台灣昆蟲Formosan Entomol. 3: 119-122 (1983)

【Research report】

臺灣果實蠅科之一新種-臺灣長角果實蠅【研究報告】

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Received: Accepted: Available online: 1983/09/01

Abstract

摘要

長角果實蠅屬 (Callantra) · 臺灣之記錄有二種 · 一為apicalis · 另一為esakii · 本種是臺灣新發現之種類 · 其與世界所有長角果實蠅不同處乃是本種翅之前緣帶(cost band)寬 · 低緣呈波浪狀及緊接著觸角窩之下方 · 有一大呈四方型之黑斑 ·

Key words:

關鍵詞:

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A NEW FRUIT FLY CALLANTRA FORMOSANA FROM TAIWAN (TEPHRITIDAE, DIPTERA)

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ABSTRACT

A new species Callantra formosana is described and illustrated. This new species is commonly found in whole Taiwan; the elevated distribution to be recorded by authors from 300 m to 2400 m.

INTRODUCTION

Callantra apicalis (Shiraki) and Callantra esakii Shiraki are the only two species of this genus which have been previously recorded from Taiwan. A species on hand from Taiwan appears to represent on undescribed species. We are describing it in this paper.

This genus composed of approximately 40 known species, is apparently confined to the Oriental and Pacific regions. The species belonging to this genus are characterized by the wasp-like abdomen, strongly clavate and petiolate, which bears a prominent hump on each side of the first segment; slender antennae, the second and third segments combined are about equal to the vertical length of the head, and the length of the entire antenna is greater than the combined lengths of the fron and the face, the first antennal segment is equal in length to the second and at least half as long as the face.

CALLANTRA FORMOSANA NEW SPECIES

This species is easily distinguished another species of genus Callantra Walker by having costal band broad, wave-like in lower margin; face with three shining black facial spots, 2 are oval, located on the antennal groove, one of which nearly rectangular, just placed below antennal fovae.

3 is predominately dark-brown species.

Head. Brownish. Face distinctly wider than long with three shining black facial spots, 2 are oval, located on the antennal groove, one of which nearly rectangular, just placed below antennal fovae; eye margin is yellow to pale brown, antennal grove and antennal fovae are brown, epistoma brown and is black in upper side, Front slightly longer than wide, approximately 1/3 as wide as head in upper side; which is brown to dark brown from lunula to one-third area, the remaning area is dark brown except for a prominent polished black spot in each base of bristle; ocellar triangle shining black; lunula dark brown; 2 pairs of inferior fronto-orbital bristles of which the below one is distinctly thicker than uppers, 1 pair of superior fronto-orbital bristles is longer than inferior fronto-orbital bristle, 2 pairs of strongly vertical bristles and with short and blackish occiptal bristles. Antennal dark brown; 1st segment approximately as long as 2nd segment, 3rd segment slightly longer than 2nd segment, 2nd segment covered by rather long whitish hair; arista bare, black except the base portion is pale brown. which is slightly longer than 3rd segment. Genal

bristle lacking, not differentiatable from the fine hair on genae. Labella brown, densely haired.

Thorax polished black, except for the following yellow marking: humeral calli, praesuture calli, median postsuture calli, mesopleural spot. Bristles are black: 1 scapular bristle, 2 notopleural bristles, 2 postalar bristle, of these the anteriors longer than posteriors, 1 supraalar bristle. Scutellum triangular, pale brown, with dark brown band across the anterior margin, one pair of scutellar bristles. Halteres pale yellow. Legs: coxae and trochanters black; femora brown on base 1/3 to 1/2, darkbrown on the remaining area; tibiae pale brown, midibia with a strong and 3 rather short spine like bristles are on the apical of segment; tarsi pale brown, except 1st segment on tarsus I is yellow. Wings nearly triangular, 2.5 times as long as wide; vein R_{1+2} and R_{4+5} are setose; R_3 bare, near straight; R_{4+5} undulated; M_{3+4} is rudimentary in apical portion; the r-m cross vein is situated apical 2/3 of cell IM_2 ; subcostal cell slightly longer than 2nd costal cell; cell M rather narrow, which is approximately 3 times as long as wide; cubital lobe about 3 times as long as $Cu_1 + 1$ st A; costal band dark brown, broad, which extends through R_{4+5} and filling 2/3 of cell R and half of cell R^5 , lower margin waved; the upper angle of cell An is pale brown.

Abdomen: largely shining black covered with short yellow hair, tinged with long white hair; 1st tergun with a narrow brownish band across the posterior margin; 2nd tergun with rather broad brownish band across the apical portion; 3rd tergun with a cilitation of bristle like hairs on each p9 sterior side, a moderated large median brown spot on the apex; 4th tergite approximately 1.5 as long as 3rd tergun, median with a large brown spot which connects the narrow apical brown band; 5th tergun with a median brownish spot. The genitalia shown as figure.

o unknown.

Collection data: Holotype, &, Paulei, Kaoshiung Hsien (cs. 350 m) ex Cuelure attractant, 31-XI-1978 (Y. H. Tseng). Paratype, 2 &, the same data as for holotype. 5 &, Tsufeng, Nantou Hsien (2400 m), Meifeng, Nantou Hsien (2100 m), ex Cuelure attractant, 17-IV-1978; 12 &, Wusha, Nantou Hsien (1200 m), 17-IV-1978; 6 &, Puli, Nantou Hsien (600 m), ex Cuelure attractant, 19-IV-1978 (Y. H. Tseng); 2 &, Alishan (2100 m), Chiayi Hsien, ex Cuelure attractant, 25-X-1978; 7 &, Fenchihu, Chiayi Hsien, ex Cuelure attractant, 28-X-1978. Ty0e materials will be deposited in Plant Quarantine Laboratory, Tainan Branch Office, Bureau of Commodity Inspection and Quarantine, Ministry of Economic Affairs.

ACKNOWLEDGEMENT

The authors wish express their sincere thank to Dr. D. Elmo Hardy, Sr. Professor & Sr. Entomologist, University of Hawaii at Manoa for his kindly assistance, provides information ad reading this manuscript.

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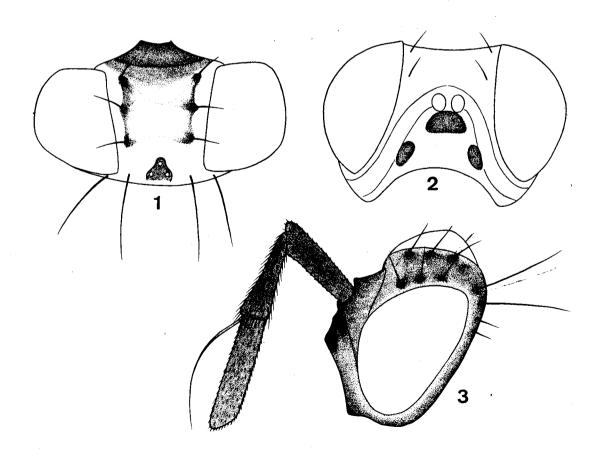
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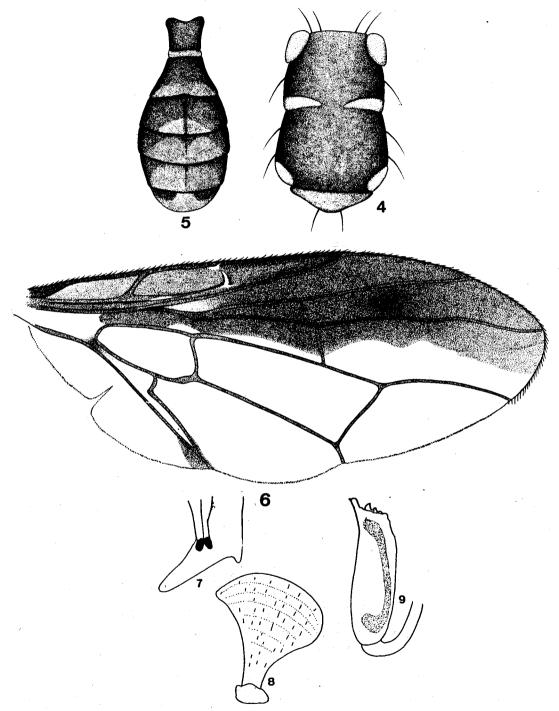
臺灣果實蠅科之一新種一臺灣長角果實蠅

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長角果實蠅屬 (Callantra) ,臺灣之記錄有二種,一爲 apicalis,另一爲 esakii。本種是臺灣新發現之種類,其與世界所有長角果實蠅屬不同處乃是本種翅之前緣帶 (costal band) 寬,低緣呈波浪狀及緊接著觸角窩之下方,有一大呈四方型之黑斑。





Figs. 1-9 Callantra formosana n. sp. &

1. Front. 2. Face. 3. Lateral view of head and antenna. 4. Mesonotum. 5. Abodomen. 6. Wing. 7. Surstylus. 8-9. Genitalia.