeyer
- *setaceus* Chapuis
- *sexporus* (Schedl)
- *sexualis* Beeson
- *shillongensis* Schedl
- *signatus* Chapuis
- *simulans* Schedl
- *sinensis* Schedl
- *singalangensis* Schedl
- *spectabilis* Schedl
- *spinulosus* Strohmeyer
- *striatopunctatus* Schedl
- *subdepressus* Schedl
- *subgranosus* Schedl
- *subplicatus* Schedl
- *subsecretus* Browne
- *subsidarius* Schedl
- *subsimilis* Schedl
- *suffodiens* Sampson
- *tasmanicus* Schedl
- *taxicornis* Schedl
- *tayabasi* Schedl
- *tenellus* Schedl
- *terebrans* Schedl

uniformis Schedl
utibilis (Schedl)
verelunatus (Beeson)
vesculus Schedl
vethi Strohmeyer
vetulus Schedl
webberi Schedl
westwoodi Chapuis

Treptoplatypus
abietis (Wood)
australis (Chapuis)
biflexuosus (Schedl)
circulicauda Browne
fischeri (Strohmeyer)
micrurus (Schedl)
multiporus Schedl
quadriporus Schedl
solidus (Walker)
subaplanatus (Schedl)
trepanatus (Chapuis)
wilsoni (Swaine)

Peroplatypus
abruptus (Sampson)
fallax (Schedl)
laosi (Schedl)
lawasensis (Browne)
obliquecaudatus (Schedl)
platypoides (Browne)
retusipennis (Schedl)
semisulcatus (Schedl)
truncaticauda (Schedl)
truncatigranosus (Schedl)
truncatipennis (Schedl)

Dinoplatypus
acutidentatus (Murayama)
aduncus (Chapuis)
agnatus (Schedl)
algosus (Schedl)
anthocephali (Schedl)
biuncus (Blandford)
calamus (Blandford)
cavus (Strohmeyer)
chevrolati (Chapuis)
cupulatulus (Schedl)
cupulatus (Chapuis)
decens (Sampson)
falcatus (Strohmeyer)
forficula (Chapuis)
hamatus (Blandford)
lepidus (Chapuis)
luniger (Motschulsky)
malaisei (Schedl)
maritimus (Schedl)
noonadanae (Browne)
omega (Schedl)
pallidus (Chapuis)
piniperda (Schedl)
pseudocupulatus (Schedl)
tenuis (Murayama)
tenuissimus (Schedl)
tetracerus (Beeson)
umbraticus (Schedl)
uncinatus (Blandford)

Crossotarsus
(See Wood & Bright c1992:1195–1209)

Carchesiopygus
(See Wood & Bright c1992:1209–1210

Crossotarsinulus
(See Wood & Bright c1992:1210)

Trachyostus
(See Wood & Bright c1992:1210–1213)

Neotrachyostus
(See Wood & Bright c1992:1213–1214)

Platyscapulus
abditulus (Wood)
abditus (Schedl)
carinulatus (Chapuis)
clunalis (Wood)
cluniculus (Wood)
clunis (Wood)
costellatus (Schedl)
frontalis (Blandford)
imitatrix (Schedl)
manus (Schedl)
occipitis (Wood)
pulchellus (Chapuis)
pulcher (Chapuis)
pusillimus (Chapuis)
shenefelti (Nunberg)
subabditus (Schedl)
turgifrons (Schedl)
umbrosus (Schedl)

Myoplatypus
biporus (Blandford)
brevicornis (Wood)
connexus (Wood)
flavicornis (Fabricius)
prenexus (Wood)
senexus (Wood)

Oxoplatypus
quadridentatus (Olivier)

Platyphysus
convexus (Schedl)
laticollis (Chapuis)
obtusus (Chapuis)
pouteriae (Wood)
vonfabri (Reichardt)

Megaplatypus
artecarinatus (Schedl)
attentus (Schedl)
auricularis (Chapuis)
auritus (Chapuis)
batesi (Chapuis)
bicornis (Nunberg)
bidens (Schedl)
binodulus (Chapuis)
brevicaudatus (Nunberg)
caravanis (Schedl)
carinifer (Schedl)
chiriquensis (Wood)

conciliatus (Schedl)
consequens (Schedl)
contractus (Chapuis)
costipennis (Schedl)
curvidens (Schedl)
darlingtoni (Reichardt)
dentatus (Dalman)
desultor (Schedl)
deyrollei (Chapuis)
diductus (Chapuis)
discicollis (Chapuis)
discoidalis (Schedl)
distinguendis (Schedl)
dolobratus (Blandford)
durus (Schedl)
egreguis (Schedl)
elongatus (Chapuis)
equadorensis (Schedl)
exaratus (Blandford)
exitialis (Wood)
exitiosus (Schedl)
flexiosus (Schedl)
fossulatus (Chapuis)
fragosus (Scheld)
fuscus (Chapuis)
godmani (Blandford)
granarius (Schedl)
gregalis (Schedl)
holdhausi (Schedl)
ignotus (Schedl)
imporcatus (Blandford)
insidiosus (Schedl)
insignatus (Schedl)
inviolatus (Schedl)
irregularis (Schedl)
irrepertus (Schedl)
irruptus (Schedl)
jelskii (Nunberg)
konincki (Chapuis)
lafertei (Chapuis)
latreillei (Chapuis)
limbatus (Chapuis)
liraticus (Wood)
liratus (Blandford)
luridus (Chapuis)
malignus (Schedl)
marginatus (Chapuis)
mutatus (Chapuis)
navarrodeandradei (Marelli)
neglectus (Schedl)
nitidicollis (Schedl)
nudatus (Wood)
obliteratus (Blandford)
occipitalis (Chapuis)
olivieri (Chapuis)
perbinodulus (Schedl)
permarginatus (Schedl)
permodestus (Schedl)
pernudus (Schedl)
peruanus (Nunberg)
porrectus (Chapuis)
pseudolignatus (Schedl)
pseudoplicatus (Schedl)
quaesitus (Schedl)
quinquecostatus (Chapuis)
ramali (Schedl)
raucus (Schedl)
reichei (Chapuis)
robustus (Chapuis)
salvini (Blandford)
schmidti (Chapuis)
sexcostatus (Chapuis)
simpliciformis (Wood)
sobrinus (Schedl)
suavifer (Schedl)
suboblitaratus (Schedl)
subsulcatus (Chapuis)
tiriosensis (Reichardt)
tuberculatus (Chapuis)
umbonatus (Blandford)
ursinus (Schedl)
ursus (Schedl)

Euplatypus
aequalicinctus (Schedl)
alienus (Schedl)
alternans (Chapuis)
angustatulus (Wood)
angustatus (Chapuis)
angustioris (Schedl)
araucariae (Schedl)
areolatus (Schedl)
bellus (Schedl)
bilobatus (Strohmeyer)
compositus (Say)
contextus (Schedl)
coronatus (Schedl)
costaricensis (Schedl)
cribricollis (Blandford)
cuspidatus (Schedl)
decorus (Schedl)
dignatus (Schedl)
dimidiatus (Chapuis)
dissimilis (Chapuis)
dissipabilis (Schedl)
efferatus (Schedl)
haagi (Chapuis)
hians (Chapuis)
hintzi (Schaufuss)
immunis (Schedl)
laminatus (Schedl)
longior (Wood)
longius (Wood)
longulus (Chapuis)
madagascariensis (Chapuis)
minusculus (Schedl)
mulsanti (Chapuis)
otiosus (Schedl)
parallelus (Fabricius)
patulus (Chapuis)
perminicus (Schedl)
pertusus (Chapuis)
pini (Hopkins)
porosus (Blandford)
pseudolongulus (Schedl)
pulicaris (Chapuis)
roberti (Chapuis)
rugosifrons (Schedl)
santacruzensis (Mutchler)
segnis (Chapuis)
simpliciformis (Wood)
sinuosus (Chapuis)

solutus (Chapuis)
striatus (Chapuis)
tragus (Schedl)
tricuspidatus (Schedl)
trispinatulus (Schedl)
trispinatus (Schedl)
truncatus (Chapuis)
vicinus (Blandford)

Baiocis
See Wood & Bright c1992:1215–1217

Epiplatypus
adnexus (Schedl)
annexus (Wood)
applanatus (Wood)
brasiliensis (Nunberg)
complanatus (Schedl)
deceptor (Wood)
deplanatus (Wood)
discolor (Blandford)
eugestus (Wood)
eximius (Wood)
filaris (Wood)
guadeloupensis (Schedl)
jamaicensis (Bright)
nudus (Schedl)
pernudus (Schedl)
secus (Wood)
spectus (Wood)
vegestus (Wood)

Teloplatypus
brunneus (Chapuis)
carinifrons (Schedl)
collatatus (Schedl)
concinnulus (Blandford)
enixus (Schedl)
excisus (Chapuis)
humilis (Chapuis)
inacessus (Schedl)
marcidus (Blandford)
ornatus (Schedl)
pallidipennis (Blandford)
percomis (Schedl)
perdiligens (Schedl)
ratzeburgi (Chapuis)
striatopennis (Schedl)
subitarius (Schedl)
ustulatus (Chapuis)

Cylindropalpus
(See Wood & Bright c1992:1217–1219)

Triozastus
See (Wood & Bright c1992:1219–1221)

Mesoplatypus
(See Wood & Bright c1992:1221–1223)

Doliopygus
(See Wood & Bright c1992:1223–1240)

Spathicranuloides
(See Wood & Bright c1992:1210)

Dendroplatypus
(See Wood & Bright c1992:1240)

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