Eleven new *Dichaetomyia* species from Indonesia (Diptera: Muscidae)

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Abstract: Eleven new *Dichaetomyia* species are described and figured based on the collection in an expedition to Indonesia by Tokyo Medical and Dental University in 1973. These are *D. celebesiensis* sp. nov., *D. noongensis* sp. nov., *D. makassarensis* sp. nov., *D. kairatuensis* sp. nov., *D. floresiensis* sp. nov., *D. berastagi* sp. nov., *D. ciliscutellaris* sp. nov., *D. maumerensis* sp. nov., *D. nigrisquama* sp. nov., *D. lalat* sp. nov. and *D. ventrosa* sp. nov.

Key words: Key words: Muscidae, *Dichaetomyia*, Indonesia, new species

INTRODUCTION

Shinonaga (2002) recorded 18 species of *Dichaetomyia* from Indonesia including 5 newly recorded species. In the present paper 11 new species belonging to the genus collected in an expedition to Indonesia by Tokyo Medical and Dental University in 1973 are described and figured. The holotypes are deposited in National Science Museum, Tokyo.

DESCRIPTIONS

*Dichaetomyia celebesiensis* sp. nov.
(Figs. 1–3)

**Male.** Body length 5.5–6.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, about half width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segments orange; arista brown, feathered; palpi black.

Thorax: Scutum and scutellum brown dark with grayish dust; humeral callus orange; ac 0 +1; dc 2+3; ia 0+1; prs 1; h 2; ph 1; nt 2; pra shorter than 2nd nt; sa 1; pa 1; st 1+2; scut 1 preapical and 2 lateral; scutellum without short setae or hairs under scutellar bristles; notopleuron with several short setae around posterior bristle; subalar knob brown; inflasquamal hairs present; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles dark brown.

Wings: Hyaline; slightly infuscate; r1 and r4+5 bare; m–m bending anteriorly; upper and lower squamae yellowish-brown with colorulous marginal cilia; halter yellowish-brown entirely.

Legs: Coxae and femora dark brown; tibiae brown; tarsi dark brown; f1 with a pair of rows of pd, a row of pv; t1 without p-seta; f2 with a sparse row of pv, 2 preapical ad, 3 preapical pd, 3 or 4 av on basal 1/3; t2 with 2 p; f3 with a row of ad and av, sparse row of pv; t3 with 1 ad, 1 pd, 2 av.

Abdomen: Second tergite orange; anterior half of 3rd tergite orange, posterior part dark brown; 4th tergite dark brown; 5th tergite dark brown, posterior 1/3 orange; genitalia as shown in figures 2 and 3.

**Female.** Unknown.

Holotype. ♂, Noongan, 50 km S. of Menado, 120 m, 2–10 Dec. 1973, H. Kurashashi.

Paratypes. 17♂, 1 ♀, same data as holotype.

Remarks. The present species is belongs to the *rufescens* group and is characterized by the following features: Subalar knob...
Figs. 1–3. *Dichaetomyia celebesiensis* sp. nov. (male). 1. fifth sternite, dorsal view; 2. hypopygium, lateral view; 3. cerci, posterior view.
Figs. 4–6. *Dichaetomyia noongensis* sp. nov. (male). 4. fifth sternite, dorsal view; 5. hypopygium, lateral view; 6. ditto, posterior view.
Figs. 7–9. *Dichaetomyia makassarensis* sp. nov. (male). 7. fifth sternite, dorsal view; 8. hypopygium, lateral view; 9. ditto, posterior view (scale: 0.5 mm).
brown; \( t_1 \) without \( p \)-seta; \( nt \) hairy; \( f_1 \) dark brown; antennae yellowish; humeral callus yellowish; inflasquamal hairs present; hypopleuron without short setae under metathoracic spiracle; scutellum bare under regular bristles; 2nd abdominal tergite and anterior part of 3rd abdominal tergite yellow; 5th tergite orange apically.

*Dichaetomyia noongensis* sp. nov.

(Figs. 4–6)

**Male.** Body length 5.5–6.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, about half width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segments reddish-brown; arista brown, feathered; palpi black.

Thorax: Scutum and scutellum dark brown with grayish dust; \( ac \) 0 + 1; \( dc \) 2 + 3; \( ia \) 0 + 1; \( prs \) 1; \( h \) 2; \( ph \) 1; \( nt \) 2; \( pra \) shorter than 2nd \( nt \); \( sa \) 1; \( pa \) 1; \( st \) 1 + 2; scut 1 preapical and 2 lateral; scutellum with 1 short setae under scutellar bristles; notopleuron without short setae or hairs under posterior bristle; humeral callus brown; subalar knob dark brown; inflasquamal setae absent; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles dark brown.

Wings: Hyaline; slightly infuscate; \( r_1 \) and \( r_{4+5} \) bare; \( m - m \) slightly bending anteriorly; upper and lower squamae yellowish brown with inconspicuous marginal cilia; halter yellowish-brown; dark brown apically.

Legs: Coxae and femora dark brown, apical 1/4 of femora reddish; tibiae yellowish brown; tarsi dark brown; \( f_1 \) with a pair of rows of \( pd \), a row of \( pv \); \( t_1 \) with \( p \)-seta; \( f_2 \) with a sparse row of \( pv \), 1 preapical \( ad \), 3 preapical \( pd \); \( t_2 \) with 2 \( p \); \( f_3 \) with a row of \( ad \) and \( av \), sparse row of \( pv \); \( t_3 \) with 1 \( ad \), short row of \( pd \), 2 \( av \).

Abdomen: Entirely dark brown with metallic reflection; genitalia as shown in figure 5 and 6.

**Female.** Body length about 6.5 mm. Frons widely open, 2.5 to 0.3 of head width; frontal vitta, parafrontals and parafacials black, slightly covered with grayish dust; 3 or 4 inclinate \( ori \) present, but only anterior one strong; 2 reclinate \( ors \) present; other characters similar to those of the male.

Holotype. \( \sigma \), Noongan, 50 km S. of Menado, 120 m, 2–10 Dec. 1973, H. Kurashiki.

Paratypes. 3\( \sigma \), 27\( \varphi \), same data as holotype.

Remarks. This species is characterized by the following features: Subalar knob dark brown; \( t_1 \) with \( p \)-seta; \( nt \) hairy; apical 1/4 of \( f_1 \) brown; antennae brown; humeral callus brown; inflasquamal hairs absent; hypopleuron without short setae under metathoracic spiracle; scutellum bare under regular bristles; abdomen entirely dark brown with metallic reflection.

*Dichaetomyia makassarensis* sp. nov.

(Figs. 7–9)

**Male.** Body length 4.5–6.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, about half width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segments yellow; arista yellow basally, brown apically, feathered; palpi black.

Thorax: Scutum dark brown, lateral surface brownish, with grayish dust and obscure 4 dark longitudinal stripes; humeral callus and notopleuron yellowish-orange; \( ac \) 0 + 1; \( dc \) 2 + 3; \( ia \) 0 + 1; \( prs \) 1; \( h \) 2; \( ph \) 1; \( nt \) 2; \( pra \) shorter than 2nd \( nt \); \( sa \) 1; \( pa \) 1; \( st \) 1 + 2; scut 1 preapical and 2 lateral; scutellum brown without short setae or hairs under scutellar bristles; notopleuron with several short setae around posterior bristle; subalar knob brown; inflasquamal hairs absent; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles dark brown.

Wings: Hyaline; slightly infuscate; \( r_1 \) and \( r_{4+5} \) bare; \( m - m \) almost straight; upper and lower squamae yellowish-brown with inconspicuous marginal cilia; halter yellowish-brown entirely.

Legs: Coxae brown; femora dark brown, apical part brownish; tibiae yellow; tarsi dark brown; \( f_1 \) with a pair of rows of \( pd \), a row of \( pv \); \( t_1 \) without \( p \)-seta; \( f_2 \) with a sparse row of \( pv \), short row of \( av \), 2 preapical \( ad \), 3 preapical \( pd \); \( t_2 \) with 2 \( p \); \( f_3 \) with a row of \( ad \) and \( av \) and \( pv \); \( t_3 \) with 1 \( ad \), 1 \( av \).

Abdomen: Orange or yellowish-orange. 4th and 5th tergites darker; genitalia as shown in
Figs. 10-12. *Dichaetomyia berastagi* sp. nov. (male). 10. fifth sternite, dorsal view; 11. hypopygium, lateral view; 12. cerci, posterior view.


Figs. 16-18. *Dichaetomyia ciliscutellaris* sp. nov. (male). 16. fifth sternite, dorsal view; 17. hypopygium, lateral view; 18. cerci, posterior view (scale: 0.5 mm).
figures 8 and 9.

Female. Unknown.

Holotype. $\sigma^2$, Makassar, 50 m, Celebes, 28–30 Nov. 1973, H. Shima.
Paratypes. 5$\sigma^2$, same data as holotype, H. Kurahashi.

Remarks. The present species is characterized by having yellow antennae, yellowish notopleuron and humeral callus, no inflasquamal hairs, bare hypopleuron, without short setae or hairs under scutellar bristles, $t_1$ without $p$-seta and yellow abdomen.

**Dichaeotomia kairatuensis** sp. nov. (Figs. 19–21)

Male. Body length 6.0–6.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, about same width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segments yellow; arista yellow basally, brown apically, feathered; palpi dark brown basally, apical half yellow.

Thorax: Scutum dark brown, lateral surface brown, with grayish dust and obscure 2 dark longitudinal stripes; humeral callus, scutellum and pleura orange; ac 0 + 1; dc 2 + 3; ia 0 + 1; prs 1; h 2; ph 1; nt 2; pra shorter than 2nd nt; sa 1; pa 1; st 1 + 2; scut 1 preapical and 2 lateral; scutellum with several short setae under scutellar bristles; notopleuron with several short setae around posterior bristle; inflasquamal hairs present; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles yellow.

Wings: Hyaline; slightly infuscate; $r_1$ and $r_{4+5}$ bare; $m$–$m$ slightly bending anteriorly; upper and lower squamae yellowish-brown with concolorous marginal cilia; halter yellowish-brown entirely.

Legs: Entirely yellow; $f_1$ with a pair of rows of pd, a row of pv; $t_1$ without $p$-seta; $f_2$ without long bristles, 2 preapical $ad$, 3 preapical $pd$; $t_2$ with 2 $p$; $f_3$ with a row of $ad$, short row of $pv$; several strong $av$ on distal 1/4; $t_3$ with 1 $ad$, 2 $av$.

Abdomen: Orange or yellowish orange, 4th and 5th tergites darker; genitalia as shown in figures 20 and 21.

Female. Unknown.

Holotype. $\sigma^2$, Kairatu, 0–300 m, Ceram, 4–5 Dec. 1973, S. Shirono.
Paratype. 1$\sigma^2$, same data as holotype; 3$\sigma^2$, Noongan, 50 km S. of Menado, 120 m, 2–10 Dec. 1973, H. Kurahashi.

Remarks. The present species is characterized by the following features: Yellow antennae, distal half of palpi yellow; entirely orange pleura, inflasquamal hairs present, scutellum with several short setae under regular pleura, entirely yellow legs, $t_1$ without $p$-seta and orange abdominal tergites.

**Dichaeotomia ventrosa** sp. nov. (Figs. 22–24)

Male. Body length 5.5–6.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, about same width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segment yellow; arista yellow basally, brown apically, feathered; palpi black.

Thorax: Scutum dark brown, lateral surface brown, with grayish dust and obscure 2 dark longitudinal stripes; humeral callus, scutellum and pleura brown, sternopleuron and hypopleuron dark brown; ac 0 + 1; dc 2 + 3; ia 0 + 1; prs 1; h 2; ph 1; nt 2; pra shorter than 2nd nt; sa 1; pa 1; st 1 + 2; scut 1 preapical and 2 lateral; scutellum with several short setae under scutellar bristles; notopleuron with several short setae around posterior bristle; inflasquamal hairs present; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles yellow.

Wings: Hyaline; slightly infuscate; $r_1$ and $r_{4+5}$ bare; $m$–$m$ slightly bending anteriorly; upper and lower squamae yellowish-brown with concolorous marginal cilia; halter yellowish-brown entirely.

Legs: Entirely dark brown; $f_1$ with a pair of rows of pd, a row of pv; $t_1$ without $p$-seta; $f_2$ with 4 long pv, 2 preapical $ad$, 3 preapical $pd$; $t_2$ with 2 $p$; $f_3$ with a row of $ad$, sparse long row of $pv$; $t_3$ with 1 $ad$, 1 $av$.

Abdomen: Orange or yellowish-orange, 4th

Figs. 22–24. *Dichaetomyia ventrosa* sp. nov. (male). 22. fifth sternite dorsal view; 23. hypopygium, lateral view; 24. cerci, posterior view.

Figs. 25–27. *Dichaetomyia nigrisquama* sp. nov. (male). 25. fifth sternite, dorsal view; 26. hypopygium, lateral view; 27. cerci, posterior view (scale: 0.5 mm).
and 5th tergites darker; genitalia as shown in figure 23 and 24.

Female. Unknown.


Paratypes. 4♂, same data as holotype.

Remarks. This species is characterized by having yellowish antennae, inflasquamal hairs, several setae on lateral margin of scutellum under regular bristles and entirely dark legs.

**Dichaeotomyia nigrisquama** sp. nov.  
(Figs. 25–27)

**Male.** Body length 5.5–6.0 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, narrowest point about same width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafrontals narrow, dark brown with grayish dust; 2nd and 3rd antennal segment dark brown, basal part of 3rd segment reddish; arista dark brown, feathered; palpi black.

Thorax: Scutum black, lateral surface brown, with grayish dust and obscure 2 dark longitudinal stripes; humeral callus, scutellum and pleura reddish-brown, except sternopleuron and hypopleuron dark brown; ac 0 + 1; dc 2 + 3; ia 0 + 1; prs 1; h 2; ph 1; nt 2; pra shorter than 2nd nt; sa 1; pa 1; st 1 + 2; scut 1 preapical and 2 lateral; scutellum bare under scutellar bristles; notopleuron with several short setae around posterior bristle; inflasquamal hairs present; hydropollon bare under metathoracic spiracle; meso- and metathoracic spiracles brown.

Wings: Hyaline; slightly infuscate; r₁ and r₄₊₅ bare; m–m slightly bending anteriorly; upper and lower squamae dark brown with concolorous marginal cilia, posterior margin of upper and lower squamae darker; halter brown.

Legs: Coxae, femora and tibiae orange, tarsi dark brown; f₁ with a pair of rows of pd, a row of pv, several short strong setae on apical 1/2 of av; t₁ without p-seta; f₂ with sparse row of pv, 1 preapical ad, 3 preapical pd; t₂ with 2 p; f₃ with a row of ad, pv and av; t₃ with 1 ad, 3 av.

Abdomen: Second and anterior half of 3rd tergites orange; 5th tergite reddish apically; 4th and 5th tergites dark brown with metallic reflection; genitalia as shown in figures 26 and 27.

Female. Unknown.

Holotype.  ♂, Berastagi, 1,400 m, Sumatra, 21–22 Dec. 1973, H. Kurahashi.

Paratype. 2♂, same data as holotype.

Remarks. This species is characterized by having strong setae on anteroventral surface of fore femur and dark margin on squamae.

**Dichaeotomyia berastagi** sp. nov.  
(Figs. 10–12)

**Male.** Body length 6.0–7.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, narrowest point a little wider than frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segment dark brown, basal part of 3rd segment reddish; arista dark brown, feathered; palpi black.

Thorax: Scutum, scutellum and pleura black except dark brown humeral callus with grayish dust and obscure 2 dark longitudinal stripes; ac 0 + 1; dc 2 + 3; ia 0 + 1; prs 1; h 2; ph 1; nt 2; pra shorter than 2nd nt; sa 1; pa 1; st 1 + 2; scut 1 preapical and 2 lateral; scutellar bare under scutellar bristles; notopleuron with several short setae around posterior bristle; inflasquamal hairs absent; hydropollon bare under metathoracic spiracle; meso- and metathoracic spiracles brown.

Wings: Hyaline; slightly infuscate; r₁ and r₄₊₅ bare; m–m straight; upper and lower squamae reddish-brown with concolorous marginal cilia; halter brown, darker apically.

Legs: Anterior surface of coxae dark brown, femora, tibiae and tarsi orange; f₁ with a pair of rows of pd, a row of pv; t₁ with p-seta; f₂ with sparse row of pv, 1 preapical ad, 3 preapical pd; t₂ with 2 p; f₃ with a row of ad and pv; t₃ with 2 ad and 2 av.

Abdomen: Entirely metallic black; genitalia as shown in figures 11 and 12.

**Female.** Body length 7.0–7.5 mm. Frons widely open, about 0.27 of head width at narrowest point (vertex) and 0.38 at widest point; frontal vitta black with grayish dust; 3 inclinate or₁ and 2 reclinate or₂ present; other
Figs. 28–30. *Dichaetomyia maumerensis* sp. nov. (male). 28. fifth sternite, dorsal view; 29. hypopygium, lateral view; 30. ditto, posterior view.

Figs. 31–33. *Dichaetomyia lalai* sp. nov. (male). 31. fifth sternite dorsal view; 32. hypopygium, lateral view; 33. ditto, posterior view (scale: 0.5 mm).

Characters similar to those of the male.

Holotype. $\sigma$, Berastagi, 1,400 m, Sumatra, 21–22 Dec. 1973, H. Kurahashi.

Paratypes. 9$\sigma$, 7 $\varphi$, same data as holotype.

Remarks. This species is characterized by having entirely black body, no inflasquamal hair and bare lateral margin of scutellum.

*Dichaetomyia maumerensis* sp. nov.

(Figs. 28–30)

**Male.** Body length about 7.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, narrowest point twice the width of frontal ocellus; frontal vitta linear, invisible; parafrentals and parafacials narrow, reddish-brown with grayish dust; 2nd and 3rd antennal segment orange, anterior half of 3rd darker; arista dark brown, feathered; palpi dark brown.

Thorax: Scutum orange with obscure dark longitudinal stripes or dark broad longitudinal marks and with silvery pollen anteriorly; scutellum and pleura orange entirely; $ac$ 0 + 1; $dc$ 2 + 3; $ia$ 0 + 1; $prs$ 1; $h$ 2; $ph$ 1; $nt$ 2; $pra$ shorter than 2nd $nt$; $sa$ 1; $pa$ 1; $st$ 1 + 2; scut 1 preapical and 4 lateral; scutellum with more than 10 short setae under scutellar bristles; notopleu-
ron with several short setae around posterior bristle; squamopieuron hairy; inflasquamal hairs present; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles yellow.

Wings: Hyaline; slightly infuscate; \( r_1 \) and \( r_{4+5} \) bare; \( m - m \) strongly bending anteriorly; upper and lower squamae orange with concolorous marginal cilia; halter orange.

Legs: Entirely orange except dark brown tarsi; \( f_1 \) with a pair of rows of pd, a row of pv; \( t_1 \) with p-seta; \( f_2 \) with short sparse row of pv, 1 preapical ad, 3 preapical pd; \( t_2 \) with 2 p; \( f_3 \) with a row of ad and av, sparse row of pv on basal 1/3; \( t_3 \) with 2 ad and 2 av.

Abdomen: Entirely orange.

**Female.** Unknown.

Holotype. \( \sigma^? \), Wolowaru, 600 m, Flores, 16–19 Dec. 1973, R. Kano.

Paratype. 1\( \sigma^? \), Maumere, 10 m, Flores, 20 Dec. 1973, R. Kano.

Remarks. The present species is characterized by having entirely orange body, 4 lateroscutellar bristles, inflasquamal hairs and hairy squamopieuron.

**Dichaetomyia floresiensis** sp. nov.  
(Figs. 13–15)

**Male.** Body length 5.0–5.5 mm. Yellow fly.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, narrowest point about same the width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, reddish-brown with grayish dust; 2nd and 3rd antennal segments yellow; arista yellow basally, apical 2/3 brown, feathered; palpi dark brown.

Thorax: Scutum, scutellum and pleura yellow entirely; \( ac \, 0 + 1; \, dc \, 2 + 4; \, ia \, 0 + 1; \, prs \, 1; \, h \, 2; \, ph \, 1; \, nt \, 2; \, pra \) shorter than 2nd nt; sa 1; pa 1; st 1+2; scut 1 preapical and 2 lateral; scutellum with more than 10 setae under scutellar bristles; notopleuron with several short setae around posterior bristle; inflasquamal hairs present; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles yellow.

Wings: Hyaline; slightly infuscate; \( r_1 \) and \( r_{4+5} \) bare; \( m - m \) strongly bending anteriorly; upper and lower squamae yellowish brown with concolorous marginal cilia; halter yellow.

Legs: Entirely yellow except dark brown tarsi; \( f_1 \) with a pair of rows of pd, a row of pv; \( t_1 \) without p-seta; \( f_2 \) without long bristles; 1 preapical ad, 3 preapical pd; \( t_2 \) with 2 p; \( f_3 \) with a row of ad, 3 long av on distal part; \( t_3 \) with 1 ad, 1 av.

Abdomen: Entirely yellow. Genitalia as shown in figures 14–15.

**Female.** Body length about 5.0 mm. Frons widely open, about 0.25 at narrowest point and 0.36 at widest point; frontal vitta dark brown with grayish pollen; parafrontals dark brown and parafacials reddish-brown with grayish pollen; 3 inclined ori and 2 reclinate ors present; lateral margin of scutellum without seta under regular bristles.

Holotype. \( \sigma^? \), Maumere, 10 m, Flores, 10–19 Dec. 1973, R. Kano.

Paratypes. 17\( \sigma^? \), 13\( \varphi \), same data as holotype.

Remarks. The present species belongs to the **Dichaeatomyia** group of the genus **Dichaetomyia** characterized by having 4 dorso-central bristles.

**Dichaetomyia ciliscutellaris** sp. nov.  
(Figs. 16–18)

**Male.** Body length about 6.0 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, about twice the width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segments dark brown, base of 3rd reddish; arista dark brown, feathered; palpi black.

Thorax: Scutum black with grayish dust and obscure 2 dark longitudinal stripes on anterior margin; humeral callus and scutellum brown; pleura mainly black with grayish dust; \( ac \, 0 + 1; \, dc \, 2 + 3; \, ia \, 0 + 2; \, prs \, 1; \, h \, 2; \, ph \, 1; \, nt \, 2; \, pra \) shorter than 2nd nt; sa 1; pa 1; st 1+2; scut 1 preapical and 2 lateral; scutellum with several short setae under scutellar bristles and cilia on ventral surface; notopleuron with several short setae around posterior bristle; inflasquamal hairs absent; hypopleuron bare under metathoracic spiracle; meso- and metathoracic spiracles dark brown.

Wings: Hyaline; slightly infuscate; \( r_1 \) and \( r_{4+5} \) bare; \( m - m \) straight; upper and lower
squamae yellowish-brown with concolorous marginal cilia; halter yellowish brown.

Legs: Entirely yellow; \( f_1 \) with a pair of rows of \( pd \), a row of \( pv \); \( t_1 \) without \( p \)-seta; \( f_2 \) with sparse row of \( pv \), 1 preapical \( ad \), 3 preapical \( pd \); \( t_2 \) with 2 \( p \); \( f_3 \) with a row of \( ad \), sparse long row of \( av \); \( t_3 \) with 2 \( ad \), 2 \( av \).

Abdomen: Entirely black with metallic reflection. Genitalia as shown in figures 17 and 18.

**Female.** Unknown.

**Holotype.** \( \varphi \), Puncak, 1,300 m, Java, 14–15 Dec. 1973, H. Kurahashi.

**Paratype.** 1 \( \varphi \) , same data as holotype.

**Remarks.** This species belongs to the bibax group of the genus * Dichaetomyia * characterized by having cilia under scutellum.

**Dichaetomyia lalat** sp. nov.

(\textit{Figs. 31–33})

**Male.** Body length 6.0–6.5 mm.

Head: Eyes bare, visible 3/4 of anterior surface of facets enlarged; frons narrow, about the same width of frontal ocellus; frontal vitta linear, invisible; parafrontals and parafacials narrow, dark brown with grayish dust; 2nd and 3rd antennal segments orange; arista brown, feathered; palpi black.

Thorax: Scutum black densely covered with grayish dust, without longitudinal stripes; scutellum dark brown, humeral callus dark brown; pleura mainly black with grayish dust; \( ac \) 0 + 1; \( dc \) 2 + 3; \( ia \) 0 + 2; \( prs \) 1; \( h \) 2; \( ph \) 1; \( nt \) 2; \( pra \) shorter than 2nd \( nt \); \( sa \) 1; \( pa \) 1; \( st \) 1 + 2; \( scut \) 1 preapical and 2 lateral; scutellum with numerous short setae on entire lateral surface; notopleuron with several short setae around posterior bristle; inflasquamal hairs absent; hypopleuron bare under metathoracic spiracle; mesothoracic spiracle brown.

Wings: Hyaline; slightly infuscate; \( r_1 \) and \( r_4+5 \) bare; \( m-m \) slightly bending anteriorly; upper and lower squamae yellowish-brown with concolorous marginal cilia; halters yellowish-brown.

Legs: Coxae and basal 1/3 of femora dark brown, tibiae and tarsi yellowish; \( f_1 \) with a pair of rows of \( pd \), a row of \( pv \); \( t_1 \) without \( p \)-seta; \( f_2 \) with sparse row of \( pv \), 1 preapical \( ad \), 3 preapical \( pd \); \( t_2 \) with 2 \( p \); \( f_3 \) with a row of \( ad \), sparse long row of \( av \) and \( pv \); \( t_3 \) with 1 \( ad \), 2 or 3 \( av \).

Abdomen: Second and anterior half of 3rd tergites orange, 4th and 5th dark brown with metallic reflection.

**Female.** Unknown.

**Holotype.** \( \varphi \), Noongan, 50 km S. of Menado, 1,200 m, 2–10 Dec. 1973, H. Kurahashi.

**Paratype.** 1 \( \varphi \), same data as holotype.

**Remarks.** This species is characterized by having numerous short setae on lateral surface of scutellum, yellow antennae and inflasquamal hairs.

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**REFERENCES**