NEW MUSCOID DIPTERA FROM THE WESTERN UNITED STATES¹

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The current activities of the California Insect Survey have brought to light a goodly number of interesting muscoid flies, hitherto unknown from the state or new to science. The new species described below are based in part upon this material; the remainder constitute related forms, all western in distribution, received from several different sources as indicated under the descriptions.

Euphyto ruficeps Reinhard, new species

Female-Head subguadrate in profile, silvery pollinose on pale or reddish background; front at vertex 0.48 and at antennal base 0.42 of head width; parafrontals beset with a few small scattered hairs outside of frontal rows; latter converging downward and stopping at antennal base; outer vertical vestigial; one proclinate and one reclinate orbital, both small and set far back near upper edge of eye; ocellars well developed, proclinate; frontal vitta widening toward vertex, overlaid with dense pollen except along median line which is reddish-yellow from antennal base almost to triangle, clypeus moderately sunk on upper half, sloping forward from middle to the moderately prominent epistoma; latter short and slightly narrowed from clypeus; vibrissa hardly differentiated, on oral margin; facial ridge bare; parafacial bare, wider than clypeus; antenna short, barely reaching below mid face, second segment reddish with inner apical margin overlapping base of black third segment which appears unusually short in a direct frontal view; arista very short, bare, thickened basal two-thirds blackish, tip pale or whitish, proximal segments small; haustellum moderately slender, about one-half head height; palpus blackish; cheek very sparsely setose, one-fourth eye height; eye bare, reaching almost to vibrissal level; back of head with a sparse vestiture of black hairs.

Thorax and scutellum black with dense pale gray pollen, notum not vittate and weakly bristled; acrostichals not differentiated; dorsocentral 1, 3; notopleural 2; presutural 1 (outer); postalar 2; sternopleural 2 (with one or two intermediate hairs); scutellum with 1 lateral near base and 1 decussate subapical pair; post scutellum not developed; postnotal slope and propleuron bare. Legs moderately long and slender, black with tarsi more or less reddish in ground color, weakly bristled; fore tarsal segments ordinary; claws and pulvilli shorter than apical tarsal segment. Wing hyaline, veins pale yellow; costal spine not developed; first vein bare, third with three or four hairs extending from base nearly halfway to small cross vein; first posterior cell closed at costa far before wing tip; cubitulus obtusely angulate, usually without stump or fold; last section of fifth vein fully three-fourths length of preceding section; epaulet red; calypter opaque white. Abdomen

¹ Contribution No. 1515, from Department of Entomology, Texas Argicultural Experiment Station.

black, largely gray pollinose above with hind margins of last three segments shining and a narrow medium dark vitta visible in most views, weakly bristled; basal segments without median marginals; third and fourth segments each with a marginal row of small depressed bristles; sternites exposed; genitalia blackish, retracted within tip of abdomen. Length, 5 mm.

Male unknown.

Holotype (Calif. Acad. Sci., Ent.): 6 miles west of INDIO, RIVERSIDE COUNTY, CALIFORNIA, on flowers of *Melilotus*, April 30, 1949 (E. G. Linsley, J. W. MacSwain, R. F. Smith). *Paratype*: 1, same data as type.

The species is distinguished by the color of the head, shorter antennae and aristae, nearly bare parafrontals, etc. It differs from *E. subopaca* Coquillett (genotype), in having the second antennal segment reddish, and the first posterior wing cell closed at the costa or non-petiolate. The only other known allied species is *E. pollinaris* Reinhard, which is readily distinguished by its larger build and wholly gray non-fasciate abdomen.

Eumacronychia scitula Reinhard, new species

Male—Front at vertex 0.38 and at antennal base 0.32 of head width; parafrontal, parafacial, cheek and posterior orbit silvery white pollinose; frontal vitta pale yellow, widening gradually from anterior extremity to vertex and much wider than parafrontal on upper half; frontal bristles extending to base of antenna; two proclinate and one reclinate fronto orbitals; ocellars moderately large, proclinate; outer vertical bristle well developed but shorter than inner one; clypeus deeply sunk and about equal parafacial width; facial ridge bare except two or three bristly hairs next to vibrissa; latter near oral margin; parafacial moderately broad, clothed with short pale inconspicuous hairs on upper half and intermixed with coarser black ones below; antenna wholly reddish-yellow, third segment rather slender and about three times length of second; arista blackish, bare, thickened to slightly beyond middle; palpus reddish-yellow, slender with tip slightly thickened; proboscis short; cheek one-fifth eye height, beset with black hairs on lower half; eye bare.

Thorax gray pollinose with three to five black dorsal vittae which extend to scutellum in most views; acrostichals absent except hindmost pair; three post dorsocentrals and two sternopleurals; scutellum black with two stout lateral, one small decussate apical and two pairs of discals behind middle; infrascutellum recessive; prosternum, propleuron and postnotal slope bare.

Legs black; mid tibia with one anterodorsal bristle; claws and pulvilli exceeding length of apical tarsal segment. Wing hyaline with a slight grayish tinge; first posterior cell open far, before wing tip; hind cross vein strongly oblique to fourth which it joins over two-thirds distance from small cross vein to cubitulus; latter angular and usually bearing a short fold; third vein setulose almost halfway to small cross vein; costal spine vestigial; calypter opaque white. Abdomen elongate conical extending well beyond wing tip, black with fourth segment including genitalia wholly reddish yellow; last three segments with sharply defined silvery pollen bands on broad basal margin terminating abruptly at the side of each; second segment with one pair of median marginals; third and fourth each with a complete marginal row; genital segments prominent in repose, devoid of any bristles but the second segment bearing a vestiture of short black hairs above; forceps in profile rather slender, tapering to acute tips and in rear view separated and slightly bowed inward at tips; accessory process as long as forceps, moderately wide at base, tapering distally and curved rearward beyond middle, tip subacute; lobes of fifth sternite not prominent, reddishyellow, clothed with black hairs on inner margin.

Female—Front at vertex 0.42 and at antennal base 0.42 of head width; third antennal segment often slightly infuscated on outer side; abdomen wider and more extensively pollinose than in male; median marginals on second segment weak and sometimes absent; first genital segment pruinose, bearing a marginal row of about ten good-sized bristles, the second segment retracted within first, anal orifice slitlike; claws and pulvilli shorter than apical tarsal segment. Length, 7–9.5 mm.

Holotype male and allotype female (Calif. Acad. Sci., Ent.): TANBARK FLAT, LOS ANGELES CO., CALIFORNIA, July 8, 1950 (A. T. McClay). Paratypes: $4 \sigma \sigma$ and $12 \varphi \varphi$, same locality as type, June 21 to July 28, 1950 (A. T. McClay, P. D. Hurd, J. W. Mac-Swain, M. J. Stebbins, K. G. Whitesell and J. C. Hall); 1σ , Crystal Lake, Los Angeles Co., Calif., June 29, 1950 (P. D. Hurd); 1σ , Big Dalton Dam, Los Angeles Co., Calif., June 25, 1950 (J. W. MacSwain) and 1σ , Pinon Flat, Calif., San Jacinto Mts., May 24, 1939 (B. Brookman).

The species is allied to *E. montana* Allen, which differs in having practically bare parafacials, a narrower front, and the male genital forceps divergent not bowed inward at the tips as in *scitula*.

Fabriciella invelata Reinhard, new species

Male—Front at vertex 0.22 of head width (four measured: 0.22; 0.22; 0.23; 0.21); parafrontal with pale yellowish-gray pollen becoming thinner and darker or blackish near vertex; frontal vitta deep red, wider than parafrontal on entire length; vertical bristles two pairs, fronto orbitals absent; ocellars proclinate; frontal rows widely divergent anteriorly, usually three bristles beneath antennal base; parafacial with dense satiny yellowish pollen, sparsely clothed with black hairs and distinctly narrower than length of second antennal segment; clypeus nearly flush, facial ridges flattened, strongly divergent downward, with three smallish bristles on lower extremity; epistoma broad, strongly bowed forward from clypeal plane; vibrissae stout, decussate, well above front edge of oral margin; antenna reddish-yellow, third segment blackish, broadly ovate and a trifle shorter than second; arista black, micropubescent, thickened on basal three-fifths thence evenly tapered to a fine tip, proximal segment barely longer than wide, second elongated, about one-fourth length of third; cheek slightly over one-third eye

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height, with yellowish-gray pollen and a sparse vestiture of black hairs intermixed with finer pale ones on lower edge; eye bare; palpus reddishyellow, moderately slender to tip and nearly as long as the rather short shining brown haustellum; back of head with a dense ruff of pale yellowishwhite pilose hairs.

Thorax black, humerus reddish-yellow, this color extending posteriorly on side of notum to include callus and scutellum, thinly gray pollinose. Chaetotaxy: acrostichal 3, 3 or 4 (often irregularly spaced); dorsocentral 4, 4; intraalar 3; supraalar 3; humeral 6-8; posthumeral 2; presutural 2; sternopleural 3; pteropleural 2 (about as strong as sternopleural); intrapostalar weak; scutellum with 3 lateral, 1 strong decussate apical and 2 discal pairs, latter in a transverse row slightly behind middle of disc; propleuron black setose; prosternum and postnotal slope bare. Wing grayish hyaline, tinged with yellow basally; first posterior cell open far before wing tip; fourth vein strongly bowed inward beyond bend, latter with a distinct fold; third vein setulose one-third way to small cross vein; last section of fifth vein fully one-third length of preceding section; costal spine vestigial; epaulet infuscated; calypter white with a distinct yellow tinge. Legs shining black basally, tibiae and tarsi reddish-yellow; fore claws unusually elongated and but slightly shorter than combined length of last three tarsal segments; middle tibia with a row of five stout unequal bristles on outer front side; pulvilli long, pale tawny. Abdomen reddish-yellow with a moderately broad black median vitta extending from base to apex of third segment; latter and preceding segment whitish pollinose on narrow basal margin; pollen on anal segment tinged with yellow extending to middle or beyond on sides; second segment with one pair of median marginals, third with a marginal row and fourth with a marginal and two irregular discal rows behind middle; sternites exposed, beset with long slender bristly hairs; genital segments reddish-yellow, second with fine black hairs over entire surface and a transverse median row of about ten moderately strong bristles; forceps blackish, prominent and strongly arched in profile, united apex broadly rounded as viewed from the rear, hind surface except the slightly concave beak-like part clothed with fine black hairs which are longest and directed laterally on the sides; accessory process terminating in a slender inwardly bowed acute-tipped process; fifth sternite reddish-yellow, deflexed and prominent, median apical excision not extending ot middle; lobes broadly emarginate on hind edge, beset with black hairs and bristles. Length, 10.5-13 mm.

Female unknown.

Holotype (Calif. Acad. Sci., Ent.): TANBARK FLAT, LOS AN-GELES CO., CALIFORNIA, July 8, 1950 (A. T. McClay). Paratypes: 48 J J, same locality as type, June 19 to July 20, 1950 (A. T. McClay, W. O. Marshall, K. G. Whitesell, J. C. Hall, M. J. Stebbins, T. R. Haig, J. W. MacSwain, P. D. Hurd and J. D. Paschke).

In a restricted sense the species is congeneric with Larvaevoropsis (type, Echinomyia dakotensis Townsend), and appears closely related to Fabriciella longiunguis Tothill. However, a specimen compared with the type of the latter by Dr. G. E. Shewell, showed a distinctly greater frontal head width ratio and wider parafacials in the present form; also, the fore claws are perceptibly shorter than the three apical tarsal segments and the male genital forceps are more tapering apically and lack the dense vestiture of heavy lateral spines present in F. longiunguis.

Fabriciella plumasana Reinhard, new species

Male—Similar to the preceding species except as follows: Front wider, at vertex 0.30 of head width; parafrontal with pale yellow to golden pollen which extends to vertex; sternopleural bristles variable ranging from three to five in number; median abdominal vitta extending from base to apex; sternites two and three each with a dense cluster of longish moderately strong bristles; fifth sternite black apically with a moderately broad U-shaped apical excision, lobes prominent, sparsely black-haired; genitalia blackish, lower lateral margin of second segment thickly beset with short spinose hairs; forceps moderately compressed, strongly arched and prominent in profile, median hind surface or beak very narrow, parallel-sided and concave to near apex thence carinate to a slightly produced acute tip. Length, 12 mm.

Female unknown.

Holotype (Calif. Acad. Sci., Ent.): QUINCY, 4 mi. W., PLUMAS Co., CALIFORNIA, June 30, 1949 (Evert I. Schlinger). Paratype: 1 &, Canby, 6 mi. N., Modoc Co., Calif., July 19, 1950 (R. M. Bohart).

The species is closely allied to F. spinosa Tothill, from which it differs in the items listed and in the structure of the male genitalia. In F. spinosa the forceps are not at all compressed and obviously less prominent in profile, the concave beak-like portion is distinctly wider and tapers more abruptly before the apex; also, the lateral margin of the second genital segment bears fewer spinose hairs which are largely restricted to the lower anterior margin.

Fabriciella evanida Reinhard, new species

Male—Vertex 0.28 of head width; parafrontal gray to almost golden pollinose on blackish background, parafacial and cheek with paler yellowishgray to white pollen on yellow ground color; median vitta red, much wider than parafrontal on entire length; verticals two pairs; ocellars long, proclinate; fronto orbitals absent; frontal bristles about 10 in a row, lowermost three or four beneath antennal base; antenna red, third segment largely blackish, about two-thirds length of second; arista shorter than antenna, thickened beyond middle and evenly tapered to tip, basal segment short, second one-fifth length of third; parafacial well over one-half clypeal width, sparsely clothed with black hairs; clypeus flush, with lateral ridges flattened and bare except on lower extremity; epistoma strongly protruding between vibrissae; latter well above oral margin; cheek slightly over one-third eye height, sparsely black-haired; palpus reddish-yellow, slender to tip and about equal to length of haustellum; occipitial hairs pale yellowish-white.

Thorax black, lateral margin of notum, posterior callus, scutellum and sometimes humerus reddish in ground color, lightly dusted with white pollen but the entire surface moderately shiny in most views; chaetotaxy as in F. invelata; n. sp. (vide supra) propleuron setose. Wing as in F. invelata. Legs black, tibiae reddish-yellow, tarsi less distinctly so; fore claws and pulvilli obviously shorter than combined length of last three tarsal segments. Abdomen shining translucent yellow with a black median vitta which usually widens distally to include a large part of upper surface of last two segments; narrow basal margin of intermediate segments and basal third of last pale pollinose; bristling as in F. invelata except discal row on anal segment is near middle of latter; sternites exposed, beset mostly with long fine black hairs; genital segments largely blackish, second clothed with long black bristly hairs above; forceps arched but not very prominent in profile, viewed from behind the flattened slightly concave beak-like portion is unusually narrow and tapers rather sharply before apex thence gradually narrowing to an acute delicate tip; accessory process slender and bowed inward apically.

Female—Front at vertex 0.32 of head width; abdomen considerably darker, often black on apical half or more of last three segments above; otherwise similar to male except for sexual differences. Length, 9–13 mm.

Holotype male and allotype female, LAKE CITY, COLORADO, 8700 ft., August 8-15, 1936 (Chas. L. Fluke). Paratypes: 3 & & and 1 \circ , same data as type; 1 \circ , Pingree Park, Colo., August 17, 1932; 1 \circ , Cameron Pass, Colo., 9500 ft., August 21, 1940 (R. K. Fletcher); 1 &, Maniton Park, Colo., August (F. H. Snow); 1 &, Pleasant Grove, Utah, July 29, 1933 (G. F. Knowlton and L. L. Hanson); 1 \circ , Allen Canyon, Utah, August 21, 1942 (G. F. Knowlton and S. L. Wood); 1 &, Logan, Utah, August 2, 1950 (Ken E. Wolf); and 1 &, S. Grand Canyon, Ariz., August 17, 1949 (P. R. Fitzgerald).

In build and general aspect, the present species is quite similar to F. brevirostris Tothill, and like the latter has an uncommonly short haustellum. However, the genitalic differences, as noted above, appear distinctive.

Mericia hamilla Reinhard, new species

Similar to M. ampela Walker in general aspect but readily distinguished by differences in structure of the male genitalia as mentioned below.

Male—Vertex 0.21 of head width, front slightly narrower before ocelli; frontal rows strongly divergent anteriorly, three bristles beneath antennal base; no orbitals; inner verticals moderately long; ocellars long and slender; parafrontal pale yellowish-gray pollinose becoming blackish near vertex; parafacial equibroad and well over one-half clypeal width, with satiny yellow-

ish-gray pollen; cheek black, lightly dusted with gray pollen, nearly twofifths eye height; eye thickly pilose; antenna black, first segment erect and somewhat elongated, third segment moderately wide and but slightly longer than second; arista bare, thickened on basal half tapering to a slender tip, middle segment barely longer than wide; facial ridge bare except a few bristles next to vibrissa; latter well above the lower front edge of the prominent epistoma; proboscis shorter than head height, labella large and fleshy; palpus yellow, beset with black hairs, back of head subshiny black, rather thickly clothed with pale hairs.

Thorax black, thinly gray pollinose, mesonotum subshiny, but with four broad dark vittae visible in a flat rear view; scutellum black, more or less reddish apically; acrostichal 2, 3; dorsocentral 3, 4; sternopleural 3; scutellum with 3 lateral, 1 decussate apical and 1 discal pair; postnotal slope setose; propleuron bare. Wing gray hyaline, with a light brownish tinge on costal margin near base; third vein with 3 to 6 small hairs near base; cubit ulus rectangular, without stump or fold; first posterior cell open far before wing tip; calypter white. Legs black, tibiae obscurely reddish, moderately long and slender; claws and pulvilli elongate or about equal to combined length of last two tarsal segments. Abdomen black, genital segments red, with gray pollen which extends thinly to the broadly arcuate hind margin of last three segments above; one pair of discals on each of latter, first without median marginals; intermediate segments greatly narrowed on venfer; keel of forceps triangular, deeply divided and nearly twice as large as in M. ampela; accessory process unusually wide at base, tapered gradually towards tip, subequal to length of second genital segment; fifth sternite subshiny black, with an apical U-shaped excision extending about to middle, lobes beset with long black hairs.

Female—Vertex 0.28 of head width; parafrontal quite blackish in most views, with two stout proclinate orbitals; outer verticals well developed; antennal segments one and two wholly reddish; mesonotum blackish and subshining as in male; fourth abdominal segment red; anal orifice large, ovate; first genital segment retracted, hind margin bearing a fringe of closely set black bristly hairs on distal half or more; apical sternites with a broad shallow groove at middle. Length, 11-12 mm.

Holotype male, MT. RAINIER, WASHINGTON, Sunrise, 6380 ft., July 31, 1932 (J. Wilcox). Allotype female, Puyallup, Washington, June 1, 1933 (J. Wilcox). Paratype: 1 3, Mt. Rainier, Washington, Shallow Lake, 6500 ft., August 15, 1932 (Chas. H. Martin).

Mericia cobala Reinhard, new species

Differs from the preceding species mainly as follows:

Male—Vertex 0.19 of head width; first and second antennal segments with a reddish tinge on apex, third segment larger, and broadly bulged on front edge; arista thickened well beyond middle; thorax moderately gray pollinose, mesonotal vittae rather well defined, four before suture and five behind; scutellum black with a barely perceptible reddish tinge at extreme apex; abdomen including genital segments, fifth sternite, forceps and accessory process black; carina of forceps moderately large, triangular, apex slightly grooved behind; accessory process long, broad to middle thence gradually narrowed to tip; fifth sternite prominent, with a deep median V-shaped incision.

Female—Vertex 0.32 of head width; two pairs of strong proclinate orbitals; outer verticals developed; ocellars stout, proclinate; first and second antennal segments wholly reddish-yellow; fore tarsus distinctly flattened, claws and pulvilli shorter than apical segment; abdomen wholly black; fused sixth and seventh sternites with a wide deep groove which bears a narrow slightly elevated median carina; eighth sternite broadly impressed at middle, subtruncate on apex. Length, 12 mm.

Holotype male and allotype female (on same pin), Otero County, New Mexico, 8000 ft., June 20 (E. M. and R. H. Painter).

Zenillia scolex Reinhard, new species

Female-Front at vertex 0.36 and at antennal base 0.52 of head width; parafrontal pale grayish to brownish-yellow pollinose, distinctly wider than the deep red median vitta; ocellars strong, proclinate; verticals two pairs; frontals in two rows on lower half of front, the main row moderately divergent below and extending to level with base of third antennal segment; two stout reclinate prevertical bristles and two proclinate orbitals; antenna red, third segment slightly over twice length of second; arista brownish on thickened basal two-fifths, micro pubescent, proximal segments short; parafacial gray pollinose on reddish ground color, bare beneath lowermost frontals and but slightly narrowed below; facial ridge reddish, beset with small hairs and bristles on lower fifth or less; vibrissae descussate, on oral margin; eye hairy, reaching nearly to vibrissal level; cheek red in ground color, overlaid with thin gray pollen and sparsely black-haired, one-fourth eye height; proboscis short; palpus reddish-yellow; back of head gray pollinose, clothed with pale hairs. Thorax black, with opaque yellowish-gray pollen showing a brownish tinge on notum, latter marked with four very narrow black vittae; scutellum and posterior callus reddish. Chaetotaxy: acrostichal 3, 3; dorsocentral 3, 4; intraalar 3; supraalar 3; presutural 2; postalar 3; intrapostalar well developed sternopleural 3; scutellum with 3 strong lateral, 1 decussate apical and 2 discal pairs behind middle of disc; prosternum setose; propleuron and postnotal slope bare. Legs wholly red; mid tibia with three anterodorsal bristles and one inner ventral; hind tibia subciliate; yellow black-tipped claws nearly equal length of last tarsal segment, pulvilli slightly shorter. Wing subhyaline with a distinct luteous tinge on basal half of costal margin; third vein with two bristly hairs near base; first posterior cell open well before extreme wing tip; costal spine not developed; epaulet deep red; calypter opaque white. Abdomen short and thick in profile, with dense opaque yellowish-brown pollen on entire surface above becoming somewhat grayer on venter; intermediate segments with discals (sometimes doubled on one or both); first and second segments each with one pair of median marginals, third bearing a complete marginal row and fourth with a discal row and numerous irregularly spaced bristles between the latter and apex of segment; anal orifice slitlike, genitalia retracted. Length, 10-11 mm.

Male unknown.

Holotype (Calif. Acad. Sci., Ent.): TANBARK FLAT, LOS AN-GELES CO., CALIFORNIA, June 30, 1950 (K. G. Whitesell). Paratypes: 1 \heartsuit , same locality as type, June 22, 1950 (P. D. Hurd); 1 \heartsuit , Crystal Lake, Los Angeles Co., Calif., June 29, 1950 (W. O. Marshall); 1 \heartsuit , West Hollywood Hills, Los Angeles Co., Calif., April 24, 1950 (R. G. Howell); and 1 \heartsuit , Forest Home, Calif., June 17, 1950 (G. P. Taylor).

The species apparently belongs to the *chrysomasicera*-group of *Zenillia*, but differs from all forms assigned here in the wholly red legs and antennae, bristling of mid tibiae and the non-golden, patternless pollen on the abdomen.

Meledonus lindensis Reinhard, new species

Male-Head uncommonly long and subquadrate in profile, cinereous pollinose; front at narrowest 0.37 and at vertex 0.42 of head width; frontal vitta brownish, gradually widened upwards, at middle subequal parafrontal width; inner vertical large, the outer vestigial, prevertical curved laterally; orbitals absent; ocellars long, proclinate; frontal rows not strongly divergent anteriorly and barely extending beneath antennal base; parafacial broad, sparsely beset with fine black hairs; clypeus rather deeply impressed; epistoma noticeably swollen or inflated and moderately produced downward beneath vibrissal level; facial ridge bare except a few bristles at lower extremity; antenna black, third segment twice as long as second; arista bare, short, thickened and tapering to distal third, basal segments small; haustellum slender, about two-thirds head height; palpus reddish-yellow, shorter than usual but well over one-half length of third antennal segment; eye bare, rather small; cheek one-third eye height; back of head moderately bulged on lower part, clothed with black hairs above and pale ones about the neck and below.

Thorax and scutellum black, gray pollinose, not distinctly vittate above. Chaetotaxy: acrostichal 1, 1; dorsocentral 3, 3; intraalar 2; supraalar 3; notopleural 2; presutural 1 (outer); humeral 2; postalar 2; intrapostalar differentiated; sternopleural 3; pteropleural hairlike; scutellum with 2 lateral and 1 smaller decussate apical pair; propleuron and postnotal slope bare. Legs rather long, wholly black; mid tibia with two anterodorsal bristles; claws and pulvilli distinctly elongated. Wing hyaline with yellow tinge at base and along costal margin; first vein bare, third with about three small hairs near base; cubitulus broadly rounded, without stump or fold; first posterior cell open well before wing tip; last section of fifth vein about onefifth preceding section; epaulet black; calypter pale yellowish-white. Abdomen rather narrow and elongate, last three segments gray pollinose on basal three-fifths, remainder of each subshiny black; segments one and two each with one pair of median marginals and a complete marginal row on segments three and four, besides a discal row on last situated well behind the middle; hypopygium moderately large and prominent, shining black; sternites narrowly exposed at least apically.

Female-Front at vertex 0.43 of head width; parafrontal pale yellowish-

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gray; ocellars and uppermost orbital divaricate, lower two orbitals proclinate; outer vertical differentiated; third antennal segment less than twice as long as second which is tinged with red on extreme apex; last three abdominal segments with heavier gray pollen extending to the apical third or fourth on each; genitalia black, retracted within tip of abdomen; claws and pulvilli shorter than last tarsal segment. Length, 7.5 mm.

Holotype male and allotype female, LIND, WASHINGTON, June 1 and 12, 1919 (R. W. Carlson).

The species is distinctly grayer and less shining in general aspect than the genotype, *M. latipennis* Aldrich. The latter differs further in having smaller, wholly black palpi, third antennal segment but little longer than second, back of head more distinctly bulged or swollen, wings broader apically and no differentiated preacrostichal bristles.

Erycia picata Reinhard, new species

Male—Front rather narrow, at vertex 0.20 of head width; parafrontal blackish above with tawny to subgolden pollen before middle, extending downward over parafacial; frontal vitta deep velvety red, narrower than parafrontal on upper half; outer verticals and orbitals absent; ocellars long, proclinate; frontal rows moderately divergent anteriorly, four or five bristles beneath antennal base, two stoutish reclinate preverticals; antenna about three-fourths length of face, basal segments more or less reddish, third black, twice as long as second; arista micro pubescent, moderately thickened on basal third, proximal segments small; parafacial narrow, bare on lower half; clypeus gray pollinose, moderately impressed, facial ridge bristled on lowest fourth; vibrissae stout, decussate, on oral margin; cheek gray pollinose, beset with black hairs, one-sixth eye height; eye bare, reaching about to vibrissal level; palpus reddish-yellow becoming darker basally; haustellum very short; labella large and fleshy; back of head gray pollinose, moderately clothed with pale or whitish hairs.

Thorax subshining black, lightly dusted with bluish white pollen, dorsal vittae scarcely visible; scutellum concolorous with thorax but with a reddish tinge in ground color near apex. Chaetotaxy: acrostichal 3, 3; dorsocentral 3, 4; intraalar 3; supraalar 3; presutural 2; notopleural 2; humeral 4; sternopleural 3; pteropleural 1 (smaller than sternopleural); postalar 3; intrapostalar well differentiated; scutellum with 3 lateral, 1 decussate apical and 1 discal pair; postnotal slope and propleuron bare. Legs black; claws and pulvilli strongly elongated, latter almost equal combined length of last two tarsal segments; mid tibia with two anterodorsal bristles. Wing subhyaline with a brownish tinge costobasally; first vein bare, third with two to four hairs near base; cubitulus broadly rounded, without stump or fold; first posterior cell narrowly open well before wing tip; last section of fifth vein slightly over one-fourth length of preceding; costal spine vestigial; calypter uniformly light brown; epaulet and subepaulet black. Abdomen black, moderately shining, entire surface above thinly dusted with bluish white pollen; hairs coarse and erect becoming bristly along median line of inter-

mediate segments, which bear usually two pairs of differentiated discals often irregularly spaced; basal segments each with one pair of median marginals and a marginal row on segments three and four besides numerous scattered discals on the latter above; hypopygium blackish, moderate prominent; forceps unusually broad in profile, rounded on apex; accessory process slightly exceeding length of forceps but much narrower and gently bowed from base to bluntly rounded tip; fifth sternite black, with a deep median excision, lobes beset with black hairs and bristles.

Female—Front at vertex 0.26 of head width; outer verticals differentiated; two pairs of proclinate orbitals present; tibiae more or less reddish; claws and pulvilli shorter than apical tarsal segment; calypter not so strongly infuscated; hairs on abdomen above subappressed; anal cerci reddish, short and bluntly rounded apically, beset with fine brown hairs. Length, 9-10 mm.

Holotype male and allotype female, on same pin (Calif. Acad. Sci., Ent.): BERKELEY, CALIFORNIA, April 23, 1949 (P. D. Hurd). Paratypes: 4 & J, same locality as type, March 29 to June 15, 1948-49 (P. D. Hurd and U. N. Lanham); and 4 J, Monrovia Canyon, Calif., May 31, 1931 (Dorothy Martin).

The species is readily distinguished from allied forms by the narrower front, shorter antennae, infuscated calypters and the thinner patternless pollen on the abdomen.

Erycia sectilis Reinhard, new species

Differs from the preceding species chiefly as follows:

Male—Front wider, at vertex 0.32 of head width; parafrontal grayish pollinose to vertex, with a secondary row of frontals outside the main row before middle; outer verticals differentiated; antenna reaching nearly to oral margin, third segment three times longer than second; parafacial gray pollinose; cheek one-fifth eye height; thorax more densely pollinose above and marked with four distinct dark vittae; pulvilli hardly exceeding length of apical tarsal segment; wing gray hyaline, at most with a slight yellowish tinge near base and on costal margin; calypter opaque white; last three abdominal segments with rather dense gray pollen on basal edge which extends thinly to about the middle of each, the broad hind margins shiny black in direct view; forceps considerably narrower than in *E. picata* n. sp. (vide supra); accessory process nearly as wide as forceps in profile. Length, 8-9 mm.

Female unknown.

Holotype male, TETON PASS, WYOMING, August 2, 1947 (F. A. Cowan and M. R. Wheeler). Paratype: 1 3, same data as type.

The Publications Committee regrets having to postpone the E. C. Van Dyke Memorial number until the April issue of the Pan-Pacific Entomologist. It proved impossible to have Dr. Van Dyke's posthumous papers and an adequate obituary and bibliography ready in time for the present issue.



Reinhard, H J. 1953. "New Mus-coid Diptera from the western United States." *The Pan-Pacific entomologist* 29, 49–59.

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