

---

---

W L Brown Jr  
CI

(19) REVISION OF THE ANT TRIBE  
DACETINI: IV.  
SOME GENERA PROPERLY EXCLUDED  
FROM THE DACETINI,  
WITH THE ESTABLISHMENT OF THE  
BASICEROTINI New Tribe

BY  
William L. Brown, Jr.

---

From the Transactions of The American Entomological Society  
LXXV, 83-96

Issued December 7, 1949

1169.35

---

---

This is a separatum from the TRANSACTIONS and is not a reprint. It bears the original pagination and plate numbers, and library copies were mailed at Philadelphia on the above date of issue.

**REVISION OF THE ANT TRIBE DACETINI: IV.  
SOME GENERA PROPERLY EXCLUDED FROM THE  
DACETINI, WITH THE ESTABLISHMENT OF  
THE BASICEROTINI NEW TRIBE**

BY WILLIAM L. BROWN, JR.

*The Biological Laboratories, Harvard University*

In his treatment of the tribe Dacetini in Fascicle 174 of the *Genera Insectorum* (1922), Emery included a number of genera in the group which were even at that time considered doubtfully placed. In the same year, Wheeler removed *Stegomyrmex* Emery to a new tribe Stegomyrmicini Wheeler (1922, p. 668) \* and placed *Blepharidatta* Wheeler in the Attini (Wheeler, *loc. cit.*). I am not prepared to discuss Wheeler's treatment of these genera except as to their exclusion from the Dacetini, an action with which I am in complete agreement. *Stegomyrmex* is a very old genus, as shown by the wing venation; it is probably related to the Attini and perhaps to *Basiceros* Fred. Smith. The possible relationship to *Basiceros* does not, as I shall show in a later paragraph, ally *Stegomyrmex* to the true Dacetini.

Although the placement of *Blepharidatta* in the Attini is perhaps doubtful, an examination of the types of Wheeler's *B. braziliensis* shows that this placement is much more logical than attachment to the dacetines.

Later authors have added genera to the Dacetini which clearly do not belong there. Two of these, *Peronomyrmex* Viehmeyer and *Weberidris* Donisthorpe, are hereby placed in the tribe Meranoplina Emery.

---

\* Bull. Amer. Mus. Nat. Hist., XLV, pp. 655, 668.

**PERONOMYRMEX** Viehmeyer

*Peronomyrmex* Viehmeyer, 1922, Arch. Naturg., LXXXVIII, A 7, p. 212.

*Peronomyrmex* Brown, 1948, Trans. Amer. Ent. Soc., LXXIV, pp. 102, 125.

GENOTYPE: *Peronomyrmex overbecki* Viehmeyer (Monobasic).

In Viehmeyer's very scanty description and poor figures are brought out certain features which seem to place this genus in the Meranoplini. *Peronomyrmex* may be a synonym of *Meranoplus* itself. Viehmeyer gives the type locality as Trial Bay, New South Wales, but Mr. John Clark, the Australian myrmecologist, has mentioned (*in litt.*) certain indications that the localities of Viehmeyer's types from the Overbeck collections are often in error. It is quite certain that *Peronomyrmex* is not a dacetine ant.

**WEBERIDRIS** Donisthorpe

*Weberidris* Donisthorpe, 1948, Ent. Mon. Mag., LXXXIV, p. 281, fig. 1.

GENOTYPE: *Weberidris rufobrunnea* Donisthorpe (Monobasic).

Synonym of *Calyptomyrmex* Emery, 1887, Ann. Mus. Stor. Nat. Genova, XXV, p. 471, GENOTYPE: *Calyptomyrmex beccarii* Emery (Monobasic).

Although Donisthorpe's species does bear a faint resemblance to certain dacetines in pilosity characteristics, it is certainly hard to understand how that author explained the several very great structural differences of the head, mandibles, etc. From the figure of *W. rufobrunnea*, it is evident that this ant belongs to *Calyptomyrmex*, of which numerous good figures appear in the literature. Mr. Donisthorpe now agrees to this synonymy.

With the exclusion of the genera mentioned above, the Dacetini form a more compact group. My extended study has revealed, however, that there are still remaining a number of genera which must be removed from the tribe. I refer to *Basiceros* Fred. Smith, *Rhopalothrix* Mayr and several closely related genera. These curious genera have been considered as dacetines by all the principal myrmecologists since the time of Mayr and Frederick Smith, and I myself placed them among the true dacetines in my preliminary generic revision of 1948.<sup>1</sup> I think this placement can be explained by the fancied similarity in habitus, and particularly in the usually bizarre pilosity displayed by the two groups. Once

<sup>1</sup> Trans. Amer. Ent. Soc., LXXIV, p. 102, 1948.

placed in the Dacetini during the formative years of ant taxonomy, no really close critical study has been made of the relationships of *Basiceros* to other dacetine genera. During later years, newly described genera were recognized as related to either *Basiceros* or to genera like *Daceton*, *Orectognathus* and *Strumigenys*, and since these four genera were all firmly entrenched in the Dacetini<sup>2</sup> by that time, the new genera were added as well. Forel and Emery closed arguments concerning affinities within the group by proposing classifications in which the dorsal position of the eyes, as opposed to a situation of these organs ventral to the antennal scrobe or within the scrobe, was accorded primary importance. This had the effect of relating genera like *Basiceros* and *Rhopalothrix* to *Daceton*, *Epopostruma*, *Orectognathus*, etc., and placing the "higher genera" like *Strumigenys* at some distance phylogenetically.

The genera with dorsolaterally placed eyes are assumed, in this arrangement, to have had a monophyletic origin. If one groups these "lower genera" according to obvious relationships among themselves, however, it is clear at once that they fall into two distinctly separable categories on the basis of body form (especially of the head and mandibles), sculpture, pilosity, etc., etc. One of these groups of genera attaches to *Basiceros*, the other to *Daceton*. Both groups contain genera showing reduction of numbers of segments in the antennal funiculus. The largest and therefore most primitive number occurs in *Basiceros* (and the related genus *Creightonidris* new genus, described below), which possesses 11 funicular segments. *Daceton*, *Acanthognathus*, *Orectognathus*, *Hypopomyrmex* and related genera have 10 or fewer funicular segments, but these are presently conceived as having no close phylogenetic relationship whatever to *Basiceros* or genera close to the latter. The higher genera contain forms (with a total of six or less antennal segments) which bear some superficial similarity to the basicerotine group in the shape of the mandibles, but, as I will demonstrate fully in a discussion of dacetine phylogeny now being prepared, this similarity is entirely a convergent one. An extensive survey of the entire tribe has forced me to the flat conclusion

---

<sup>2</sup> Various names have been used for this tribe, among which are Dacetoni, Dacetonii, Dacetii, etc. Since the tribal names should be formed from the root (in this case *dacet-*), with *-ini* added as the tribal suffix, the proper name for the group is *Dacetini*, and the author is Emery.

that all genera with a total of six or less antennal joints are descended from an ancestor related to *Daceton* and *Acanthognathus*, but not at all related to any basicerotine genus.

Since the tribe as it has been constituted obviously contains two distinct and not closely related stocks, and since *Daceton* Perty is the nominate genus of one tribal stock, I hereby propose a new tribe to receive *Basiceros* and related genera.

#### BASICEROTINI new tribe

Very small to medium-sized myrmicine ants, usually of bizarre appearance, the head narrowed in front and often furnished with deep lateral antennal scrobes. Eyes present or (rarely) absent, when present situated on the dorsolateral margins of the head. Antennae consisting of a basal scape and 11, 7 or 6 funicular segments. Mandibles, except in the aberrant genera *Heptastruma*, *Acanthidris* and *Talaridris*, triangular and furnished with serially dentate apical (masticatory) margins.

Propodeum usually armed with a pair of teeth or lamelliform structures. Petiole and postpetiole diverse in shape, the former armed anteroventrally with one or more irregular spines or teeth, but neither node with lateral or dorsal spongiform or lamelliform tissue or dentiform processes.

Integument thick and hard, the entire, or nearly the entire, body surface usually thickly sculptured and opaque. Hairs bizarre, often of two or more forms on a single individual, squamate, clavate, lacinate or pompon-like, but not closely resembling those of the Dacetini in basic details.

Color testaceous or ferruginous to brownish-black.

The members of the tribe as presently restricted are found in the Neotropical and Papuan regions and somewhat peripherally in the Indomalayan region. All seven of the presently recognized genera occur in the Neotropical region, while only one, *Rhopalothrix*, is found in the Old World. It is evident that the tribe is a very old one which once must have inhabited a large part of the earth's surface, but which is now being forced to contract its range into the same areas into which other old genera of ants (*Acanthoponera*, etc.) have similarly retreated.

Practically nothing is known of the basicerotine ethology. The species form rarely seen nests in the soil cover or beneath, in rotten logs, and in similar situations usually sought out by small arthropods with comparable cryptobiotic habits. Although the food is not known, it is presumed from the convergent characters shared by many of the species with certain dacetine ants, that it must consist largely or entirely of small arthropods frequenting the same

cryptobiome. It is entirely possible that competition offered by more recently developed true dacetine stocks like *Smithistruma* and *Serrastruma* has been a major factor contributing to the present restriction of the tribal range.

Presented below is a systematic list of the basicerotine genera, with a citation of the original references and some of the more important later ones. It is probable that revisionary work on this group will produce more than a few changes; it also seems probable that many species yet remain to be described.

#### BASICEROS Schulz

*Basiceros* Schulz, 1906, *Spolia Hymen.*, p. 156.

*Ceratobasis* Fred. Smith, 1860, *Journ. Ent.*, 1, p. 78, preoccupied name, worker *nec* female.

*Meranoplus* Fred. Smith, *sensu* Fred. Smith, 1858, *Cat. Hymen. Brit. Mus.* VI, p. 195, part. (Not Fred. Smith, 1853.)

GENOTYPE: *Meranoplus singularis* Fred. Smith (Monobasic). The worker as described in Smith's 1858 work should be regarded as the type of the species *singularis* and hence of *Basiceros* as a genus; the female described in 1860 belongs to the genus *Creightonidris* described as new below, and the female described in the 1858 paper is too poorly characterized and figured to allow placement in either genus with any certainty.

This genus may be separated from the related *Creightonidris* new genus (see below) by the form of the mandibles, the subtriangular blades of which are evenly convex above, the apices gently deflected and not suddenly bent downward. There is no transverse crease in the dorsal surface near the bases of the blades, and the basal borders form curves away from the anterior clypeal border so as to enclose a semicircular or subtriangular interspace or "zwischenraum" of respectable dimensions. The apical borders are relatively straight, set with serially-arranged teeth or large denticles, opposite members meeting along the apical or masticatory margins when closure is complete. In his description of *B. squamifer* (*loc. cit. infra*), Borgmeier mentions no differences between the mandibles of his females and workers taken from the same nest, so I assume that both neuter and female castes of *Basiceros* have the same type of mandibles.

The genus occurs in tropical America from at least as far north as Costa Rica south into southern Brazil. Donisthorpe's record of a *Basiceros* male from Dutch New Guinea (Ann. Mag. Nat. Hist., 1948, ser. 12, vol. 1, p. 131) is probably based on an erroneous determination.

***Basiceros singularis* (Fred. Smith)**

*Meranoplus singularis* Fred. Smith, 1858, Cat. Hymen. Brit. Mus., vi, p. 195, pl. 13, figs. 6-10, worker, female.

*Ceratobasis singularis* Fred. Smith, 1860, Journ. Ent., 1, pp. 78-79, worker nec female.

*Basiceros singularis* Wheeler, 1916, Bull. Amer. Mus. Nat. Hist., xxxv, p. 9, female.

Smith's original figure, especially that of the mandible (fig. 10), leaves little doubt that the worker of *Basiceros singularis* is closely related to the workers of *Basiceros* described by later authors. There is some doubt, however, about the original female described with the worker in 1858, since the figure of this is small and rather vague as to mandibular detail. When, in 1860, Smith set forth *Ceratobasis*, he did so partly on the basis of another female herein identified as belonging to *Creightonidris*. He does not compare the 1858 and 1860 females, but the two figures accompanying the descriptions of these do not agree very well. In 1860, Smith seems to have forgotten the existence of the female described two years earlier, and one wonders whether he had misplaced the type. Smith's type locality, "Ega, Brazil" (probably collected by Bates) may refer to the second female, or to the workers described earlier, or to all the specimens concerned; Smith was so notoriously lax in giving correct type localities that the simple designation "Amazonas" should probably be followed until the types in the British Museum are properly checked by a competent worker. It is my opinion that the female Wheeler mentioned (1916, *loc. cit.*) is the true *Basiceros* female; its mandibles are of the normal *Basiceros* conformation, and the general features of this specimen agree pretty well with Smith's descriptions and figures of the *singularis* worker. I would be inclined to place true *Basiceros* of this species in the Amazon-Orinoco fauna, and it seems that *singularis* is the common, if not the only, species inhabiting this area. A closely related new species is represented in my working collection by

series from Costa Rica, Honduras, etc., in Central America; I cannot describe this form now. *Basiceros* contains also the species *convexiceps* Mayr, *disciger* Mayr and *squamifer* Borgmeier (1937).<sup>2a</sup>

**CREIGHTONIDRIS** new genus

*Ceratobasis* Fred. Smith, 1860, Journ. Ent., I, p. 78, female *nec* worker.

*Ceratobasis* of authors, part.

*Basiceros* Schulz and authors, part.

FEMALE.—Resembling the same sex of *Basiceros*, with 12 antennal segments and a deep antennal scrobe running the full length of the side of the head, but differing radically in mandibular form. Mandibles with swollen, dorsally convex basal portions occupying nearly half of the length; the apical portions slightly longer, with strongly convergent external borders and a very nearly straight pair of inner borders, bent sharply ventrad at nearly a right angle to the principal plane of the basal portions and having the two opposing blades which make them up sloping gently inward dorsally toward the inner (masticatory) borders. The straight apical portions of each mandible bear a row of nine or ten serially arranged triangular teeth or denticles which begin at the bend and increase gradually in size to the apex, the two series of teeth meeting on the midline in the closed mandibles. The swollen basal portions also meet on the midline, and the basal borders are transverse and contiguous to the anterior clypeal border at full closure, so that no appreciable opening is left anterior to the clypeus. These basal portions are almost divided into anterior and posterior portions by a deep transverse-oblique cleft running from the inner margins at least halfway across each mandible and ending shallowly there, the two opposite clefts meeting at the juncture of the two inner borders to form a broad V with its obtuse apex directed basally. From beneath, the ventral portion of the basal half of each mandible is seen to form a deeply hollowed shell; the position of the cleft on the dorsum is visible as a distinct translucent line. Viewed from the side, the basal swollen portions are quite conspicuous, and the apical portions are seen to be gently tapered to a rather acute point. This specialization is very different from any mandibular type the author has ever witnessed among the immense range of bizarre forms to be found in the entire family Formicidae.

GENOTYPE: *Creightonidris scambognatha* new species, described below.

**Creightonidris scambognatha** new species

?*Ceratobasis singularis* Fred. Smith, 1860, Journ. Ent., I, pp. 78-79, pl. 4, figs. 12, 13, female (part) *nec* worker.

?*Basiceros singularis* of authors, part.

FEMALE, HOLOTYPE.—Total length, including mandibles, 7.4 mm.; head length, maximum measurable, excluding mandibles, 1.42 mm.; mandibles,

<sup>2a</sup> Borgmeier, T., 1937. Arch. Inst. Biol. Veget. (Rio de Janeiro), III, pp. 245-246, figs. 30-33.



viewed in the same plane which gives the maximum length measurement for the head proper, 0.42 mm. anterior extension; Weber's length of thorax, 1.84 mm.; greatest width of head (across occipital lobes just behind eyes) 1.25 mm. Posterior excision very shallow and broad; sides of head fairly straight and converging only moderately anteriorly; clypeus convex dorsally in the center, its anterior border very shallowly and broadly emarginate or concave. Eyes placed far back, just before the small, rounded, slightly projecting occipital lobes, the latter not so strongly projecting nor the eyes so sunken as in Smith's figure 12 (*loc. cit.*). Eyes themselves moderately large and convex, with much the same proportions as in Smith's figure.

Alitrunk bulky and rather steep sided, the mesonotum dorsally only moderately convex; propodeal teeth low and subrectangular.

Petiole slightly arched or bent, with an anteriorly tapered peduncle and a prominent, thick node, slightly longer than its peduncle and with steep anterior and gently sloping posterodorsal faces. Peduncle beneath with seven ventrally directed acute spines unevenly spaced along the midventral line, the most anterior of these thicker than the rest. Postpetiole subequal in length to the petiolar node, low in profile, with a long, flat, sloping dorsal face which rises to a low rounded apex posteriorly and then drops slightly to its juncture with the gaster. Seen from above, the petiole is narrower than the postpetiole and is oblong in shape, while the postpetiole is subtrapezoidal, as broad behind as long, the sides diverging posteriorly and then very slightly narrowed so that it is attached to the gaster by nearly its entire breadth. Gaster long oval, its anterior border semicircularly excised to receive the postpetiole; first gastric segment forming the great bulk of the gaster, anteroventrally with a prominent low median ventral carina running longitudinally back from the anterior border.

Mandibles smooth and shining, with minute scattered punctulae. The center of the upper cephalic dorsum is raised in a large circular swelling, which is structural rather than merely a sculptural feature; this swelling has a deep concavity in the center, and thus forms a thick ring, in the posterior part of which is situated the anterior ocellus (just as Smith mentions). Surface of head rugulose, with deep, longitudinal punctures separating the ridges, the clypeus with very low, fine rugulation and punctation on the same pattern; the entire cephalic sculpture more or less concealed by the dense squamate pilosity. Alitrunk and coxae of forelegs with finer rugulation; the sides feebly shining and rather smooth, but covered for the most part with abundant and often crowded, but distinct, pin-point punctulae, as are also the nodes of the pedicel and the surface of the gaster.

Dorsum of head, outer basal parts of the mandibles, dorsum of alitrunk and nodes with small, brilliant, whitish, subappressed and appressed suborbicular spatulate hairs, densely arranged on head and antennal scapes, much less abundant on thorax and nodes. The squamate hairs tend to lie in and fill the punctures of the sculpture where these are deep. Appendages with abundant cream-colored subappressed spatulate or subs spatulate hairs directed apically and becoming gradually more and more pointed toward the apices of

the members. Head posterior to the eyes, dorsum of alitrunk, anterior humeral faces of the thorax, nodes and gaster with fairly abundant short, erect, strongly clubbed hairs of a sordid whitish-yellow color.

General body color deep ferruginous red.

Single remaining forewing as in Smith's figure 13, but with a short spur remaining to represent the basal vestige of the apical (fourth) free abscissa of M (following the system of nomenclature of Ross, 1936).

This female otherwise agrees very well with the females and workers from British Guiana which Wheeler determined as *Basiceros singularis*; the antennal conformation is much the same, with the scape flattened and basally strongly and lobately or subangulately produced from the anterior margin.

Described from the lone *holotype*, a female (labelled "*Basiceros* n. sp.") sent me by Father Thomaz Borgmeier of Rio de Janeiro. The specimen was collected by Schwarzmaier at Campinas, Goias State, Brazil, during October 1935. Type is to be returned to Father Borgmeier's collection with my hearty thanks for the privilege of studying this and other dacetines from the eminent Brazilian entomologist's collection.

It was noted above that I consider this to be the same form Frederick Smith described 89 years ago as the female of *Ceratobasis singularis*, the only doubt stemming from certain differences in Smith's figures, which are often inaccurate and vague. I do not know whether Ega is the proper locality for Smith's specimen, but seemingly it was taken somewhere in the Amazon Basin by the famous naturalist Henry Bates. Although Smith cautioned Bates, as he says, to keep good collecting records and proper associations of the castes of one species, it appeared that Smith himself had a perverse genius for mixing up these same records and associations as few have ever done. Most of Smith's locality records bear little examination, and it is not safe to accept them too specifically for types. Many previous authors have flayed the same hide while themselves committing errors as grievous, so it is perhaps best to let Mr. Smith rest in peace while his detractors have their well-deserved turn.

I know of no other forms properly referable to *Creightonidris* in addition to the genotype. The curious mandibles certainly lead one to wonder what the feeding habits may be like.

**OCTOSTRUMA** Forel

*Rhopalothrix* (*Octostruma*) Forel, 1912, Mem. Soc. Ent. Belg., XIX, p. 196.  
*Octostruma* Brown, 1948, Trans. Amer. Ent. Soc., LXXIV, pp. 102, 125.

GENOTYPE.—*Rhopalothrix simoni* Emery (by designation of Wheeler).

In my 1948 paper, I separated *Octostruma* from *Rhopalothrix* on the basis of the seven-segmented antennal funiculi (eight antennal segments total) as opposed to the six-segmented funiculi of *Rhopalothrix*. I have studied the species of neither genus in detail, but I believe the generic distinction will hold. Of the many specimens of twenty-odd species I have examined in the two genera, there have appeared no intergrade freaks with incomplete segmentation such as make generic separation on the basis of antennal segment numbers doubtful in other formicid groups. The future reviser of this group will undoubtedly carry the splitting of both *Octostruma* and *Rhopalothrix* to a further extreme, since both contain some rather aberrant species. Listed below are the species and subspecies<sup>3</sup> of *Octostruma*.

<i>balzani</i> Emery	<i>reichenspergeri</i> Santschi
<i>barberi</i> Mann	<i>rugifera</i> Mayr
<i>batesi</i> Emery	<i>simoni</i> Emery
<i>equilatera</i> Weber	<i>simoni</i> subsp. <i>spei</i> Forel
<i>godmani</i> Forel	<i>simoni</i> subsp. <i>sulcata</i> Santschi
<i>iheringi</i> Emery	<i>simoni</i> subsp. <i>wighti</i> Wheeler
<i>lutzi</i> Wheeler	<i>truncata</i> Forel
<i>petiolata</i> Mayr	<i>wheeleri</i> Mann

The genus is completely restricted to the Neotropical region.

**RHOPALOTHRIX** Mayr

*Rhopalothrix* Mayr, 1870, Sitzb. Akad. Wiss. Wien, LXI, p. 415.

GENOTYPE.—*Rhopalothrix ciliata* Mayr (designated by Wheeler).

This genus is distinguished from *Basiceros*, *Creightonidris* and *Octostruma* by having only six segments in the antennal funiculus.

<sup>3</sup> I have arbitrarily raised several forms heretofore considered as varieties to subspecific rank because I believe these forms must stand or fall as either subspecies or species. There is much evidence to indicate that the varietal rank in the Formicidae is based on unsound taxonomic principles and practices viewed from a modern biological standpoint, as Creighton will presently show in an extended discussion in his book on North American ants, now in press.

It differs from the three other genera with six-segmented funiculi (listed below) in having triangular or subtriangular serially dentate mandibles of the more common general basicerotine pattern.

In the New World, *Rhopalothrix* is represented by six tropical or subtropical species:

<i>amoena</i> Mann	<i>ciliata</i> Mayr
<i>bolau</i> Mayr	<i>gravis</i> Mann
<i>bruchi</i> Santschi	<i>schmidti</i> Menozzi

In the Old World, the genus is represented by more numerous forms, several of which are rather large and highly decorated. Most of the species are concentrated in the Papuan subregion, while a few have found their way into northeastern Australia and peripheral island groups like Fiji, Samoa and the Philippines. Dr. Keizō Yasumatsu of the University of Kyushu has sent me a female specimen taken by Dr. T. Kano on Botel-Tobago Island, which lies between Luzon and Taiwan. This is the most northerly record for the basicerotines in the Old World.

<i>angulinodis</i> Stitz	<i>mixta</i> Szabó
<i>biroi</i> Szabó	<i>procera</i> Emery
<i>borneënsis</i> Wheeler	<i>procera</i> subsp. <i>ballionii</i> Forel
<i>brevicornis</i> Emery	<i>procera</i> subsp. <i>malua</i> Mann
<i>elegans</i> Mann	<i>procera</i> subsp. <i>melanotica</i> Mann
<i>emeryi</i> Forel	<i>procera</i> subsp. <i>samoae</i> Santschi
<i>isabellae</i> Mann	<i>punctata</i> Szabó
<i>kokodensis</i> Donisthorpe	<i>subdentata</i> Donisthorpe
<i>manni</i> Menozzi	

*Rhopalothrix redux* Donisthorpe was described from the isolated male sex. The type came from British Guiana, so *R. redux* could conceivably belong to any one of several basicerotine genera or even to another tribe. Donisthorpe has described quite a few isolated males belonging to the "Dacetini" and other groups, a practice which is highly questionable in dealing with the dacetines, basicerotines and some other higher specialized myrmicine groups in which this sex is highly conservative. Unless and until such authors are willing to put forth adequate descriptions of male uniques which will include such necessary details as analysis of the venation of the forewing and figures of the genitalia, the addition of new names based on males alone can only add to the already considerable confusion of the taxonomy in the groups in question.

The roster of the basicerotine genera is completed by the three monotypic genera described from the New World tropics by Dr. Neal A. Weber within recent years. These are probably all related to *Rhopalothrix* or *Octostruma*, from which they are differentiated chiefly by means of rather extreme deviations in mandibular structure.

#### ACANTHIDRIS Weber

*Acanthidris* Weber, 1941, Ann. Ent. Soc. Amer., xxxiv, p. 188, pl. 1, figs. 4-7.

GENOTYPE.—*Acanthidris isthmicus* Weber (Monobasic, designated by Weber).

I have seen a specimen in addition to the type of *isthmicus*, but taken at the type locality on Barro Colorado Island, Panama Canal Zone (J. Zetek) and sent me by Dr. M. R. Smith. *Acanthidris* may be recognized by the long and very sharp spine situated on the inner mandibular border a short distance basad of the apex. Eyes are strongly reduced and very difficult to locate in the worker.

#### TALARIDRIS Weber

*Talaridris* Weber, 1941, Ann. Ent. Soc. Amer., xxxiv, pp. 184-185, pl. I, figs. 1-3.

GENOTYPE.—*Talaridris mandibularis* Weber (Monobasic, designated by Weber).

*Talaridris mandibularis* is known so far only from the original localities in Trinidad and British Guiana. The genus is characterized by the sublinear, somewhat arcuate mandibles furnished apically with a short series of irregular teeth; the opposite mandibles meet only along these small apical masticatory borders when closed.

#### HEPTASTRUMA Weber

*Heptastruma* Weber, 1934, Rev. de Ent., Rio de Jan., iv, pp. 54-55, fig. 13, A, B.

GENOTYPE.—*Heptastruma wheeleri* Weber (Monobasic, by designation of Weber).

The genotype, so far the only known species of the genus, was taken in Cuba. The mandibles are strongly convergent, though

basically dissimilar, to those of certain dacetines. The similarity is mainly due to the presence of an apical mandibular fork of two subequal spiniform teeth directed medially, much like those of *Strumigenys*, etc. The remainder of the head and body shows that this ant is probably related to *Rhopalothrix* and not at all closely to any dacetine genus.

The *Basicerotini* form a very compact group of ancient aspect, with possible relationships to *Stegomyrmex* and the *Attini*. Studies of the ethology, now totally or nearly totally unknown, should enable us to place them more satisfactorily. Studies of the wing venation and especially the genitalia in relation to the same features in other myrmicines should also furnish some solid clues to the phylogeny. Genitalia, in the few species I have examined, are totally unlike those of any dacetine male, but the males of so few other myrmicines are known from genitalic dissections that I cannot relate them properly to any other forms on this basis. The study of the basicerotine larvae may also furnish important phylogenetic evidence.

The tribe is ripe for a revisionary study, and such a study should not prove difficult. Types of the species are concentrated in the collections made by Emery, Forel, Mayr and Santschi, in European museums at the present; the early *Basiceros* material of Frederick Smith is at the British Museum, as are also Donisthorpe's species. Material is fairly abundant in the larger American museums, and types of most of the species of Wheeler, Mann, Weber, Menozzi and Borgmeier rest in the Museum of Comparative Zoology at Cambridge or in the private collections of those specialists mentioned who are still living.

I wish to thank Dr. M. R. Smith, Father Thomaz Borgmeier, Sr. Mario Consani and Dr. J. C. Bequaert for their aid in the matter of loans of basicerotine material.

*Note.*—The tribe Dacetini is seen to be altered considerably from the list in my preliminary revision (*op. cit.*, p. 102). I inadvertently omitted from that list two genera (*Codioxenus* Santschi and *Trichoscapa* Emery) which appeared and were treated at some length in the body of the paper; *Codioxenus* was also omitted from the generic key, in which it runs to couplet 28 on p. 128, but differs

from both alternatives in possessing an oblong head with sub-parallel sides. There is so much new generic material soon to be published in this tribe that I have considered it advisable to wait until a later date before bringing out a revised list or survey of the genera of the Dacetini. Such a list will include many important recently published genera and subgenera and changes in the status of older ones, as well as those now in press.