

On larval characters they group thus :

- Anal segment with the plate separated ventrally; upper head hairs  
 3-5, lower, 2-4.....*aboriginis* Dyar  
 Anal segment ringed by the plate; head-hairs single or double,  
*punctor* Kirby, *hexodontus* Dyar, *cyclocerculus* Dyar, *leuconotips*  
 Dyar

The specific localities for *Culiseta impatiens* Walk. and *C. incidens* Thom. have been included under the heading of the Canadian Fauna. In the southern part of the Coast Region there is an intrusion of *Culex tarsalis* Coq., *Culex saxatilis* Grossb. and *Aedes palustris* Dyar (Royal Oak, British Columbia, April, 1917, R. C. Treherne, through Dr. C. G. Hewitt), of *Aedes astivalis* Dyar (Nanoose Bay, British Columbia, August 1, 1903, J. Fletcher), of *Aedes varipalpus* in tree holes, and of *Aedes curriei* Coq. as a salt-marsh breeder, besides *Anopheles* sp. (Ins. Ins. Mens., v, 102, 1917), but these species are not found farther north in the typically rainy belt. The specimen which I recorded from the Olympics (Ins. Ins. Mens., v, 98, 1917) as *increpitus* (?) seems on reëxamination to be certainly *palustris*; but there remains the large red *alopnotum* Dyar, about which nothing positive can be said until males and larvæ are at hand.

## A SECOND CULEX OF THE SUBGENUS TRANSCULICIA DYAR

(*Diptera, Culicidæ*)

By HARRISON G. DYAR

*Culex* (*Transculicia*) *petersoni*, new species.

Male. Proboscis with a broad whitish ring beyond the middle. Palpi slightly exceeding the proboscis, with small white rings at the bases of the joints and the middle of the long joint. Femora with whitish tip, the tarsal joints narrowly dull white at bases and apices. Abdomen with basal segmental whitish bands, widening at the sides; venter white, with some black scales at the tips of the segments toward the base. Pleura pale, with six brown spots. Antennæ plumose,

the short joints white, with black rings, the last two joints long and dark. Front tarsi with one large and one smaller claw, each with a tooth; hind small, equal and simple.

Genitalia. Side pieces large and stout, about twice as long as wide, a large excavation at base reaching beyond the middle. At the apex of this a stout lobe, bearing at tip two very stout blade-like short spines, and on the side a patch of about six short setæ, one of which is longer and stouter than the others. A small dense patch of setæ at base of lobe and another midway between it and the tip; apex rather densely haired. Clasp-filament stout, bent near base. Harpes rather weakly chitinized, with a basal arm, the tip densely spinose; unci showing four plates, the first triangular, slender, well chitinized; second short, thick, curved outward at tip, lamellate, the margin serrate, very strongly chitinized; third long, tooth-like; fourth short, with an outwardly directed point at tip. No basal appendages; no scales.

Female. All the specimens have been badly handled and are practically denuded. Mesonotum apparently with narrow curved light bronzy brown scales. Proboscis with a broad white ring a little beyond the middle, as in the male. Tarsal rings small, yellowish white. Abdomen with narrow basal segmental white bands.

Type, male, No. 22689, U. S. Nat. Mus.

Three males and six females, St. Thomas and St. John, Virgin Islands (Dr. E. Peterson), sent under transmission numbers St. J.-12 and D-1.

In reply to inquiry, Doctor Peterson writes: "The larvæ of St. J.-12 were caught in a large pond very near the seashore at Leinster Bay, St. John, Virgin Islands of the U. S., on the 22nd of October, 1919, and the adults emerged on the 26th October, 1919. This pond through the present rainy season constitutes for all practical purposes a fresh water pond. It is a very shallow pond, which during high tide will receive the tide water.

"The larvæ of D-1 were caught in fresh water pools in the upper part of Dominigade Gut, so called, St. Thomas. The

pools in said gut are continuously supplied with water from a well on the hill-side. These pools contain algæ. The larvæ of D-1 were caught on October 26, 1919, and the adults emerged on November 1, 1919."

Larvæ from Leinster Bay, from which typical *petersoni* were bred, although not isolated, are as follows:

Head rounded, flat, about as broad as long; antennæ moderate, a large tuft at the outer fourth, the part beyond it slender; head-hairs fine and pale, in tufts of about four each. Lateral comb of the eighth segment a patch of about 30 small remote spines with narrowly expanded feathered tips. Air-tube about five times as long as wide, thick and nearly uniform, finely pilose, especially toward tip; pecten of about ten teeth, the outer ones widely separated, and reaching beyond the basal third of the tube; eight large hair-tufts along the posterior margin of the tube, the basal one well within the pecten and the second nearly so, the last one being subapical; tracheæ in the tube broad and straight. Anal segment slender, with a small dorsal chitinous saddle. Anal gills only two, short, sac-like, firm and yellowish.

### *Culex* (*Transculicia*) *bahamensis* Dyar & Knab.

*Culex bahamensis* Dyar & Knab, Journ. N. Y. Ent. Soc., xiv, 206, 1906.

*Culex bahamensis* Howard, Dyar & Knab, Mosq. N. & Cent. Am. & W. I., ii, pl. 107, fig. 359, 1912.

*Culex bahamensis* Howard, Dyar & Knab, Mosq. N. & Cent. Am. & W. I., iii, 300, 1915.

*Culex* (*Transculicia*) *eleuthera* Dyar, Ins. Ins. Mens., v, 184, 1917.

*Culex* (*Transculicia*) *eleuthera* Dyar, Ins. Ins. Mens., vi, 100, 1918.

From the close similarity of the larva of *petersoni*, just described, with *Culex bahamensis* D. & K., hitherto known only as larva, it is evident that *eleuthera* Dyar is the adult of *bahamensis* larva, and that the above synonymy will obtain.