Two new species of the tribe Hydrotaeini from Indonesia
(Diptera: Muscidae)

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Abstract: Two new species belonging to the tribe Hydrotaeini, genus Muscina
Robineau-Desvoidy and Hydrotaea Robineau-Desvoidy, are described from Indonesia.
They are Muscina sumatrensis sp. nov. and Hydrotaea kanoi sp. nov.

INTRODUCTION

Muscina Robineau-Desvoidy is a small genus, containing only 7 species from the
Palaearctic region (Pont, 1986). Among them, six species are also distributed in the
Oriental region except M. minor (Portschinsky, 1881) (Pont, 1977). During the
course of our studies on Indonesian muscid flies, we found a new Muscina-species
from Sumatra.

Hydrotaea Robineau-Desvoidy is a rather large genus including about 50 species
from the Palaearctic and 18 species from the Oriental regions. Sabrosky (1949) re-
ported 8 species belonging to Ophyra Robineau-Desvoidy which was considered to
be a synonym of genus Hydrotaea R.-D. (Pont, 1986) from the Pacific region. Only
a species, O. aenesens (Wiedemann, 1830), is known to have yellow palpi and to be
found in Hawaii Islands and the South Pacific area, but it is not a Oriental species.
We found the present new species which seems to belonging to Hydrotaea and have
characteristic yellowish palpi and abdo-
men.

In the present paper, we describe these two new species with illustrations of male
genitalia and photographs.

The holotypes are deposited in National Science Museum, Tokyo and paratypes in
the Puslitbang Biologi, Komplek LIPI,
National History Museum, London; Bishop
Museum, Honolulu; Obihiro University of
Veterinary Agriculture and medicine, Obi-
hiro and Reference Museum, National In-
stitute of Infectious Diseases, Tokyo.

Muscina sumatrensis sp. nov.
(Figs. 1–4, 9–11)

Male. Body length 6.0–6.5 mm.

Head. Eyes bare, upper 2/3 of facets of
compound eyes enlarged; frons narrow,
about 0.05 of head width at narrowest
point and 0.1 at vertex; frontal vitta linear
on posterior part and triangular on anterior
part; parafrontals and parafacials black
with silvery pollen; about 10 ori present
on entire length of parafrontals, anterior
half inclinate and posterior half pro-
clinate; ors absent; antennae dark brown,
anterior part of 2nd and basal part of 3rd
segments reddish; length of 3rd segment
about 2 times that of the 2nd; arista black,
long plumose; palpi black.

Thorax. Scutum dark brown with gray-
ish dust and 4 dark longitudinal stripes; ac
2–3+2; dc 2+4; ia 0+2; prs 1; h 3; ph 1; nt
Figs. 9-11. *Muscina sumatrensis* sp. nov., 9. 5th sternite, ventral view; 10. Epandrium, cercus and surstylus, posterior view; 11. Ditto, lateral view.


2; pra present, about same length with 2nd nt; sa 2; pa 2; st 1+2; scut 2 laterals, 1 preapical and no discals; scutellum concolorous with scutum, apical part reddish; notopleuron with small setae around 2nd nt; hypopleuron bare; meso- and metathoracic spiracles dark brown, metathoracic spiracle with several setae on posteroventral margin.

Wings. Hyaline; veins brown, r₁ bare; basal node of r₂+r₃ and r₄+r₅ bare; m₁+m₂ slightly bending anteriorly near wing margin; m-m bending anteriorly; epaulet and basiconst dark brown; basicostal sclerite brown; upper and lower squamae whitish brown with white marginal cilia; lower squamae tongue shaped; halteres brown.

Legs. Black; f₁ with a pair of rows of pd, a row of pv; t₁ with 1 or 2 ad, without p-seta; f₂ with a row of al, av and pv on basal half, 2 preapical pd; t₂ with 3 p-setae; f₃ with a row of ad and av; t₃ with 1 ad, a row of short ad, 2 av, 1 pd.

Abdomen. Black with grayish pollen entirely; anterior part of 2nd segment without dust; 2nd to 5th tergites with dark median longitudinal stripes; sternites black.

Female. Body length 5.5–6.5 mm. Frons widely open, parallel sided, about 0.33 of head width; about 5 inclinate ori and 2 reclinate ors present; parafrontals with a row of short setae; other characters similar to those of the male.


Paratypes. 1 male, 2 females, same data as holotype.

Remarks. The present species is very close to M. angustifrons in external features, but differs from it by having dark tibiae and median longitudinal stripes on abdominal tergites.

Hydrotaea kanoi sp. nov.
(Figs. 5–8, 12–14)

Male. Body length 6.0–7.5 mm. Yellowish fly.

Head. Eyes large, sphaerical, bare; facets on anterior surface enlarged; frons narrow, linear, narrowest point narrower than the width of front ocellus; parafrontals and parafacials narrow, black shining, without dust; genae and face black, slightly covered with grayish pollen; frontal lunula light brown with silvery pollinosity; antennae brown, basal part of 3rd segment orange; length of 3rd segment about 3 times that of the 2nd; arista pubescent, dark brown, orange basally; palp dark brown, paler apically.

Thorax. Scutum, scutellum and pleura metallic black, slightly covered with white dust on anterior surface of scutum; ac 1+1; dc 2+4; ia 0+2; prs 1; h 2; ph 1; nt 2; pra absent; sa 1; pa 2; st 0–1 (fine) +1; scut 1–2 laterals, 1 preapical and 1 discal; meso- and metathoracic spiracles dark brown.

Wings. Hyaline, yellowish orange tinged, anterior surface more or less infuscated; veins light brown; r₁ bare; basal node of r₂+r₃ and r₄+r₅ bare; m₁+m₂ straight; m-m bending anteriorly on the middle; epaulet and basiconst brown; subcostal sclerite yellowish brown; upper and lower squamae yellowish brown with concolorous marginal cilia; lower squamae tongue shaped; halteres yellowish brown.

Legs. Black; f₁ with a rows of pd and pv; t₁ without p-seta; f₂ with a row of ad and av, a row of pv on basal half, 2 preapical pd; t₂ with 2 p-setae; f₃ with a row of ad, a row of long and strong bristles on distal 1/3 and sparse row of fine bristles on basal 2/3 of av surface; t₃ with 2 ad, a row of short ad, a row of long bristles on av, numerous short bristles on pd, without pd (calcar).

Abdomen. First + second and 3rd tergites and anterior half of 4th tergite yellow, posterior half of 4th and 5th tergites metallic black, without pollen entirely; 2nd to 4th sternites yellow, 5th tergite black.

Female. Body length 6.0–7.3 mm. Frons widely open, about 0.23 at narrowest point (antennal base) and 0.27–0.28 at widest point (vertex); fronal vitta black with grayish dust; parafrontals and para-
facials black shining, several inclinate ori, 1 procline and 2 reclinate ovs present; interfrontal cruciate bristles present; wing more or less infuscated on apical half; posterior half of 3rd, 4th and 5th abdominal tergites black shining; hind tibia with 3 normal av, without long and short bristles on ventral surface.


Remarks. This species is easily distinguished from other species belonging to the genus *Hydrotidae* by having yellowish abdominal tergites. The specific name of this species is dedicated to the late Dr. Rokuro Kano, Professor Emeritus, Tokyo Medical and Dental University, who planned Overseas Scientific Research Program in 1973.

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**References**

