**Hoplitis** of the tallgrass prairie region and eastern North America

**M. Arduser**

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**Females:**

1. Clypeus with a conspicuous erect tubercle apico-medially; clypeus much wider than long, width x length about about 3:1 or wider; scopa pale..........................**robusta** (Nylander)  
   *(circumboreal; Ontario, Quebec; not known from US)*  
   Clypeus without an apico-medial tubercle or other projection; clypeus longer, WxL about 2:1; scopa variable, but usually pale........................................................................................................2

2. Clypeus with apical margin crenulate to denticulate; mandible relatively long and narrow, (length x maximum width at apex, about 2:1), three-toothed, apical tooth much larger than others.......................................................**anthocopoides** (Schenck)  
   *(introduced from Old World; rare, NE US, *Echium oligolege*, no Midwest/TGP records)*  
   Clypeus with apical margin either entire, broadly concave or convex, or sometimes slightly undulate; mandible variable, *if* apical tooth much larger than others *then* scopa dark brown to blackish and mandible four-toothed.........................................................................................3

3. Scopa dark brown; mandible much broader apically than basally; mandible with four teeth, apical tooth much larger than others; S6 with a stout, very short, apical mucro, sometimes concealed by pubescence.................................................................**albifrons** (Kirby)  
   *(boreal region south to transition zone; western NA forms of *albifrons* also have the S6 apical mucro)*  
   Scopa pale; mandible width apically and basally approximate; *if* mandible with four teeth *then* apical tooth not much larger than others; S6 apically simple, entire, without a mucro........4

4. Mandible with four teeth, these approximately similar in size and equidistant from each other; T1 anterior surface dull, tessellate; T6 with a thin, fragile, translucent lamella issuing from beneath the narrow, shelf-like apical margin of T6............................**spoliata** (Provancher)  
   *(widespread in ENA; western NA “Chlorosmia” spp. are the only other *Hoplitis* species that have the thin lamella on the underside of the T6 shelf)*  
   Mandible with three teeth; T1 anterior surface shiny, without tessellation; T6 lacking a thin fragile lamella on the underside of its narrow, shelf-like apical margin.................................5
5. Genal basket (this is the set of long, recurved hairs bordering the hypostomal area) well-developed, nearly all hairs bordering hypostome very strongly curled; shelf-like apical margin of T6 quite short.................................................................................................................................
........6
Genal basket poorly developed, relatively few hairs bordering hypostome strongly curled, many straight hairs present; shelf-like apical margin of T6 longer, conspicuous, like the brim of a ball cap..........................................................................................................................................

6(5). Clypeus medially with a narrow, shiny, somewhat raised longitudinal ridge; hind tibial spurs apically curved or weakly hooked, usually dark; scutellum convex; T3 and T4 with a deep, transverse groove or depression basally.................................................................truncata (Cresson)
(widespread in ENA; strongly associated with Fabaceae)
Clypeus finely, closely punctate throughout, without a medial, narrow, shiny, raised longitudinal ridge; hind tibial spurs straight throughout, usually pale in color; scutellum flattened; T3 and T4 only weakly transversely grooved or depressed basally (all Robertsonella key here).................7

7(6). Females of the three species of H. (Robertsonella) are quite similar and difficult to separate reliably in the absence of associated males (which, conversely, are all quite distinct, see male key):
H. micheneri  Mitchell tends to be the largest of the three, and separable from the other two: punctures on T1-T2 in micheneri are finer and more scattered than in the other two, and the surface of T1-T2 tends to be shinier in H. micheneri. This species is strongly associated with Amorpha fruticosa, the other two species (below) have never been collected from that plant species.
Females of H. simplex Cresson and H. nemophilae Neff are virtually identical. Both are strongly associated with riparian areas and plants in the family Hydrophyllaceae.

8(5). Shelf-like margin of T6 thinly but completely pubescent ventrally; T6 punctures usually as coarse, or coarser, as those on T5; T5 usually with apical fascia, sometimes weak; interspaces on T5 shining, without microsculpture.................................................................pilosifrons (Cresson)
(widespread in ENA)
Shelf-like margin of T6 glabrous ventrally; T6 punctures usually finer and more dense than punctures on T5; T5 usually lacking apical fascia; interspaces on T5 tessellate
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Males:

1. Flagellar segments in part modified, either F2-F5 broadened and flattened relative to F6-F11, or F11 drawn to a fine point. 

2. Flagellar segments not modified, all segments more or less cylindrical and of equal width, F11 rounded apically.

2(1) F2-F5 broadened and flattened relative to F6-F11, F11 apically rounded; S1 apically upturned with a short, blunt projection; S2 surface shallowly concave, shiny, smooth with few hairs, but with a strong apical fringe. spoliata (Provancher) (widespread in ENA)

F2-F5 not broadened and flattened, instead similar to other segments, but F11 drawn to a fine point; S1 flat, not upturned, without any projection; S2 surface either flat and hairy, or convex with a strong central projection or swelling. truncata (Cresson) (widespread in ENA)

3(2) S2 surface flat, hairy, without any projection; T7 apically truncate....truncata (Cresson)
S2 surface with a strong projection or swelling medially, not flat; T7 apically pointed or narrowly triangular..................................................................................................................4

4(3). S2 medial projection a relatively low transverse swelling, in profile not triangular or pointed; apex of T7 process blunt........
..........................................................................................................................pilosifrons (Cresson)
(widespread in ENA)
S2 medial projection strongly produced, in profile triangular or pointed; apex of T7 process pointed..........................................................................................................................producta (Cresson)
(widespread in ENA)

5(1). T7 apically with four teeth or toothlike processes; boreal..................robusta (Nylander)
(circumboreal; Ontario, Quebec; not known from EUS)
T7 apically rounded or truncate, without any teeth or toothlike processes..................6

6(5). Clypeus covered with very short appressed white pubescence; S2 apico-medially with a tiny mucro (minute spine), which is shorter than adjacent hairs; large, 10mm or larger; northern, in our area only in MN, WI, MI, Canada.................................................albifrons (Kirby)
Clypeus with longer hairs; S2 apical margin without any process or minute spine; usually smaller
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7(6). Length of F4-F8 segments slightly less than their width; penis valves broader than gonostyli, gonostyli very narrow and not broadened apically; introduced species in NEUS, not known from the Midwest or prairie region, Echium oligolege........anthocopoides (Schenck)
F4-F8 segments slightly longer than broad; penis valves more or less as wide as gonostyli, gonostyli broadened apically; uncommon native species .................................................................................8

8(7). Base of mandible very broad, almost equalling length of mandible (length of base of mandible at least 2/3 of the max. length of mandible); mandibular fringe (pubescence along ventral margin of mandible) long and dense, the basal hairs as long as, or longer than adjacent genal hairs; clypeal pubescence short, dense, sub-appressed (white); gonocoxites with ventral
hairs very short and dense, angled towards base of gonoxite, and much shorter than the long hairs at the apices of the gonocoxites.......................................................... simplex Cresson
Base of mandible not as broad, no more than half the length of the mandible; mandibular fringe weak, basal hairs no longer (and usually slightly shorter) than adjacent genal hairs; clypeal pubescence longer, erect or sub-erect, surface of clypeus visible in part; gonocoxites with ventral hairs longer, erect, not angled towards base of gonocoxite
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9(8). T6 with a broad, shiny, shallow median depression which lacks hairs or punctures; gonocoxites with hairs at apex long; gonocoxites ventrally with hairs present on apical half, these hairs shorter than the hairs at the apex of the gonocoxites; frons punctation fine and mostly contiguous; oligolege of Amorpha fruticosa .................................................micheneri Mitchell
T6 flat to weakly convex, without a medial depression, the surface with scattered hairs and punctures; gonocoxites with hairs at apex short; gonocoxites ventrally with hairs throughout most of ventral surface, but with a denser cluster on medial section, these hairs as long or longer than the apical hairs of the gonocoxites; frons punctation similar to above but punctures a bit more separated, not quite so contiguous; usually at Hydrophyllaceae
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end