***Dieunomia*** of the tallgrass prairie region and greater midwest

M. Arduser

*edited June 19, 2023*

**Females:**

1. Posterior face of propodeum confluent with lateral face, the transition between posterior and lateral faces rounded, not a right angle, not carinate; ***usually*** large (15mm or greater) all-dark bees, all hairs including scopae ***usually*** black to dark brown (rare exceptions) ……………………………………………………….2

Transition between posterior and lateral faces of propodeum abrupt, more or less a right angle, often carinate in part; usually smaller bees (13mm or less), all hairs including scopae light-colored (whitish to rarely pale orangeish)……….…………………………………………………………………………………………………………………4

2(1). Pubescence and wings usually all black or nearly so; apical depressed areas of tergites without fasciae, very finely and densely punctate with narrow impunctate apical margins…………….***heteropoda***

Pubescence all light-colored, whitish to pale orangeish; T3-T4 apical depressed areas with dense to weak pale fasciae……………………………………………………………………………………………………………………………………………3

3(2). Large bee, 15mm or so; extralimital species, characteristic of Great Plains, no TGP or Midwest records to date; propodeum with lateral faces shiny with few if any punctures or striations; T3-T4 apical depressed areas covered with complete dense pale fasciae, concealing integument.………….***apacha***

Smaller bees, 11-13mm or slightly less; propodeum with lateral faces shiny but with deep, close punctures and/or striations/reticulations; legs and abdomen often reddish or orangeish in part:

**(a)** Propodeum with lateral faces shiny with deep, close punctures; tergites with weak pale fasciae, not concealing integument; late spring-early summer flight period, Asteraceae specialist; southern TGP only……………………………………………………………….…………………….……..…***bolliana***

**(b)** Propodeum with lateral faces shiny with indistinct punctures, striations or reticulations; tergites with narrow but dense pale fasciae, concealing integument; late summer flight period, Asteraceae specialist, sand obligate; central and southern TGP/Midwest

……………………………………………………………………………………..……….***bakeri*** Cockerell 1898, *in part*

4(1). Mid-femur ventral margin forming a very weak obtuse angle medially; legs usually orangeish or reddish in part; T1-T2 occasionally orangeish or reddish in part; posterior face of propodeum baso-laterally without carinae, or these extremely short and not reaching up onto posterior-lateral margin; late summer flight period, Asteraceae specialist, sand obligate; central and southern TGP/Midwest; 10-12 mm……………………………………….………………***bakeri***, *in part*

Mid-femur ventral margin straight from base to apex, lacking any vestige of an obtuse angle medially; legs and terga dark, without orange or red; posterior face of propodeum with basolateral carinae present and often reaching onto posterior-lateral margin; primary oligolege of *Helianthus*, usually on alluvial plains but not necessarily in sandy habitats; throughout TGP/Midwest; 12-14 mm ……………………………………………………………………………………….…….……………………………***triangulifera***

**References:** Cross (1958); Mitchell (1960); Michener (2007)

***Dieunomia*** of the tallgrass prairie region and greater midwest

M. Arduser

*edited June 6, 2023*

**Males:**

1. Hind tibia greatly expanded, maximum width across distal margin more-or-less equal to maximum length of tibia; F11 flattened, somewhat paddle-shaped, apically truncate, much different in shape compared to F10; bee usually 15mm or greater…………………………………………………………………………...2

Hind tibia maximum width at most half the length of tibia; F11 isodiametric, rounded apically, similar in diameter to F10; bees less than 15mm………………………………………………………………………………….4

2(1). Mid-femur with a projecting ventral keel; mid-basitarsi broadened, flattened, anterior margin carinate; hind coxa tubercle basal, covered with appressed black bristles; overall appearance usually blackish (exceptions occur, and superficially resemble *apacha*, below); common species ……………………………………………………………………………………………………………………………………….***heteropoda***

Mid-femur rounded ventrally, without a keel; mid-basitarsi narrow, stalk-like; hind coxa tubercle either distal, or entirely absent, with pale hairs; overall appearance of bee pale, without black hairs….3

3(2). Mid-basitarsi with a spur-like distal process; hind coxa with distal tubercle; bee usually 15mm or greater; extralimital species, characteristic of Great Plains, no TGP or Midwest records to date …………………………………………………………………………………………………………..….…………………………….***apacha***

Mid-basitarsi simple, without a spur-like distal process; hind coxa without a distal tubercle (do not confuse with trochanter, which has a tubercle); bee 11-13mm; late spring-early summer flight period, Asteraceae specialist; southern TGP only…………………………………………………………………..………....***bolliana***

4(1). Pronotum with lateral surface striate; hind tibia with large projecting tooth, surface of tibia above the tooth smooth (entire) all the way to base, without any additional projection or process; primary oligolege of *Helianthus*, usually on alluvial plains but not necessarily in sandy habitats; throughout TGP/Midwest……………………………………………………..………………………………………………….…..***triangulifera***

Pronotum laterally without striae, surface smooth; hind tibia with a small angulate or toothlike process above the distal tooth; Asteraceae specialist, sand obligate; central and southern TGP/Midwest ……………………………………………..………………………………………………………………………***bakeri*** Cockerell 1898

**References:** Cross (1958); Mitchell (1960); Michener (2007)