TWO NEW SPECIES OF TELENOMUS. BY A. ARSENE GIRAULT, WASHINGTON, D. C.

1. Telenomus quaintancei species novem.

Female.—

Shining black; length, 0.60 mm. trochanters, knees, distal tips of tibiae, and tarsi, brownish-yellow; basal and distal joints of tarsi darker, the latter sometimes nearly black.

Head slightly wider than mesothorax, much wider than prothorax, from dorsal aspect twice as wide as thick (cephalo-caudad), shagreened; face to cephalic ocellus glabrous, excepting the portions bordering the inner margins of the eyes which are hairy; head triangulate, cephalic aspect hairy; eyes hairy and very dark red, ocelli inconspicuous, reddish, the lateral ocelli close to, but not touching, the margin of the eye.

Thorax rather stout, slightly longer than abdomen, sculpture similar to that of the head, the dorsum with rather dense whitish pubescence. Mesothorax flattened dorsad, with a deep conspicuous smooth femoral furrow on its side. Scutellum smooth, hairy, striate at outer edges.

Abdomen smooth, polished, first and second segments, at base, strongly, longitudinally striate, the striations of the second segment not present near the lateral margin of that segment; second segment by far the largest, one-third wider than long; hairs sparse, whitish, in lateral rows at incisions; anal segment truncate. Abdomen depressed.

Wings hyaline, venation yellowish, the marginal vein more than half the length of the shaft of the stigmal; postmarginal vein sub-equal in length to the marginal and submarginal veins combined, or slightly shorter. Shaft of the stigma thick.

Antennae 11-jointed, uniformly pubescent, black; scape at basal constriction and at tip, and the tip of the pedicel, pale. Antennae more gradually clavate than usual, the club, however, distinct.

Scape long, subclavate, constricted at basal one-fourth and narrowed somewhat at tip; longer than the four joints following. Pedicel oval, much longer and thicker than the first funicle joint. Funicle joints 1, 2, and 3 moniliform,

slightly longer than wide, equal, about half the length of the pedicel; 4, wider. Club 5-jointed, the basal joint somewhat rounded, but much wider and slightly longer than joint 4 of the funicle, wider than the scape, and narrower than joint 2 of the club; club joints 2, 3 and 4 equal, 2 slightly smaller, all nearly twice as large as joint 1 of the club, quadrate; the distal joint, or 5, conic, its base slightly narrower than joint 4 of the club, but wider than the pedicel, and about equal to the pedicel in length, though much stouter. Antennae shorter than the body.

From six specimens.

The same. Length, 0.68 mm., legs and antennae lighter in color; body more slender. Abdomen oval. Mandibles dark brown, tridentate at tip.

Antennae 12-jointed, filiform, the pubescence stiffer. Scape long, cylindrical, curved, more pale at the tip than in the female, nearly as long as the next five joints combined. Pedicel small, rounded, subcuneate. Joint 1 of the funicle longer than the pedicel by one-half, ovate; funicle joints 2 and 3 sub-equal, oval, twice as long as the pedicel and about one-third longer than the first funicle joint; funicle joints 4 and 1 subequal; joints 5, 6, 7, 8 and 9 of funicle equal, subequal to funicle joint 4, but slightly smaller. Club joint acutely conical, twice longer than the preceding joint, or joint 9 of the funicle. Joints of the funicle very slightly pedicellate. Antennae about equal in length to the body.

Sixteen specimens; ten males, six females.

Female very near to *Telenomus graptae* Howard, female, but the males of the two species are quite distinct. In the female of *quaintancei*, the legs are much darker than those of *graptae*, and the antennae are wholly black, and have a much better defined club. The male differs from the male of *graptae*, by having black antennae and legs, and in the relative lengths of the club and joint 2 of the funicle.

Bred from the eggs of Sanninoidea exitiosa Say, on peach, Odenton, Maryland, September 1st to 8th, 1905, in connection with Deciduous Fruit-insect Investigations, Bureau of Entomology, U. S. Department of Agriculture. Apparently common.

The species is respectfully dedicated to Professor A. L. Quaintance. Type:—No. 9098, United States National Museum.

2. Telenomus perplexus species novem.

Female.—

Shining black, length, 1.18 mm.; legs, excepting anterior coxae, yellowish brown; pedicel concolorous with scape, darker basally.

Head slightly wider than thorax, polished, shagreened along the inner margins of the eyes and on vertex. Eyes and ocelli normal, the former naked.

Thorax slightly longer than the abdomen; mesothorax minutely punctate, pubescent.

Abdomen short, subcuneate (dorsal aspect), the anal segment truncate; the second segment slightly longer than wide; first and second segments, at base, strongly, longitudinally striate; remaining segments polished. Wings hyaline, venation pale yellowish.

Antennae 11-jointed. Scape long, longer than the next three joints combined. Pedicel equal to, or slightly shorter than, the first funicle joint, but thicker; ovate. Joint 1 of funicle cylindrical, much longer than the following joints, twice the length of joint 3 of the funicle; funicle joints 2, 3 and 4 subequal, 3 and 4 equal, 2 slightly longer, all moniliform. Club 5-jointed, its basal joint transverse, about equal in length to joint 4 of the funicle, or slightly longer; club joints 2, 3 and 4 subequal, varying slightly in width, 3 the widest, all much wider than the other antennal joints; the distal antennal joint, or club joint 5, conic, acute, about as long as each of the three preceding joints of the club.

From two specimens.

Male.-

The same. Length, 1.15 mm. Antennae 12-jointed. Scape paler yellow; antennal joints 2, 3 and 4 with some yellow.

Scape short, about as long as pedicel and first funicle joint combined. Pedicel short, subcuneate, about half the length of the first funicle joint. The latter cylindrical, equal to, or slightly longer than, joint 2 of the funicle; funicle joint 3 thicker and shorter; funicle joints 4, 5, 6, 7, 8 and 9 moniliform, equal, much shorter than joint 3 of funicle, and less than half as long as funicle joint.

1. The club pointed cylindrical, nearly twice longer than the joints immediately preceding, and about equal to joint 3 of the funicle in length.

From one specimen.

Three specimens; I male, 2 females.

Bred from the eggs of *Brochymena* species on Currant, received from Miss May Beattie, Zanesville, Ohio, July 20th, 1905, in connection with Deciduous Fruit-insect Investigations, Bureau of Entomology, United States Department of Agriculture.

Type:—No. 9039, United States National Museum.