Harpedona marginata Distant (Hemiptera: Miridae), a new pest of Discorea in Taiwan

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ABSTRACT


Harpedona marginata Distant was recently found causing damage of Discorea in Taiwan in early October, 2000, and is now believed to be a major pest in the farm of Discorea. This note focuses on the taxonomic and morphological description of this pest species, Redescription in more detail of external morphology, pictures of male and female both dorsal and ventral view, and SEM pictures are given in order to assist for further diagnosis of this pest species.

(Key words: Harpedona marginata, Miridae, Discorea, new record)

INTRODUCTION

Harpedona Distant 1904 can be identified by the following characteristics: "Body short, elongate, densely pilose, smooth. Head wider than long, frons prominent, vertex flat, immarginate; eyes contiguous to pronotum; antenna with segment I about as long as width of vertex, segment II twice as long as I, segments III-IV slender, pubescence short; rostrum reaching the hind coxae. Pronotum with large and wide calli, fused at middle where there is a deep pit, reaching lateral margins of disc, collar distinct, well separated from collar, hind margin of disc convex; scutellum flat, impressed at base; mesocutum covered. Hemelytra with parallel sides, embolium narrow, cuneus slightly longer than wide at base; membrane short, areola large, with apical angle well defined. Legs short, pilose, femora with long and erect ventral setae.(1).

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Fig. 1. A. Dorsal view of male. B. Ventral view of male. C. Dorsal view of female. D. Ventral view of female.
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detail of external morphology, pictures of
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Descriptions

_Harpedona marginata_ Distant, 1904

_Harpedona marginata_ Distant, Fau. 
Brit.Ind. Rhync. 2:419; id. Carvalho, Acq. 
Mus. Nac. R. Jan. 44: 105,1957

Materials examined

Nantou: Minchien, X-3-2000, C. C. 
Chen, 2 ♀ ♂ 4 ♀ ♂.

Male

Head and body black. First antennal
segment dark fuscous, second segment black,
the remaining joints dark fuscous. Hemelytra
dark fuscous, cuneus dark fuscous with
brownish area. Membrane translucent
fuscous. Underside of body dark fuscous,
rostrum brown, with terminal end dark
brown. Coxae and legs yellowish brown,
tibia dark brown, with pretarsus dark
fuscous.

Body short, elongate, densely pilose,
smooth. Head wider than long, frons
prominent, vertex flat, immarginate; eyes
contiguous to pronotum; antenna with
segment I about as long as width of vertex,
segment II twice as long as I, segments
III-IV slender, pubescence short; rostrum
reaching the hind coxae. Pronotum with
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of disc, collar distinct, hind margin of disc
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mesocutum covered. Hemelytra with parallel
sides, embolium narrow, cuneus slightly
longer than wide at base; membrane short,
areola large, with apical angle well defined.
Legs short, pilose, femora with long and
erect ventral setae.

Genitalia: Pygophore with long, curved,
and spine-like projection. Left paramere long
and curved. Right paramere enlarged and
with bilobed apex.

Female

Very similar to male, except first
antennal segment yellowish brown.

Measurement (in mm):

Head length 0.3, width 0.75, interocular
length 0.4; antennal segment length 0.3, 0.8,
0.5, 0.5; rostrum length 0.9. Pronotal length
0.75, width 0.6, claval commissure length
0.6. Scutellum length 0.45, width 0.45,
cuneus length 0.4, width at base 0.25, cuneus
apex to membrane apex 0.6, basal width 1.1,
body length 3.6.

Host plant:

_Discorea_ sp. (Dioscoreaceae).

Distribution:

Taiwan (New record); Sri-Lanka,
Manus Island(1), China.

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Fig. 2. E. Dorsal view of male pronotum. F. Ventral view of male genitalia. G. Ventral view of pro-femur. H. Ventral close view of pro-femur.

LITERATURE CITED