NORTH AMERICAN THYSANURA.

BY ALEX. D. MACGILLIVRAY, ITHACA, N. Y.

Smynthurus spinatus, n. sp.

Olive. Head tinted with purple, lighter on the sides, olive around the mouth and eyes; coarsely and sparsely punctuate, punctures light olive each bearing a white hair. Antennæ purplish, basal joint lighter, as long as the body; apical segment with from seventeen to twenty subsegments. Abdomen fuscous with lighter spots; the apical part with an olivaceous cloud, the remainder fuscous with whitish or olivaceous blotches; on the middle of the back a number of groups of circular white spots, and on the posterior part of each side a row of white spots, varying from four to ten. Underneath olive. Anal papillæ large, distinct, with numerous bristles; the upper part and the sides purplish or fuscous, the remainder olive with darker spots. Legs long and slender, purplish or fuscous, mottled with variously formed olive or whitish blotches; apex of the tibiæ and base of the larger claw blackish purple. Claws long and slender, inner claw indistinct; apex of the tibiæ with a few clubbed hairs. Spring long, broad and flat, reaching the mouth; second joint broad, each side with a row of long stiff bristles; bristles twice as long as the spring is broad; third joint long, broad, bluntly rounded.

Length, 2 mm. (.078 inch).

Habitat: Ithaca, New York.

A very variable species, in young specimens the back is pea-green, and in some specimens there is a broad olive band down the middle of the back. The color varies from pea-green to purplish and fuscous. Collected on the surface of standing water. The species can be easily recognized by the row of stiff hairs on each side of the spring. Smynthurus floridanus, n. sp.

Black, sides lighter, hairy. Head black, with lighter lines, mouth olive. Antennæ long, slender, as long as the body, basal joint black, remainder olive. Thorax and abdomen with a triangular black spot, the base of the triangle at the apex of the thorax and its apex at the apex of the abdomen. Sides of the abdomen olive mottled with light brown. Underneath olive. Anal papillæ with its front and upper part black, the remainder olive mottled with brown. At the median two-thirds of the back, a stout porrect spine; spine as broad at base and higher than anal papillæ; concolorous with the black triangle, except a small olive spot on each side. Legs slender, pale olive; inner claw two-thirds the length of