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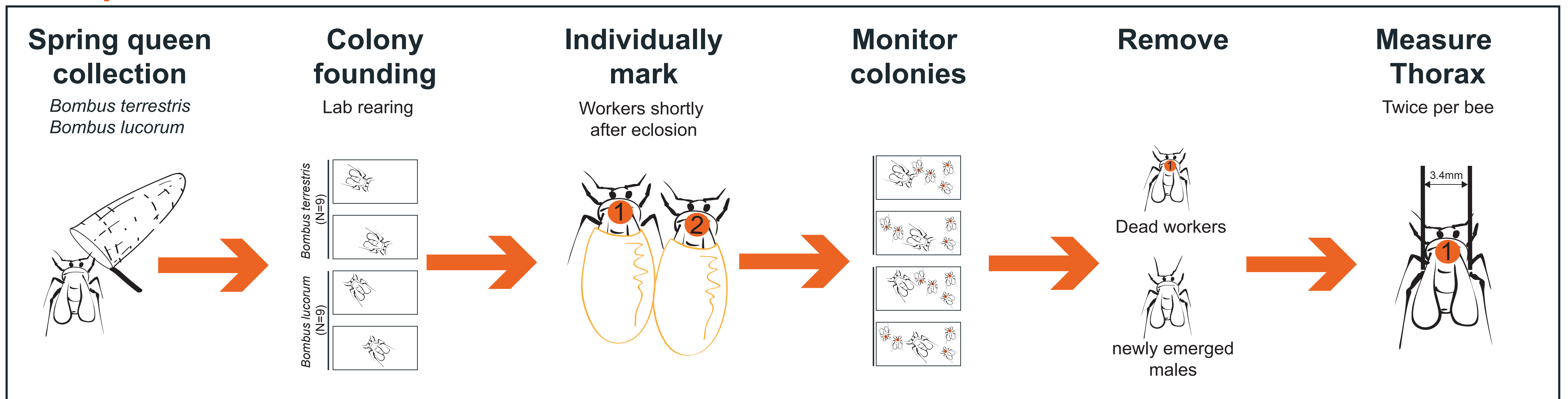
The demography of worker size in bumblebee colonies

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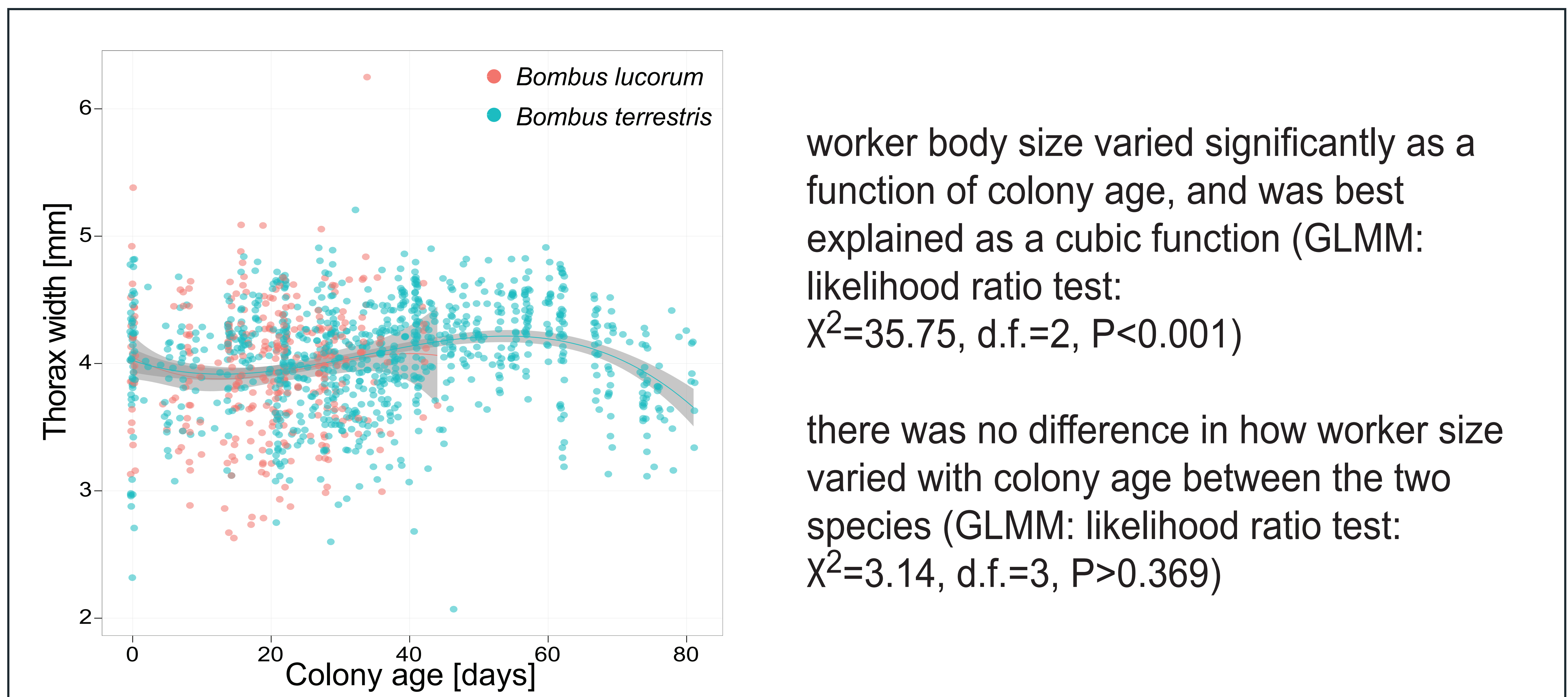
Introduction

Worker polymorphism is found across the social insects, but little is known of its ontogeny outside the ants. In ant species where queens found new colonies without the help of workers, first offspring are often reduced in size (nanitics)¹. In contrast a previous study on bumblebees suggested that the size of eclosing workers decreased with colony age². Here we studied how worker size varies in two closely related bumblebee species *Bombus terrestris* and *Bombus lucorum*, over the colony cycle.

Setup



Results



Conclusion

- No evidence for smaller offspring in the first clutch in the two studied *Bombus* species.
- The demographic dynamics do not differ between the two species
- There is no straight forward linear relationship between colony age and thorax width, but rather a higher order relationship resulting from factors like worker:brood ratios, types of brood present at any given time point, switch point and competition point dynamics³

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References

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