

CALOPTERYGIDAE

Two genera, *Calopteryx* and *Hetaerina*, represent the family in Texas. *Calopteryx* species occur widely in the northern hemisphere, and *Hetaerina* species inhabit only North and South America, reaching their highest diversity in southern latitudes. Broad, non-petiolated wings and body colors of brown, metallic greens, blue and bronze distinguish these damselflies. Sexual dimorphism exists in wing pigments; males possess the brighter colors and females usually have much less wing pigment.

KEY TO THE GENERA

- I a) Median space without cross veins; coloration metallic green or bluish, little or no pale area; wing pigments blackish, red colors absent, stigma absent in males, present and distinctly white in females *Calopteryx*
- b) Median space with several cross veins; body pattern with distinct pale areas adjacent to dark metallic stripe or diffuse brownish body; male fore wings possess basal red area with or without adjacent brownish area, small stigma usually in both sexes *Hetaerina*

Calopteryx Leach, 1815

Color pattern differences given in the keys also allow field identification. Female *C. maculata* have fully pigmented wings as the male, but they are usually darker in the apical fourth and possess a distinct white stigma or pseudo-stigma (Tillyard, 1917). Teneral *C. maculata* have only smoky-gray wing colors. Female *C. dimidiata* occur in two forms; the wings have little to no pigment or the apical fourth is pigmented similar to the male pattern (Johnson and Westfall, 1970). Both female morphs have distinctive white stigmas.

KEY TO THE MALES

- I a) Wings translucent brown (in teneral specimens) to opaque black for full length; ventral surface of abdominal segments 9 and 10 whitish; inferior abdominal appendages two-thirds or greater length of superior abdominal appendages (Fig. 6 C) *maculata*
- b) Wings with basal five-sixths to three-fourths area clear, apical portion distinctly marked with brown or black pigment (Fig. 6 C); ventral surface of abdominal segments 9 and 10 black; inferior abdominal appendages less than two-thirds length of superior abdominal appendages (Fig. 6 D) *dimidiata*

KEY TO THE FEMALES

- I a) Wings possessing brownish-black pigment over full length, often with greater intensity in apical fourth; ventrolateral surface of pterothorax blackish *maculata*
- b) Wings devoid of brownish-black pigment, or pigment restricted to apical fourth or less (Fig. 6 H); ventrolateral surface of pterothorax pale *dimidiata*