THREE NEW SPECIES OF ACUTITORNUS FROM THE KALAHARI

By A. J. T. JANSE D.Sc.

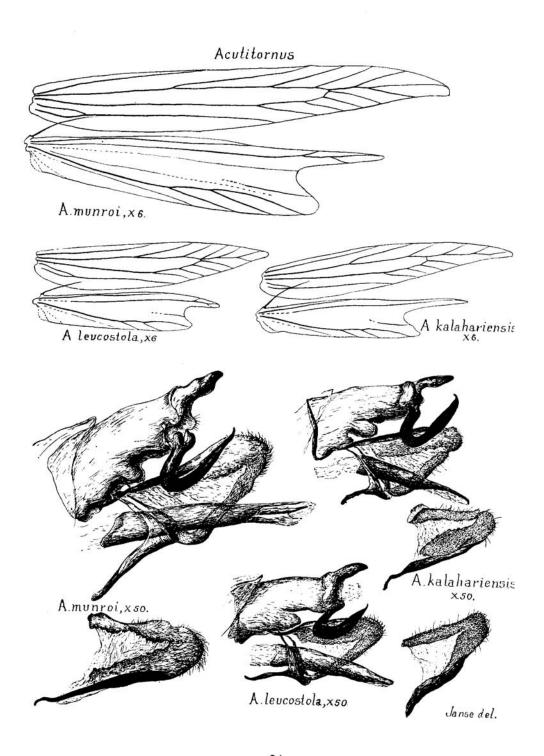
The generotype of Acutitornus Janse had its home in the Kalahari and South West Africa and it is interesting that now three more species belonging to this genus have been discovered in the same region. Probably these four species feed on a plant that occurs in semi-desert regions only and they may have a very interesting life history.

Though the palpi, the fringing of the scape and the peculiar shape of the hindwing are present in all four species, yet the venation of the forewing varies somewhat in minor points. In munroi M2 is free from the stalk, and in the hindwing R5 has an additional veinlet to the costa; in leucostola M2 is free from the stalk but R3 is shortly stalked while in kalahariensis the stalking of R3 is much longer. In the hindwing of leucostola the extra veinlet of R5 is present but absent in kalahariensis where also M1 is absent.

Unfortunately I have not seen females of any of the three new species but the males show very close relationship in their genitalia and those of munda.

ACUTITORNUS KALAHARIENSIS, species nov.

Head, antennae, palpi, thorax, abdomen, legs and forewing white; palpi fringed with white and drab hairs mixed, forming an anterior tuft on second joint; scape fringed with white hairs; hind tibiae fringed with whitish hairs above.



Forewing: apical half of wing sprinkled with drab scales, densest near the margins and darkest along the costa; cilia whitish.

Hindwing: white with a creamy tinge along the margins; cilia whitish.

Genitalia: tergite rather broad, well sclerotized, and with rounded lobes just above the joint with the valves; uncus rather narrow, spatulate, also well sclerotized; gnathos a large, stout hook of even width, ending in a curved point; sternite rather narrow, well sclerotized and with a narrow rather long saccus; valves triangular, broad and with the apex rounded, convex and with the costa and inner margin forming a broad fold inwardly; aedoeagus long, of even width, tapering at terminal half to a blunt point.

Unfortunately only one specimen is collected so far but it is quite distinct from munda in wing marking and genitalia; the short stalking of R3 with the stalk is also a good character to distinguish it from worn specimens of munda.

Exp. 23 mm. Hab. Kalahari Gemsbok National Park, collected in May, 1956 at Grootkolk by Dr. H. K. Munro. One specimen only.

ACUTITORNUS LEUCOSTOLA, species nov.

Head, antennae, palpi, thorax, obdomen, legs and forewings white; patagia drab; second joint of palpi slightly sprinkled with fuscous; frontal tuft mainly white mixed with only a few drab hairs; hind tibiae fringed with whitish hairs.

Forewing: a very thin sprinkling of drab scales on the white background; along the apical part of the costa and along the termen minute patches of hairbrown scales between the veins; cilia white.

Hindwing: uniform light greyish olive; cilia concolorous, getting paler towards tip.

Genitalia: almost as in kalahariensis but the valves are smaller, more broadly rounded at tip and the margins with broader folds; the gnathos is more stout, shorter and tapers more suddenly to a point; aedoeagus a little shorter.

Exp. 20 mm. Hab. Kalahari Gemsbok National Park, collected at Twee Rivieren in May, 1956, by Dr. H. K. Munro. Only one specimen.

ACUTITORNUS MUNROI, species nov.

Frons white with hairbrown scales at the edges; epicranium hairbrown with white scales mixed; palpi white, second joint with a long pointed tuft of white and hairbrown hair-like scales, terminal joint slightly fringed anteriorly with narrow scales; antennae white, over three-fourths of costa, scape hair-brown anteriorly, white posteriorly and fringed with long white hairs; thorax

and tegulae hairbrown mixed with a few white, hair-like scales; abdomen in all the five specimens rather greasy but on the posterior edge of each segment are white scales; legs white; hind tibiae fringed with long white hairs above.

Forewing: ground-colour hairbrown, evenly covered with white hair-like scales; no maculae or fasciae; cilia composed of whitish and drab hairs mixed.

Hindwing: glossy light drab, evenly covered with white scales and hairs; cilia light drab becoming whitish towards tips.

Genitalia: similar to those of kalahariensis but gnathos with the terminal half more slender; aedoeagus in proportion longer, at the tip an elongate sclerotized portion which might be taken for a cornutus but which, I think, is part of the tip of the aedoeagus which became detached in the preparation for none of the other three species show a trace of it; saccus in proportion longer than in the other species; the valves are similar in structure to the other two species. As this species is about double the size of leucostola one would expect the genitalia to be in the same proportion larger, but they are relatively smaller than in the other two species.

I have much pleasure in naming this interesting species after its captor.

Exp. 39-42 mm. Hab. Kalahari Gemsbok National Park; collected at Twee Rivieren in May, 1956, by Dr. H. K. Munro. Five specimens, all males.