Some New Species of Mexican Dikrella (Homoptera Cicadellidae)

Ruppel, Robert F.; DeLong, Dwight M.
The genus Dikrella was recently erected by Oman (1949) to include a group of minute, delicate Cicadellinae previously placed in the genus Dikraneura. These differ from Dikraneura in having the anterior apical cell of the first pair of wings extending scarcely basad of the base of the adjoining apical cell. Dikrella differs from Kunzeana in having a posterior apical cell on the first pair of wings which is broader at its base than the combined width of the two adjacent apical cells.

The Mexican fauna contains a large number of species of this genus most of which are undescribed. The following species are the first group of previously undescribed forms from Mexico. Types of all species are in the DeLong Collection.

**Dikrella bimaculata n. sp.**

Plate I

Resembling *mera* in general appearance, with distinct male genital structures. Length 3 mm.

Vertex: Narrow, produced, and bluntly angled, width between eyes at base about equalling median length. The elytra are long and narrow.

Color: Dull yellowish without markings except at apex of elytra. The elytra are marked with a round black spot on anterior apical cell which is near base and on costal margin. The posterior apical cell has a round black spot at about its middle.

Genitalia: The male pygofer are broad with their apices nearly truncate. Short, slender, bent pygofer hooks arise on the dorso-caudal angles of the pygofer. The anterior margin of the valve is truncate with its posterior margin convexly produced on its median half. The plates are broad and separated at their bases. A pair of heavy, short spines arise on the proximal third of the lateral margins of the plates. The styles are broad with their apical margins serrate and their mesal apical lobes long and curved. The connective is Y-shaped and thick. The base of the aedeagus is short and slender with its dorsal processes long and moderately thick. A pair of parallel, long, thin ventro-lateral processes arise on the base and extend dorsad to near the apices of the pygofer. The phalicata is slender and nearly parallel sided. A pair of thin ventro-lateral processes arise at the base of the phalicata and extend to near its distal third.

Holotype male collected at Chilpancingo, Gro., October 25, 1941 by Good and DeLong.

**Dikrella nigrinota n. sp.**

Plate I

Resembling *bimaculata* in general form but smaller and with distinct genitalia. Length 2.5 mm.

Vertex: Rather strongly produced and angled, a little longer on middle than basal width between the eyes.

Color: White tinted with yellow. Elytra yellowish subhyaline with a large round black spot in the anterior apical cell and another in the posterior apical cell.

Genitalia: Female seventh sternite with posterior margin broadly roundedly produced. Male pygofer broad with their apices rounded. Flat elongate processes, bifurcate at their apices, arise on the inner walls of the pygofer and extend to the apices of the pygofer. The anterior margin of the valve is truncate with its posterior margin convexly produced on its median half. The plates are broad and widely separated at their bases. A pair of stout spines arise near the middle of the lateral margin of each plate. The styles appear swollen near their apices and their mesal apical lobes are long and curved. The connective is nearly T-shaped and broad. The base of the aedeagus is short and broad and bears two pair of processes, a pair of long, appressed processes ventrad to the phalicata and a pair of shorter, diverging processes borne on a thin shaft dorsad to the phalicata.

Holotype male collected at Chilpancingo, Gro., October 25, 1941 by Good and DeLong.
Holotype male, allotype female, and male and female paratypes collected at Chilpancingo, Gro., October 25, 1941 by DeLong and Good.

**Dikrella mella** n. sp.  
*Plate I*

Resembling *bimaculata* in general form and appearance but with distinct male genitalia. Length 3.5 mm.

**Vertex:** Produced and bluntly angled, as long at middle as basal width between the eyes.

**Color:** White tinged with yellow which is condensed on the median portion of the vertex and in two irregular longitudinal stripes across pronotum. Elytra subhyaline with yellow veins. The anterior and posterior apical cells each containing a large round black spot.

**Genitalia:** Female seventh sternite with posterior margin forming a pair of short rounded median lobes and a rounded more produced lobe next each lateral margin. Male pygofers elongate, with their apices produced into sharply pointed projections, the ventral edges of which are thickened. Short, spine-like pygofer hooks arise on the dorso-caudal angles of the pygofers. The valve is truncate on its anterior margin and convex on its posterior margin. The plates are narrow and widely separated at their bases, a pair of stout spines arise near the middle of the lateral margin of each plate. The styles are broad with their lateral apical lobes broad and relatively long and with their mesal apical lobes long, thin, and curved. The connective is Y-shaped with its arms broad. The base of the aedeagus is long and cylindrical. It bears two pairs of processes, a pair of long appressed processes ventrad to the phallicata, and a shorter diverging pair dorsad to the phallicata.

Holotype male and paratype male collected at Cuernavaca, Mor. (K. 57), October 21, 1941 by DeLong, Good, Caldwell, and Plummer. Allotype female and female paratype collected at Iguala, Gro., September 11, 1939 by Plummer and DeLong. Female paratypes from Rancho Monter, Oax., December 14, 1937 (M.F. 3639), collected by Dampf; and paratype female from Vergel, Chis., May 22, 1935 (M.F. 4259) Dampf.

**Dikrella angustella** n. sp.  
*Plate I*

Resembling *bimaculata* but with vertex more bluntly angled and with distinct male genitalia. Length 3.5 mm.

**Vertex:** Produced and bluntly angled, about one-fourth wider between eyes at base than median length. Pronotum decidedly wider than vertex.

**Color:** Pale yellowish, unmarked except for three spots on elytra. The three spots are round and pale. One is near the base of the anterior apical cell, another is near the base of the posterior apical cell, and a third is anterior to the cross veins of the third apical cell.

**Genitalia:** Female seventh sternite with posterior margin broadly rounded and produced. Male pygofers rounded at their apices and without hooks. The anterior margin of the valve is concave while its posterior margin is convexly produced on its median half. The plates are rather broad and separated at their bases with their apices upturned and rounded. The styles are moderately heavy with their mesal apical lobes long and thick and their lateral apical lobes short and sharply pointed. The connective is U-shaped and thick. The aedeagus is thick and cylindrical and tapers from near its middle to its narrowed, rounded apex. A pair of long, curved, lateral processes arise at the apex of the aedeagus and extend laterad.

Holotype male, allotype female, and female paratypes from San Jacinto, D.F., July 4, 1932. Female paratype from Mexico City, D.F., June 12, 1924 and female paratype from San Cristobel Las. Casas Chis., July 9, 1926, all collected by Dr. Dampf.

**Dikrella venella** n. sp.  
*Plate I*

Resembling *angustella* in form and general appearance but without color markings and with distinct male genital structures. Length 3 mm.

**Vertex:** Bluntly angled about one-third wider between eyes at base than median length. Pronotum decidedly wider than head.
Color: White rather uniformly tinged with yellow, elytra subhyaline, veins yellow.

Genitalia: Female seventh sternite with posterior margin strongly produced and bluntly angled. The male pygofers are long with their apices extended into short, sharp spines. Tapering, sharply pointed pygofer hooks arise on the dorso-caudal angles of the pygofers. The valve is truncate on its anterior margin and convex on its posterior margin. The plates are contiguous at their bases and angu落地ately produced on the basal quarter of their lateral margins. The styles are unique in *Dikrella*, their apical portions being extended into foot-shaped lobes. The connective is Y-shaped with its shaft short and broad. The base of the aedeagus is long and broad with its dorsal processes long and slender. The phalicata is broad, parallel sided, and obliquely truncate apically. A pair of broad, flat, apically notched lateral processes arise on the apex of the phalicata.

Holotype male and allotype female collected at Zitacuro, Mich. (Km 160), Sept. 29, 1941 by DeLong, Caldwell, Plummer, and Good.

*Dikrella albidula* n. sp.

Plate I

Resembling *bimaculata* in general appearance, white in color and with distinct male genitalia. Length 2.5 mm.

Vertex: With apex rather broad and blunt, about one-fourth wider between eyes at base than median length. Pronotum a little wider than head.

Color: White, the elytra with a large round black spot in the anterior apical cell, and another in the posterior apical cell.

Genitalia: Male pygofers broad, with their apices nearly truncate. Thin, curved pygofer hooks arise on the dorsal-caudal angles of the pygofers. The anterior margin of the valve is sharply concave with its posterior margin convexly produced on its median third. The plates are broad and narrowly separated at their bases and taper to rounded apices. The styles are deeply, roundly notched on the apical third of their lateral margins. The mesal apical lobes of the styles are long and thin with their lateral apical lobes thick and pointed. The connective is Y-shaped and thick. The base of the aedeagus is short and thick with its dorsal processes long and slender. A pair of long, recurved, ventro-lateral processes arise on the base, cross each other near their bases and extend laterad. The phalicata is broad, nearly parallel sided, and truncate at its apex.

Holotype male and paratype males collected at Iguala, Gro., Sept. 11, 1939 by Plummer and DeLong.

*Dikrella aureocosta* n. sp.

Plate II

Resembling *bimaculata* in form and general appearance, pale in color and with distinct male genitalia. Length 2.5 mm.

Vertex: Bluntly angled about one-fourth wider between eyes at base than median length.

Color: White faintly tinted with yellow. Abdomen bright yellow, Elytra subhyaline, costal vein yellow, other veins white.

Genitalia: Male pygofers broad with their apical margins truncate. Short, sharply pointed spines arise at the apices of the pygofers and tapering, pointed pygofer hooks arise on their dorso-caudal angles. The anterior margin of the valve is truncate with its posterior margin convexly produced on its median third. The plates are broad and separated at their bases with their apices rounded. The styles are broadly, roundly notched near the apical third of their lateral margins and their mesal apical lobes are long and slender. The connective is Y-shaped and slender. The base of the aedeagus is short and slender with its dorsal processes long and rather thick. A pair of long, recurved ventro-lateral processes arise on the base and extend dorsad above the apex of the pygofers. The phalicata is long, slender, and rounded at its apex.

Holotype male and male paratypes collected at Iguala, Gro., Sept. 11, 1939 by DeLong and Plummer.

*Dikrella rubralineata* n. sp.

Plate II

Resembling *bimaculata* in general form with a blunter head, two red lines on vertex and pronotum, and with distinct male genitalia. Length 2.7 mm.
The figures are illustration of the ventral and lateral views of the male genital structures.
New *Dikrella*
Robert F. Ruppel and Dwight M. DeLong

The figures are illustrations of the ventral and lateral views of the male genital structures.
Vertex: Bluntly angled, a little wider between eyes at base than median length. Pronotum decidedly wider than head.

Color: White, a pair of broad longitudinal orange bands extending from each side of apex of vertex across vertex, near eyes, pronotum and onto base of scutellum. An orange spot at apex of scutellum. Elytra with large orange reddish spots on clavus. The basal spot is elongate, the other three or four are more rounded. The costal and corium areas of the elytra have a series of small, bright red, circular spots scattered from base to apex, usually about nine in number, two near base along costa, three about middle of wing between costa and corium, three in a row before apical cross veins and one on second apical vein. Face yellow with an orange spot next each eye.

Genitalia: Male pygofers broad, with their apices produced into sharp, nearly erect points. The posterior margin of the valve is almost truncate while its anterior margin is concave. The plates are narrow and separated at their bases with their apices narrow and blunt. The styles are moderately broad with their lateral apical lobes short and blunt and their mesal apical lobes elongate and narrow. The connective is T-shaped, with its arms curving ventrad. The base of the aedeagus is short and cylindrical with its dorsal processes long and thin. A pair of long, flat, lateral processes arise on the base and sheath the thin, elongate phallicata for most of its length.


Dikrella rubrapuncta n. sp.

Resembling rubralineata in form and general appearance but paler in color and with distinct male genital structures. Length 2.5 mm.

Vertex: Blunt, rounded at apex, about one-fourth wider between eyes at base than median length. Pronotum wider than head.

Color: White, vertex with a pair of rather broad yellowish lines extending from apex of vertex across vertex, pronotum, and the basal angles of scutellum. A yellow spot on the apex of the scutellum. Elytra subhyaline tinged with yellow. A small round red spot at apex of clavus and a series of four on the medius vein. A few are found irregularly on the corium or apical cells.

Genitalia: Male pygofers short and broad with their apical margins rounded. Thickened, oblique folds divide the pygofers into pigmented basal portions and hyaline apical portions. Long, thin, recurved pygofer hooks arise on the dorso-caudal angles of the pygofers. The anterior margin of the valve is nearly truncate with its posterior margin convex. The plates are rather broad and separated at their bases with their apices narrow and bluntly angled. The styles are broad with their mesal and lateral apical lobes long and pointed. The connective is Y-shaped with the base of its shaft produced into a broad, flat dorsal lobe. The base of the aedeagus is long and thick with its dorsal processes short and broad. A pair of thin ventro-lateral processes arise on the base and curve dorsal to near the apex of the broad, apically rounded phallicata.


Dikrella scarlatina n. sp.

Resembling meria in general form with vertex more pointed, brightly marked with red and with distinct male genitalia. Length 2.7 mm.

Vertex: Strongly produced and bluntly pointed. A little longer at middle than basal width between the eyes. Head as wide as pronotum.

Color: White, vertex with an elongate, reddish spot on disc between the eyes. Pronotum with a rather broad, reddish curved band parallel to the anterior margin and protruding to the margin on each side between the eyes. A large red spot on apex of scutellum and a fainter spot in each basal angle. Elytra with an elongate reddish spot on the clavus at the base. A spot on the middle of each clavus, a reddish spot on corium and a diagonal reddish band extending
backward from costa at about two-thirds the length of elytra which terminates on the middle. Each elytron with a black spot on inner basal portion of posterior apical cell. Face yellowish with a broad red band interrupted at middle, a little below margin and between the eyes.

Genitalia: Female seventh sternite with posterior margin broadly angularly produced. The male pygoferes are elongate and bluntly angled at their apices. The thick pygofer hooks arise on the dorso-caudal angle of the pygofer and appear somewhat clavate. The margins of the valve are almost truncate. The plates are broad and narrowly separated at their bases. The styles are broad with their mesal apical lobes long and curved dorsad. The connective is broad and T-shaped. The base of the aedeagus is long and cylindrical with its dorsal processes long and moderately thin. A pair of thin, ventro-lateral processes arise on the base and are closely appressed to the long, parallel sided phalicata to near its apex.

Holotype male, allotype female and female paratype collected at Chilpancingo, Gro., October 25, 1941 by DeLong and Good.

**Dikrella rubranota** n. sp.

A blunt headed species with one red spot on each elytron and with distinct male genitalia. Length 3 mm.

Vertex: Short, blunt, rounded in front, about one-third wider between eyes at base than median length. Head narrower than pronotum.

Color: White tinted with yellow. Elytra subhyaline, coastal margin broadly yellow. A bright red elongate spot just above costal margin and about two-thirds the distance from the base.

Genitalia: Male pygoferes elongate, with their apices bluntly angled. Thin, dorsally curved pygofer hooks arise on the dorso-caudal angles of the pygofer. The anterior margin of the valve is concave with its posterior margin convex. The plates are broad and separated at their bases. The styles are widened toward their apices and their apical lobes are rather long. The connective is Y-shaped and thin. The base of the aedeagus is short and bears three processes, a pair of short, thin ventro-lateral processes and a single, long, caudally directed, dorsal process.

Holotype male and male paratype from Popotla D.F., June 19, 1924 (M.B. 68) and male paratypes from D.F. without specific data all collected by Dr. Dampf.

REFERENCE