

## Asymmetrical intra-guild predation and niche differentiation in two pit-building antlions

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### Supplementary material

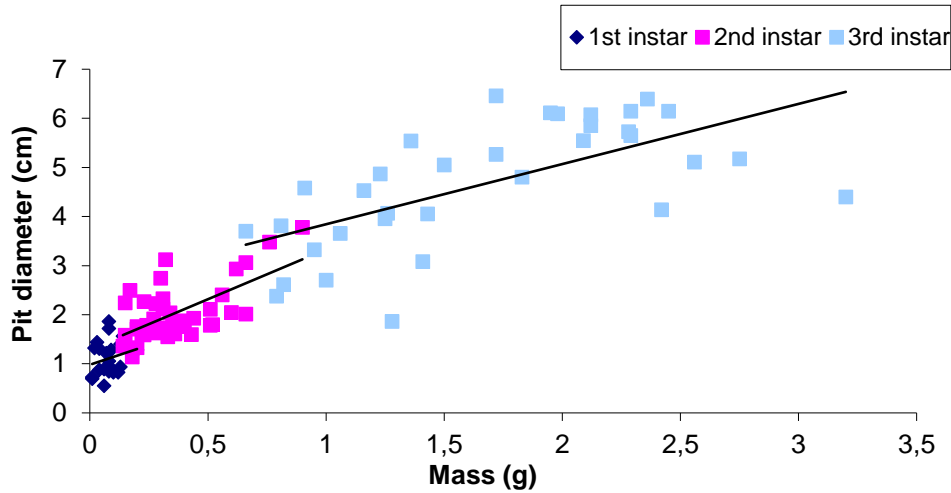


Figure S1. The correlation between body mass, instar stage and pit area in *Myrmeleon hyalinus*.

There is a tight correlation in antlions (here, *Myrmeleon hyalinus*) between body mass and instar stage with very little overlap in body masses between instars. In other words, body mass can easily indicate on the instar stage. The following figure presents the triplet link in *M. hyalinus* between instar, mass and pit area, based on the data of Scharf et al. (2009). We used body mass over instar stage because it is a better proxy of body size, consisting of much higher variance – it is a continuous rather than categorical variable (1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> instar stage). It also better represents body reserves. Using both body mass and instar stage as covariates is problematic, because it violates one of the assumption of linear models: the explanatory variables being uncorrelated with each other (Sokal and Rohlf, 1995, *Biometry* pp. 394).

## **References**

- Scharf, I., Golan, B., and Ovadia, O. (2009). The effect of sand depth, feeding regime, density, and body mass on the foraging behaviour of a pit-building antlion. *Ecological Entomology* 34, pp. 26–33.
- Sokal, R., and Rohlf, F.J. (1995). *Biometry*, 3rd edn. Freeman, New York.