Revision of "A comparison of the parasitoid wasp species richness of tropical forest sites in Peru and Uganda – subfamily Rhyssinae (Hymenoptera: Ichneumonidae)"

We have now revised the paper, taking into account the suggestions of the positive reviews. In particular, we expanded on the evenness indexes, and how they relate to diversity indexes, as suggested by reviewer 2.

All suggestions were adopted except for the following.

Filippo di Giovanni

*not 81? [for Timms et al. 2016 highest latitude of 82°N]*

The metadata for Timms et al. had an error, claiming their highest sampled latitude to be 81°N. The actual highest latitude in the data is 81.83°N.

This type of sampling could be coupled with the new gen sequencing and integrated taxonomy protocols

There is something in this, but we feel it goes beyond the scope of the paper. We discuss how to get representative samples, not how to identify species in already existing samples.

Could the smaller number of individuals collected in Peru also be a consequence of the coexistence of a larger number of species, which tend to segregate spatially and temporally due to competition?

We'd say no. The densities of individual species could well decrease if there are lots of species. But not the total density of all species combined.

Have you tried to estimate the expected number of species? [at the Peruvian sites]

We haven't, there are unfortunately too few wasps caught for it to be worth trying.

Might also reflect the fact that the primary forest is a more stable and internally more uniform environment? [in discussion about what habitat types were sampled]

We're not confident we understood this comment. However, we suspect the main focus of the paragraph (highlighting that our study sites have a diversity of habitats, not all of which could be sampled) is not affected by this.

Reviewer 2

Would it be possible to infer some data on this [if rhyssine species are restricted to specific habitats] for example from Gauld's Costa Rican revision, for example examining what altitude ranges species of rhyssines occur in?

Unfortunately, we do not believe this is possible. Gauld's data is not sufficient, and is too coarse-scale, for this.