

Lithurgopsis of eastern North America (to the 100th Meridian)

April 16, 2023 M. Arduser

Note: The Palaearctic *Lithurgus chrysurus* Fonscolombe has been found in Pennsylvania and possibly occurs elsewhere in the northeast US, but has never been found any further west (Rozen 2013, 2014). It is superficially similar to our native *Lithurgopsis* species, but the males lack arolia (all *Lithurgopsis* males have arolia), females and males both have F1 longer than F2 (F1 equal to or shorter than F2 in all *Lithurgopsis*), and females are strict oligoleges of *Centaurea*, not *Opuntia*. Both sexes of *L. chrysurus* fly later than our native *Lithurgopsis*; females are known to create nests in structural timbers, which *Lithurgopsis* are not known to do.

Females:

1. Supraclypeal area with a pair of horn-like lateral processes, the processes separated by a broad saddle or concavity; malar space present, and with an irregular pit-like depression which is slightly behind and below the lower end of the eye.....2

Supraclypeal area produced as a sub-rectangular or semicircular process, its dorsal margin mostly entire, only weakly concave (if at all) between the lateral margins; malar space absent, pit-like depression below lower end of eye absent or very small and obscure.....*gibbosa* (F. Smith)

2(1). T6 pubescence entirely orangeish-reddish; T5 pubescence light-colored; hind tarsi with hairs all light-colored (dull white to pale orange); depression below and behind the lower margin of the eye deep and large, usually margined posteriorly by an irregular carina.....*apicalis* (Cresson)

T6 pubescence all black, sometimes with brownish highlights; T5 pubescence all black; hind tarsi with mostly blackish hairs, some light-colored hairs intermixed; depression below the lower margin of the eye less distinct, smaller, and usually not margined posteriorly by an irregular carina.....3

3(2). Supraclypeal prominence viewed from behind is C-shaped in profile, the lateral processes nearly perpendicular to the plane of the face; clypeus apically with a very low, weak, narrow *pre*-apical ridge which is divided medially, and somewhat hidden by pubescence (best seen in anterior view, in silhouette).....*n. sp. "ozarkensis"*

Supraclypeal prominence viewed from behind broadly concave in profile, not C-shaped, the lateral processes projecting at about a 45 degree angle to the plane of the face; clypeus without a very low, weak, narrow preapical ridge or swelling.....*littoralis* (Cockerell)

Males:

1. Labrum near base with a pair of erect spine-like processes, usually visible (at least in part) when mandibles are closed.....*littoralis* (Cockerell)

Labrum near base with either a single triangular projection (sometimes very broadly triangular), or base of labrum without any projection(s); if mandibles closed may be difficult to determine.....2

2(1). Labrum near base with a single triangular projection, sometimes very broadly so; clypeus flattened*gibbosa* (F. Smith)

Labrum along basal portion with a very low, weak swelling that stretches across the basal width of the labrum, being widest medially, but without any medial increase in height; clypeus weakly convex3

3(2). Hind basitarsi posteriorly with black hairs; T6 and T7 pubescence black.....*n. sp. "ozarkensis"*

Hind basitarsi posteriorly with light-colored hairs; T6 and T7 pubescence light-colored (pale brownish to yellowish-orangeish).....*apicalis* (Cresson)

References: Rozen (2013, 2014), Snelling (1986), Snelling (1983)