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Contribution Number 75
SOME MISCELLANEOUS COCCOIDEA (INSECTA:HOMOPTERA)
Figures 1-2

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In the extensive collections at hand there are numerous undescribed species, some of which belong to groups already considered in the *Atlas of the Scale Insects of North America* and others belonging to groups which will not be considered for some years in the course of continuing this work. Some of these are of sufficient interest to merit special consideration and from time to time they and certain other species will be described. The types of all these species will be in the Stanford Collection.

Family ASTEROLECANIIDAE
MYCOCOCCUS, new genus

GENERIC TYPE. *Mycococcus copernicíae*, new species. One other species, *Sphaerococcus diaspidiformis* Green, is here referred, at least tentatively to this genus.

DESCRIPTION. Coccoidea apparently referable to the family Asterolecaniidae. Adult female concealed beneath a roughly circular, flat, more or less vitreous scale, which in the generic type bears dorsally a number of quite stout, curling filaments of wax. The insect itself is flat, circular, membranous, without legs and with the antennae represented by mere points, with no indication of an anal opening. Body in the form of a very low apically truncate cone, the dorsal apex of which bears a small, sclerotized, oval plate. Ventral side of the body with a circle of very small, quinquelocular pores which surrounds the mouthparts and the area enclosed between the pairs of spiracles. Spiracles very small, with no specially distinctive characters. Apart from the circlet of ventral pores there seem to be no detectible pores or ducts.

First stage larva with a conspicuous series of heavily sclerotized 8-shaped pores about the margins of the body. Antennae 4- or possibly 5-segmented.

NOTES. This is a most peculiar genus, the adult female of which contains no clue to its relationships. The 8-shaped pores of the first stage larva, however, seem to indicate a relationship with the Asterolecaniidae, a family in which these pores are almost always strongly developed. The name of the genus is suggested by the mass of more or less curling threads of wax which arise from the dorsum of the scale and which give somewhat the appearance of fungus hyphae.

Mycococcus copernicíae, new species
Figure 1

HOST AND DISTRIBUTION. From a palm, *Copernicia hospita*, near Santa Clara, Province Las Villas, Cuba. Collected in the summer of 1951 by Dr. B. E. Dahlgren of the Chicago Museum of Natural History.

HABIT. As described for the genus. Occurring in the material at hand, on the petioles and the leaf bases. Scale about 1.5 mm. in diameter, quite flat, the central point occupied by a slight nipple which is formed about the exuvium of the first stage. Surrounding this nipple and about halfway between it and the margin of the scale is a circlet of rather thick, stiff, curled, glassy rods of secretion, these attaining a length greater than the diameter of the scale.

MORPHOLOGICAL CHARACTERS. Adult female about .75 mm. in diameter, almost circular; characters as described for the genus. The small, flat, oval, sclerotized plate which occupies the apex of the dorsum seems to fit into the ventral side of the first exuvium and is underlain by an apparently sclerotized support. There are no dorsal structures visible other than this plate. Ventrally the only apparent structures are the spiracles, the mouthparts, the minute points which represent the antennae and the circlet of minute, quinquelocular pores that surrounds the mouthparts.

First stage larva as described for the genus. In addition to the marginal series of large 8-shaped pores there are four longitudinal rows of extremely minute pores of the same type. The anal ring is not evident.

NOTES. It might be supposed, a priori, that there must be some structures that correspond with the dorsal threads of wax but nothing appears in the insect that does so. It has not been possible to recover any exuvium of a second stage from the material at hand.

Mycococcus diaspidiformis (Green)

1916. *Sphaerococcus diaspidiformis* Green, Bulletin of Entomological Research 7:54; figure 11.

HOST AND DISTRIBUTION. From a palm, *Livistona humilis*, at Stapleton, Northern Territory, Australia.

NOTES. The only information concerning this species is contained in the original description, but on the basis of this the species seems to be in many respects rather similar to *Mycococcus copernicíae*. The scale is quite similar, although it lacks the dorsal processes. The larva apparently, according to the description and illustration, lacks the marginal series of large, 8-shaped pores, although pores of some kind are indicated as occurring along part of the margin. The body of the female is similarly in the form of a low cone, Green stating that the "median dorsal area rises into a central hump, on the summit of which are grouped the four spiracles which—in this insect—have taken up a dorsal position." The illustration indicates a sclerotized or pigmented area which may very well correspond with the sclerotized dorsal plate of *copernicíae* and it may be surmised that the spiracles are not dorsal as thought by Green.

Certainly this species can have nothing to do with *Sphaerococcus*, the type of which is a Pseudococcid of the general character of *Antonina*, and the assignment of the species to *Mycococcus* seems in all probability to indicate something of its real relationship.

Family DIASPIDIDAE
Subfamily Phoenicococcinae
Genus COLOBOPYGA Brethes

1912. *Colobopyga* Brethes, Annales de la Museo Nacional de Buenos Aires 23:281.
1915. *Colobopyga*, Sasscer, Proceedings of the Entomological Society of Washington 17:30.
1934. *Palmaricoccus*, Stickney, United States Department of Agriculture, Technical Bulletin 404:49.
1942. *Palmaricoccus*, Ferris, Atlas of the Scale Insects of North America, Volume 4, Fascicle 439.

GENERIC TYPE. *Colobopyga magnani* Brethes, which is recorded as from a palm, *Chamaerops humilis*, at Buenos Aires, Argentina. The type of *Palmaricoccus* is *Palmaricoccus attaleae* Stickney, from a palm, *Attalea cohune*, at Manzanillo, Mexico.

NOTES. The synonymy indicated above seems quite evident. The only possible basis for a generic separation lies in the fact that in the type of *Colobopyga* the adult female is indicated as bearing flattened setae on the margin of the "pygidium," while in the type of *Palmaricoccus* the setae in this position are acute. Such a separation seems quite unnecessary.

The error made by Stickney in overlooking the genus *Colobopyga* is quite understandable, since this genus was placed by Sasscer in the Tachardiidae, a group with which it has nothing to do.

*Colobopyga copernicia*e, new species
Figure 2

HOSTS AND DISTRIBUTION. From a palm, *Copernicia hospita* at Santa Clara, Province Las Villas, Cuba. Collected in the summer of 1951 by B. E. Dahlgren.

HABIT. Occurring in the folds of the leaf about the hasta, where the insects have the appearance of minute, brown, seed-like bodies. They seem to be devoid of any wax covering, although at times specimens occur in wax that apparently originates from the host.

CHARACTERS. Pre-adult female about .6 mm. long, elongate-ovoid, tapering posteriorly, the posterior end slightly elevated. Derm becoming strongly sclerotized at maturity. Operculum almost elliptical, slightly longer than wide. Apex of the body forming a rather narrow, apically narrowly rounded process which projects noticeably beyond the operculum. Derm of the venter beset with sclerotized points throughout a submarginal zone which extends from slightly in front of the operculum almost to the antennae. Spiracles very small, entirely sessile. Antennae formed each by a very small, unsegmented, sclerotized tubercle, which bears two or three setae.

Adult female of much the same form as the pre-adult. "Pygidium" with the posterior margin broadly rounded and bearing three pairs of short, stout, pointed setae of somewhat variable form. There is no transverse band of pores anterior to the pygidium. Antennae much as in the pre-adult.

NOTES. The New World species of the genus may be separated by the following keys. The description of *magnani* is not sufficiently definite to permit the inclusion of the pre-adult in this key.

Pre-adults

1. Ventral side of the body with a submarginal zone of sclerotized points.....2

   Ventral side of the body with no such zone of sclerotized points.....3

2. Apex of the body broadly rounded, forming a narrow band posterior to the operculum.....ATTALEAE Stickney

   Apex of the body pointed and narrowly rounded, projecting beyond the end of the operculum...COPERNICIAE Ferris

3. Spiracles borne on little, ear-like processes..SABALIS Ferris

   Spiracles not borne on such processes.....WASHINGTONIAE Ferris

Adults

1. With a transverse band of pores anterior to the vulva.....2

   With no pores anterior to the vulva.....3

2. With three (or two) pairs of short, apically truncate setae on the posterior margin of the pygidium.....MAGNANI Brethes

   With three pairs of short, apically acute setae along the posterior margin of the pygidium...ATTALEAE Ferris

3. With three pairs of stout, short, apically acute setae along the posterior margin of the pygidium..... COPERNICIAE Ferris

   With a single pair of stout, apically truncate setae on the posterior margin of the pygidium..... SABALIS Ferris

Colobopyga kewensis (Newstead)

1901. *Fiorinia kewensis* Newstead, Entomologist's Monthly Magazine, Second Series, 12:82; figures 3, 4.

1901. *Fiorinia kewensis* (Newstead), Newstead, Monograph of the British Coccidae, Volume 1:137; figure 17.

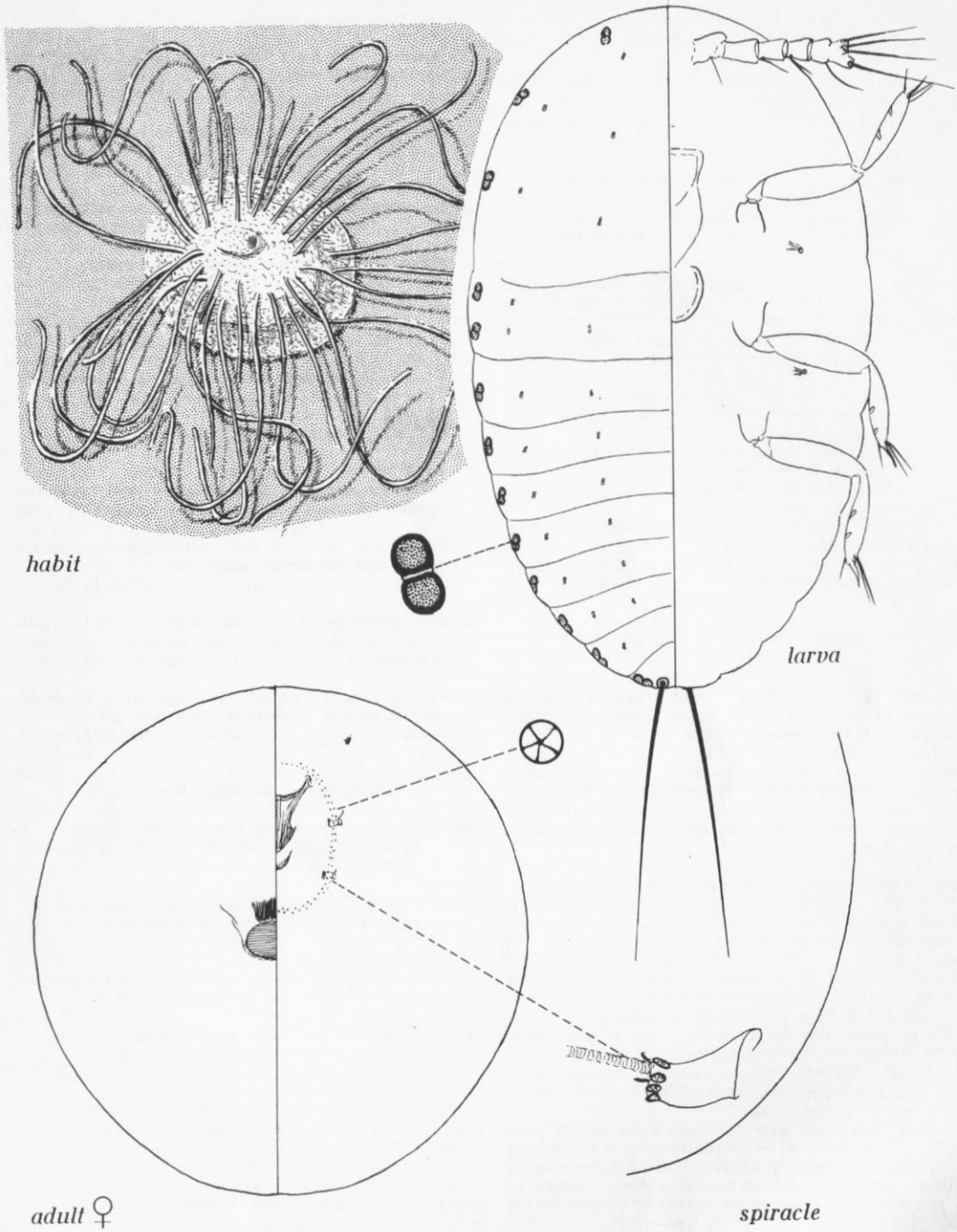
1925. *Halimicoccus nesiotes* Laing, Bulletin of Entomological Research 15:51; figure 1.

1934. *Palmaricoccus nesiotes* (Laing), Stickney, United States Department of Agriculture, Technical Bulletin 404:72; figures 21, 22.

HOSTS AND DISTRIBUTION. Recorded by Newstead from a palm, *Howea forsteriana*, in the temperate house at Kew Gardens, London. Recorded by Laing from an unnamed palm on Lord Howe Island.

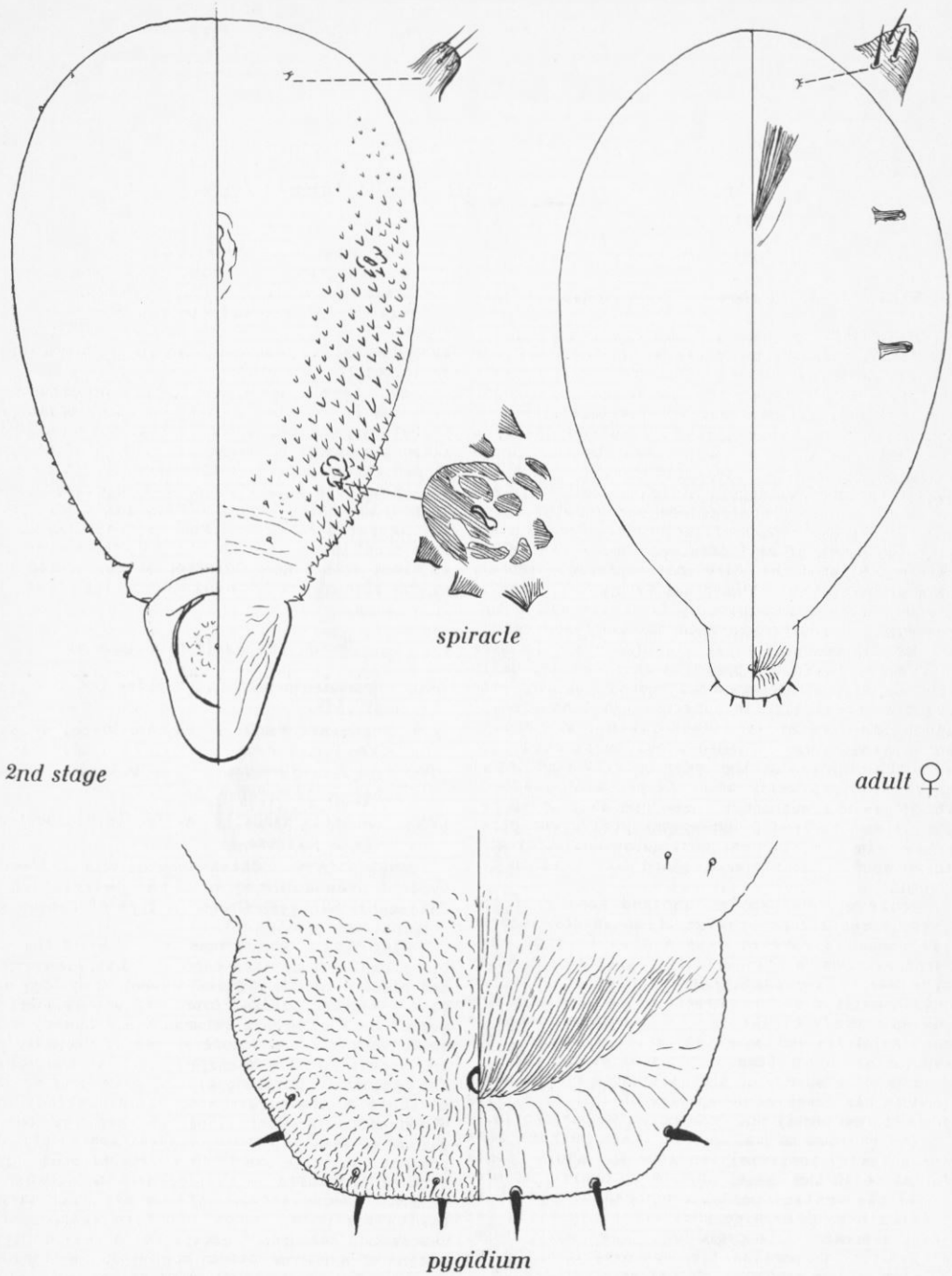
NOTES. The descriptions of Newstead and of Laing are in such close agreement that it seems evident they involve the same species. There are said to be two genera of palms on Lord Howe Island, so it cannot be said that *Howea forsteriana* and "palm from Lord Howe Island" are necessarily the same species, but combined with the evidence from the descriptions of the two species of scale insects it seems highly probable that they are.

The error made by Stickney in overlooking this species stemmed from the much more egregious error of the original assignment of this species to *Fiorinia*.



Mycococcus coperniciae, new species

Figure 1



Colobopyga coperniciae, new species

Figure 2