**WV Lasioglossum (dialictus) Notes**

Claire Rubens, September 2023

**L. incompletum:**

Considering other characters in combination with the oblique propodeal carina is helpful. There is some randomness to dialictus propodeum striations, sometimes appearing similar to the characteristic “tabs” or “wings” on the propodeum of L. incompletum. Other key characters to consider are the punctate mesepisternum, anterior face of T1, and overall size. Generally L. incompletum is much smaller than most of the other species we have in our collection. Size comparison is an easy place to start, especially given the amount of specimens of L. incompletum that we have. The anterior face of T1 is inscribed with tiny lines, like a fingerprint (not smooth and shiny).

The mesepisternum appears to be somewhat variable between individuals. Some are more smooth and punctate while others seem more sculptured, somewhat obscuring the punctures. This is something I would have liked to spend more time looking at. I think barcoding a handful of the L. incompletum specimens could be helpful to make sure we don’t have other species within this group. It’s just such a large group in comparison to all the others.

**L. MS CR-4:**

L. MS CR-4 is a morphospecies I am proposing. It is quite similar to L. incompletum in terms of size and general appearance, but lacks the characteristic “tab” like carinae on the propodeum. Another big difference is that the anterior surface of T1 is smooth and shiny.

**L. mesiglab/obscurum:**

David- I definitely agree that these specimens key out well to L. obscurum and look like what I remember L. obscurum to be, however it would be well out of range. I don’t necessarily think this is L. tenax either since the scutum punctures are distinctly sparse lateral of the parapsidal lines. This would be another good choice to barcode since we have decent number of them, and they are relatively easy to distinguish from other dialictus.

**L. ruidosense**:

The character that really stands out to me is the integument colour. I’ve never seen a dialictus this dark, bordering on non-metallic. The reflections are very easy to miss. David- I definitely agree that this is L. ruidosense. I don’t think it would be L. versans based on the colouration and the sculpturing of the propodeum (see below). I’m pretty familiar with L. versans from the east, and these specimens look distinctly different to me. I think the range of L. versans is also east of the rockies.

Regarding the pitting on T2 (mentioned in DC’s key), I have found this character to be inconsistent (particularly in the versatum group) even with reference specimens that Jason Gibbs has ID’d himself. It doesn’t really seem like a reliable character in this group, or at least one of the trickier ones to use. It only seems helpful in extreme cases where there are either no pits or really dense pits on the apical ends. Jason mentioned that L. ruidosense is a species complex anyway, so the punctures on T2 might be irrelevant at this stage. Close up of a pair of eyes

Description automatically generated(Gibbs 2010)

**L. hyalinum**

I didn’t see any other specimens in our collection that matched this one that David ID’d earlier in 2023. The character that really stands out to me are the lateral surfaces of the propodeum. In all of our other specimens, this area is either heavily sculptured or smoother with inscribed lines. David- a close up shot of this surface would be a good addition to the key.

**L. helianthi:**

David- I’m not sure how likely it would be that we would find other large tegula dialictus species, but it might be worth adding the ones in range to your key since they are a fairly easy subgroup to pick out. The main characters on L. helianthi are the large, dark, punctate tegulae, small size, and oblique propodeal carina. The anterior face of T1 is not smooth and shiny, but inscribed with tiny lines and has a large fluffy fan of hairs.

**L. blueink Group**

I’m not convinced that **L. villobar and L. blueink are separate species so I am proposing that we call them, collectively, the L. blueink group**. , **DONE** I feel like there are multiple species here, considering there is quite a bit of variation in the propodeum sculpturing. I agree with David that many of the individuals in this group could be L. knereri (also considering L. reasbeckae, punctatoventre, etc. ). It would be really interesting to barcode a handful from this group. The bees in the group are on the larger side, generally more blue, have a shiny central scutum with coarse punctures, short face, and very dark tegula. Relative to other specimens in our collection this group also has less tomentum and sparser apical tergite fringes.

**L. MS CR-1**

In general, this specimen looks similar to the L. blueink group. The face is a little wider, the scutum punctures are much finer and denser, but most importantly, the apical ends of T1 and T2 are densely punctate in comparison to the L. blueink group.

**L. pruinosum**

This is a pretty distinctive species with an extremely long face, very metallic green tergites and dense tomentum. There are some dirty specimens at the end of the row, but I believe these are still L. pruinosum after scraping off some of the gunk.

**L. MS CR-2**

-long head shape

-similar to L. pruinosum, except dark brown, non-metallic tergites

**L. MS CR-3**

-extremely small

-extremely sculptured propodeal area, particularly the lateral slopes

-light yellow, clear tegulae