

It is of interest to observe (as will be brought out in more detail in another note) that the above theory of interruptions accounts for the polarization of resonance radiation in weak magnetic fields in a more satisfactory manner than the classical resonator.⁷

ENTOMOLOGY.—*New mosquitoes from Brazil (Diptera, Culicidae).*
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Dr. J. Bequaert has placed before us for determination a collection of mosquitoes recently made in Brazil, chiefly in the State of Amazonas. Among a number of interesting species collected, the following are hitherto undescribed.

Sabethoides glaucodaemon, new species.

Of usual size in the genus, largely purplish black; proboscis extending well beyond the antennae, slightly longer than the abdomen; palpi small, slightly longer than the two basal flagellar joints; eyes contiguous on lower side of head for a greater distance than they are above; prothoracic lobes contiguous above, their scales overlapping; rather numerous setae on anterior margin; mesonotum with setae only above roots of wings and a few on anterior margin; spiracular sclerite with three setae; propleura with two setae; sternopleura without setae; a small but dense tuft of long setae on upper posterior corner of mesepimeron; pleurae with dense white scales below; trochanters and base of femora yellow, the under sides of the femora white scaled basally along the entire length of the posterior pair; abdomen compressed laterally, dark scaled on upper half, yellowish white scaled below, the colors divided in a straight line, though the white is illy contrasted in certain lights. Wings normal, basal cross-vein opposite the anterior cross-vein; roots of halteres yellow, stem and knob blackish; mid tarsi white scaled below on last four joints except narrowly at base of second.

Type, female, no. 27744, U. S. Nat. Mus.; near San Alberto, Rio Branco, Amazonas, Brazil, August 28, 1924 (*J. Bequaert*).

Nearest related to *imperfectus* B.-W. & B., differing chiefly in the slightly longer proboscis, and from both this and *chloropterus* Humb. in the coloration of the abdomen.

Culex (Choeroporpa) bequaerti, new species

Rather small dark brown species; occiput with erect forked scales, all the recumbent scales broad, mostly white in front, a patch of black ones on each side of the middle; antennae fairly long, exceeding length of proboscis, which is about equal to the length of abdomen; integument of mesonotum very dark brown, scutellum somewhat paler; scales narrow, dark brown; dorsal setae sparse but well developed; a row of pronotal setae; pleurae yellowish,

⁷ In such a way we may think of the field caused by virtual oscillators as virtual in the sense that it carries energy away only statistically but does not necessarily produce damping of the motions induced in the virtual oscillator by the exciting field.

prealar setae about seven, a row of fairly strong setae along posterior margin of sternopleura, a little weaker below; a single lower mesepimeral seta; legs entirely dark, except for paler ventral surfaces of femora; abdomen dark brown, with whitish scales on ventral surface at bases of segments; wing scales broad subcostally, those on base of fork of second vein narrowly ovate to ligulate; halteres pale, the knobs dark.

Male: palpi exceeding the proboscis by nearly the length of the last two joints, the penultimate joint with a small whitish ring at base, otherwise dark. Scales of mesonotum deep bronzy brown; three pronotal setae, broken in the female type.

Hypopygium.—Side piece a little longer than hemispherical; inner division of lobe strong, running far into the side piece, with an infuscated patch basally, columnar, long, exceeding the outer lobe, with two strong long hooked and distorted filaments at tip, one inserted basally of the other; outer division small, with four stout rod-like filaments on the oblique outer aspect and a small rounded leaf basally of them. Clasper slenderly snout-shaped, the spine appendiculate. Tenth sternites comb-shaped, with six teeth, enlarged at base, with only a rudiment of basal projection; first plate of mesosome normal, the articulated plate rather narrow, emarginate on one side; second plate curved, tip furcate, the arms short, inner pointed, outer smooth, a long strong horn a little beyond the middle of the stem; basal hooks slender, strongly recurved, not projecting at base; ninth tergites conically pointed, small, setose, connected by a chitinous band.

Type, male, paratype, female, no. 27745, U. S. Nat. Mus.; male, Sororoca, Rio Branco, Amazonas, Brazil, September 1, 1924; female, Carmo, with other data the same (*J. Bequaert*).

The preceding description was written before we had an opportunity of examining Miss A. M. Evans' recent paper¹ describing new *Choeroporpa* from Brazil. Of the species there described *C. (C.) thomasi* Evans comes nearest to the present form. The mesosomal plate in the two is much the same. The comb of the tenth sternite of *thomasi* appears abnormal in Miss Evans' figure; in *bequaerti* it consists of seven long equal teeth. The inner division of the lobe of the side piece has a longer stem in *bequaerti* than in *thomasi*, the distance between the insertion of the two filaments being less than the remaining basal part of the stem, whereas in the figure of *thomasi* the reverse is the case. The outer division of the lobe of the side piece is differently formed, having no inner limb in *bequaerti* and the leaf is inserted on the stem basally of the other filaments, whereas in *thomasi* it arises between the limb and the outer setal group.

***Culex (Choeroporpa) albinensis* Bonne-Wepster & Bonne**

Culex (Choeroporpa) albinensis Bonne-Wepster & Bonne, Ins. Ins. Mens. 7: 173. 1920.

Culex (Choeroporpa) albinensis Dyar, Ins. Ins. Mens. 8: 62. 1920.

Culex (Choeroporpa) gordonii Evans, Ann. Trop. Med. & Par. 18: 369. 1924.

No difference is apparent between Miss Evans' detailed figures of the

¹ Ann. Trop. Med. and Par. 18: 363-375. 1924.

hypopygium of *gordoni* and the characters of *albinensis* in a slide before us. The distribution of the species includes Paramaribo, Surinam, and Manáos, Brazil.

Mansonia indubitans, new species

Basal antennal joints as dark as rest of antennae; antenna somewhat shorter than length of proboscis; palpi as long as four basal flagellar joints; proboscis on basal two-fifths with pale and dark scales intermixed, a rather broad white ring a little beyond middle, beyond blackish, paler at apex; mesonotum dark brown, setae normal, sparse small narrow golden scales intermixed, with long dark scales on the sides posteriorly; a number of pronotal setae; postspiracular setae present; sterno-pleural on posterior margin with one long stout seta midway and smaller setae on either side, mesepimeron with three setae near anterior margin; femora and tibiae with dark and light scales intermixed; hind tibiae darker; first tarsal joint without basal or apical ring, but with scattered white scales on inner surface; second and third tarsal joints white basally, also the fourth joint of mid and hind tarsi, remainder dark; wings dark scaled with numerous white ones intermixed, all broad; abdomen dark, with triangular patch of white scales on first segment, apex directed forward, the venter with numerous broad white scales intermixed. Knobs of halteres dark brown.

Type, female, paratypes, three females, no. 27746, U. S. Nat. Mus.; Belem, Para, September 19, 1924; Carmo, Rio Branco, Amazonas, August 31, 1924; above Santarem, July 22, 1924, Itacoatiara, Amazon River, September 15, 1924 (*J. Bequaert*).

Similar to *titillans* Walker, the palpi shorter, and with slight differences in coloration as indicated above.

Anopheles celidopus, new species

Medium size, grayish in general appearance; occiput with erect truncate white scales above, dark brown below, white setae and scales between eyes; antenna shorter than palpus, scales only on the basal flagellar joint; palpus but little shorter than proboscis, with outstanding dark brown scales, a few white ones at apices of second and third joints; prothoracic lobes with tuft of scales above; mesonotum with pale curved hairs sparsely distributed, a little denser anteriorly and darker on the sides; pleura with two indefinite pale pollinose lines; legs dark with narrow white rings at apices and bases of all but the last tarsal joints; abdomen dark, with sparse dark hairs, a few white scales on the dorsum of the last segment, and many dark and white scales on the venter of this segment; cerci densely scaled, mostly dark; wings with eight more or less definite white spots on anterior margin, and numerous other small white spots irregularly distributed over the wing; wing scales lanceolate; knobs of halteres dark.

Type, female, paratypes, four females, no. 27747, U. S. Nat. Mus.; Carmo, Rio Branco, Amazonas, Brazil, September 1, 1924 (*J. Bequaert*).

This species does not fit well into any of the existing groups of *Anopheles*. It comes nearest to *Arribalzagia*, but lacks the lateral scale tufts of the abdomen.