

Halictus of the tallgrass prairie region and eastern North America

M. Arduser

revised August 30, 2019

Males

- 1. Thorax dull metallic green, blueish-green to blackish-green.....2
Thorax blackish, non-metallic.....3

2. Face short, i.e., about half of the clypeus extends below the suborbital line; propodeum with dorsal surface finely striate with a smooth, shiny posterior margin; gonocoxite laterally with a very narrow vertical projection which is separate from the gonostylus.....**tripartitus**

Face longer, nearly all of the clypeus extending below the suborbital line; propodeum dorsally finely rugose or finely reticulate-striate in its entirety, without a smooth, shiny posterior margin; gonocoxite laterally simple, lacking any projection; throughout ENA.....**confusus**

Note: H. (S.) tectus Radosz. has been introduced on the east coast recently; it is similar to H. (S.) confusus. but with conspicuous white or yellowish appressed hairs all over the body, esp. on the anterior face of T1 where they mostly conceal the integument; in confusus males, the hairs on the anterior face of T1 are erect, not appressed, and the integument is clearly visible there.

- 3. ST4 with apical margin weakly concave and bordered with a narrow, dense, pubescent fringe; propodeal triangle dorsally rugose-reticulate.....**rubicundus**
ST4 margin straight, to very weakly concave, its margin without a fringe of dense hairs, pubescence short and uniform throughout.....4

4. Propodeal triangle dorsally extremely finely and densely rugoso-punctate; ST2-ST4 with very fine, short, appressed pubescence, lacking any long, suberect hairs even laterally; inner margin of gonostylus with a comb of 6 or so distinct setae; usually 12mm or longer in length, wings typically brownish.....**parallelus**

Note: H. rubicundus is similar but ST4 is modified in that species, see above; the western farinosus, which barely makes it onto the Great Plains, is also similar but has lighter wings and a shorter vertex than parallelus. In addition, the tergal punctures are very fine and close in farinosus, much more so than those on the scutum; in parallelus the tergal punctures are much like those of the scutum in size and density.

Propodeal triangle dorsally finely rugose to rugoso-striate, lacking any punctures; ST2-ST4 with longer, suberect hairs more-or-less throughout; inner margin of gonostylus without anything resembling a comb; usually smaller, 10 mm or less in length, wings not so darkened, lighter in color.....**ligatus**

Note: the recently-recognized H. poeyi Lepel. is genetically distinct from H. ligatus, but morphologically similar. Thus far known from Tennessee, Mississippi, south Texas; acc. to Sam it may be a sand obligate (true ligatus is not a sand obligate).

Halictus of the tallgrass prairie region and eastern North America

M. Arduser

revised August 25, 2019

Females

1. Thorax dull metallic green or blueish (subgenus *Seladonia*).....2

Note: H. (S.) tectus Radosz. has been introduced on the east coast recently; it is similar to the native *Seladonia* spp. but with conspicuous white or yellowish appressed hairs on the posterior face of the propodeum and elsewhere on the body; our native *Seladonia* species lack this appressed pubescence.

Thorax blackish, non-metallic.....3

2. Propodeum with posterior margin usually evenly crescentic in outline; overall punctation of the bee exceptionally fine and close, this especially notable on the frons; eyes parallel, face not narrowed below; pronotum with dorso-ventral ridge sharp-edged, not obtuse; propodeal triangle dorsally usually with weak, largely linear macrosculpture stretching from base to approximate posterior margin of propodeum; TGP region but not known east of the Mississippi River.....**tripartitus**

Propodeum usually with posterior margin truncate medially, not evenly crescentic; overall punctation of the bee coarser, especially notable on frons; eyes weakly converging below, thus face narrowed below; pronotum with dorso-ventral ridge obtuse, not angulate; propodeal triangle dorsally usually with weakly reticulate (not linear) macrosculpture, and weak, narrow transerve ridges adjacent to the medial portion of the posterior margin of the propodeum; widespread in TGP.....**confusus**

3. Gena with a distinct toothlike or angulate process along ventral-posterior margin; hind tibial spur with one large basal tooth, serrated beyond this tooth.....**ligatus**

Note: the recently-recognized H. poeyi Lepel. (not recorded from TGP at present) is genetically distinct from *H. ligatus*, but morphologically similar; "female *poeyi* have the ocelli set back quite a distance from the vertex (greater than the distance between the outside edges of the lateral ocelli), and have a much wider and narrower clypeus (Droege)". Thus far known from Tennessee, Mississippi, south Texas, possibly a sand obligate (Droege), true *ligatus* is not.

Gena simple, rounded, not angulate; hind tibial spurs otherwise4

4. Vertex short (distance from midocellus to interantennal line nearly twice the distance from midocellus to crest of vertex); hind tibial spur with 4-6 widely-spaced, separate teeth; wings light in color, pale brown at most.....**rubicundus**

Vertex taller (distance from midocellus to interantennal line about equal to distance from midocellus to crest of vertex); hind tibial spur serrate, without distinctly separate teeth; wings darker (brownish).....**parallelus**

Note: the western H. farinosus is similar to *parallelus* but barely enters the western Great Plains. *H. farinosus* females have the hind tibial spur similar to that of *parallelus*, but a shorter vertex, more like that of *rubicundus*, and *farinosus* has longer, erect hairs on the pronotal collar, *parallelus* has short, dense, suberect hairs on the pronotal collar.