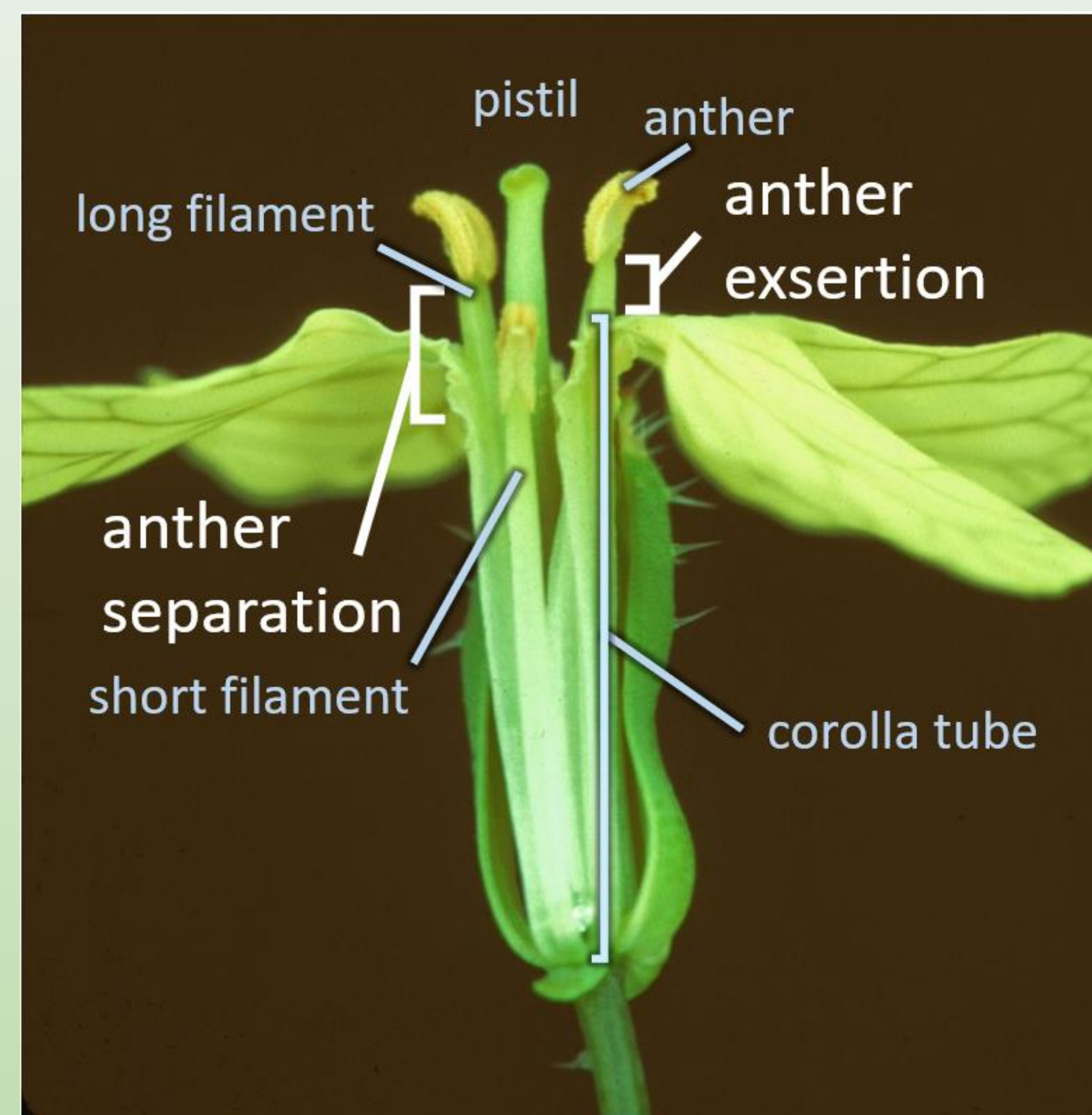


Anther position in wild radish (*Raphanus raphanistrum*) affects position of anther contact with pollinator bodies and varies across taxa



Adaptation, driven by natural selection, is responsible for the immense diversity of flowers extant today.



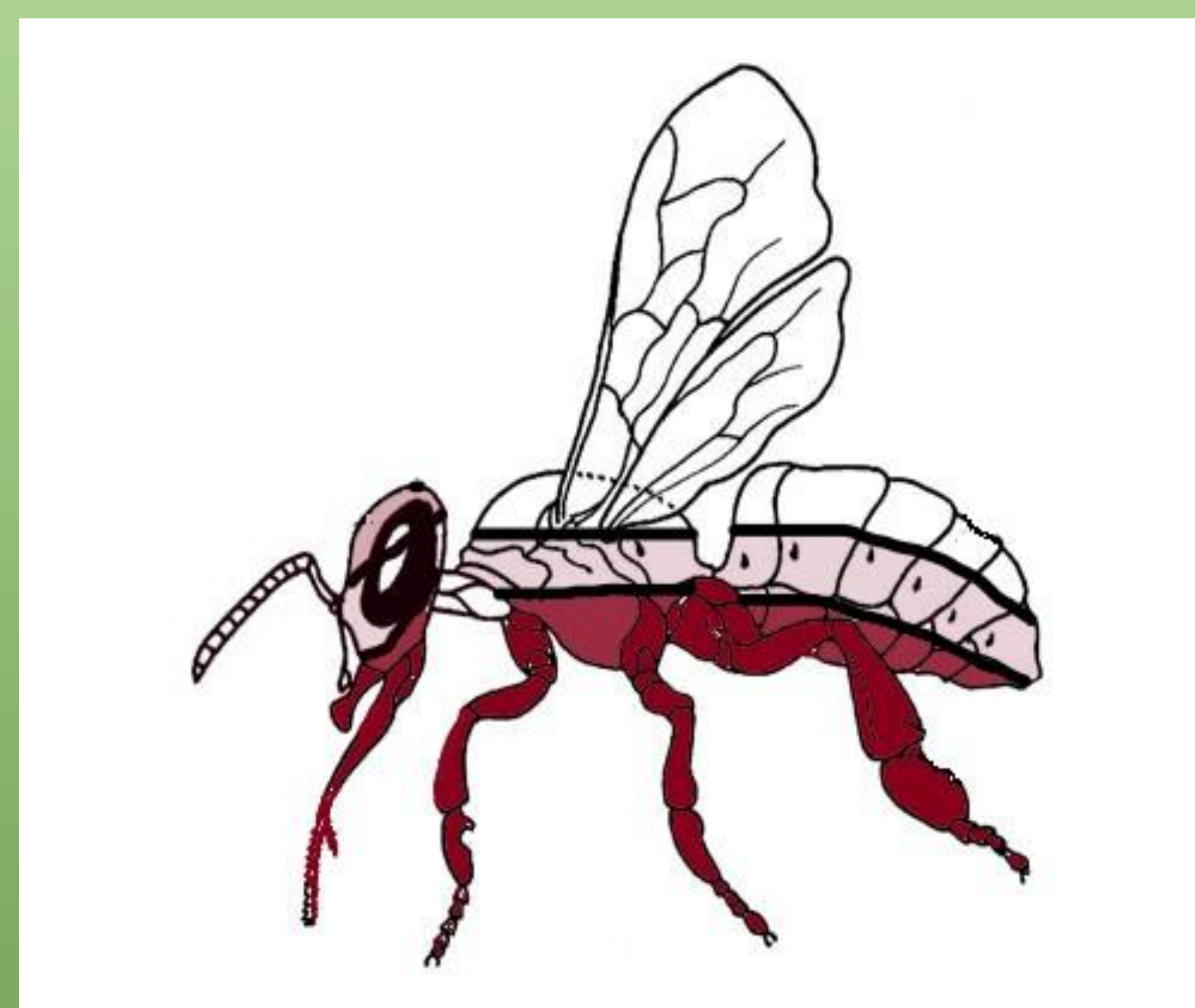
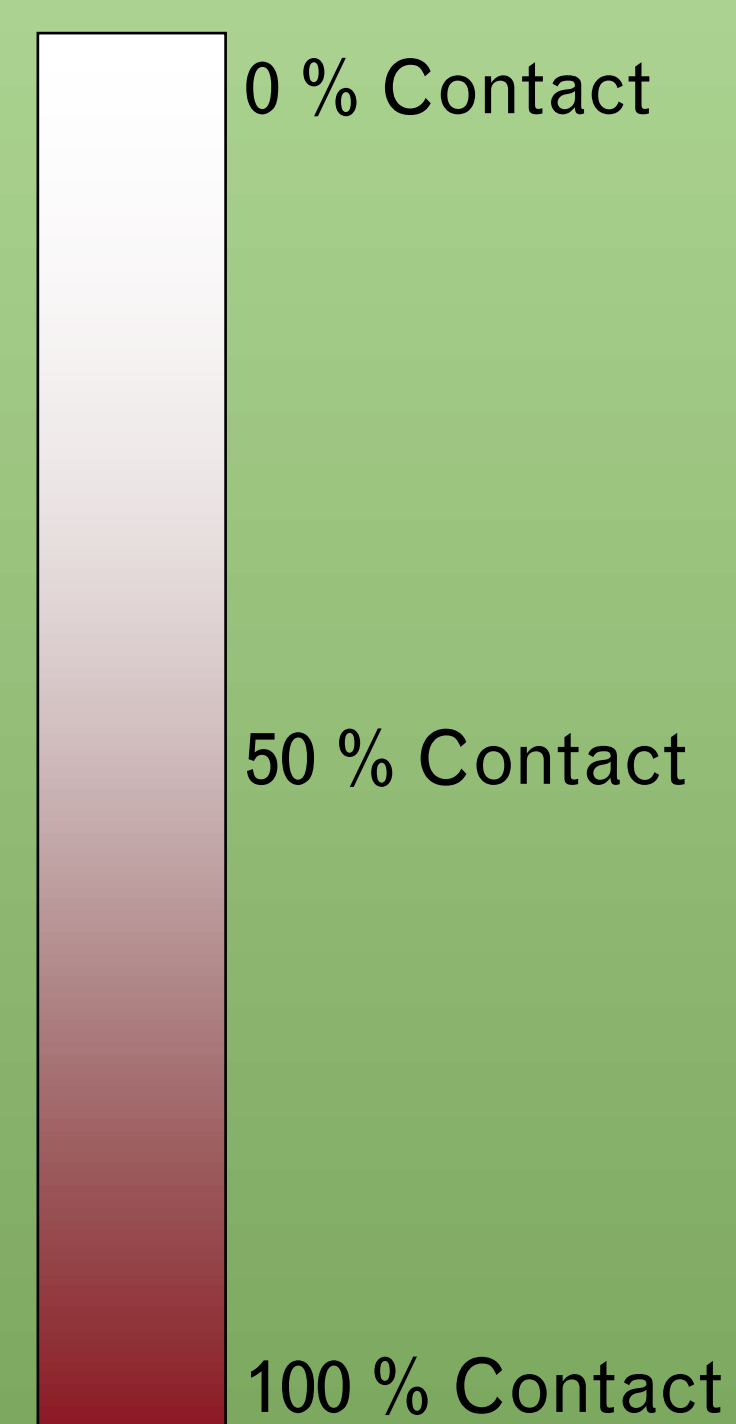
Flowers in wild radish have four long and two short anthers. We have evidence for stabilizing selection on anther exsertion and disruptive selection on anther separation.

We don't know the functional mechanisms behind these selection patterns.

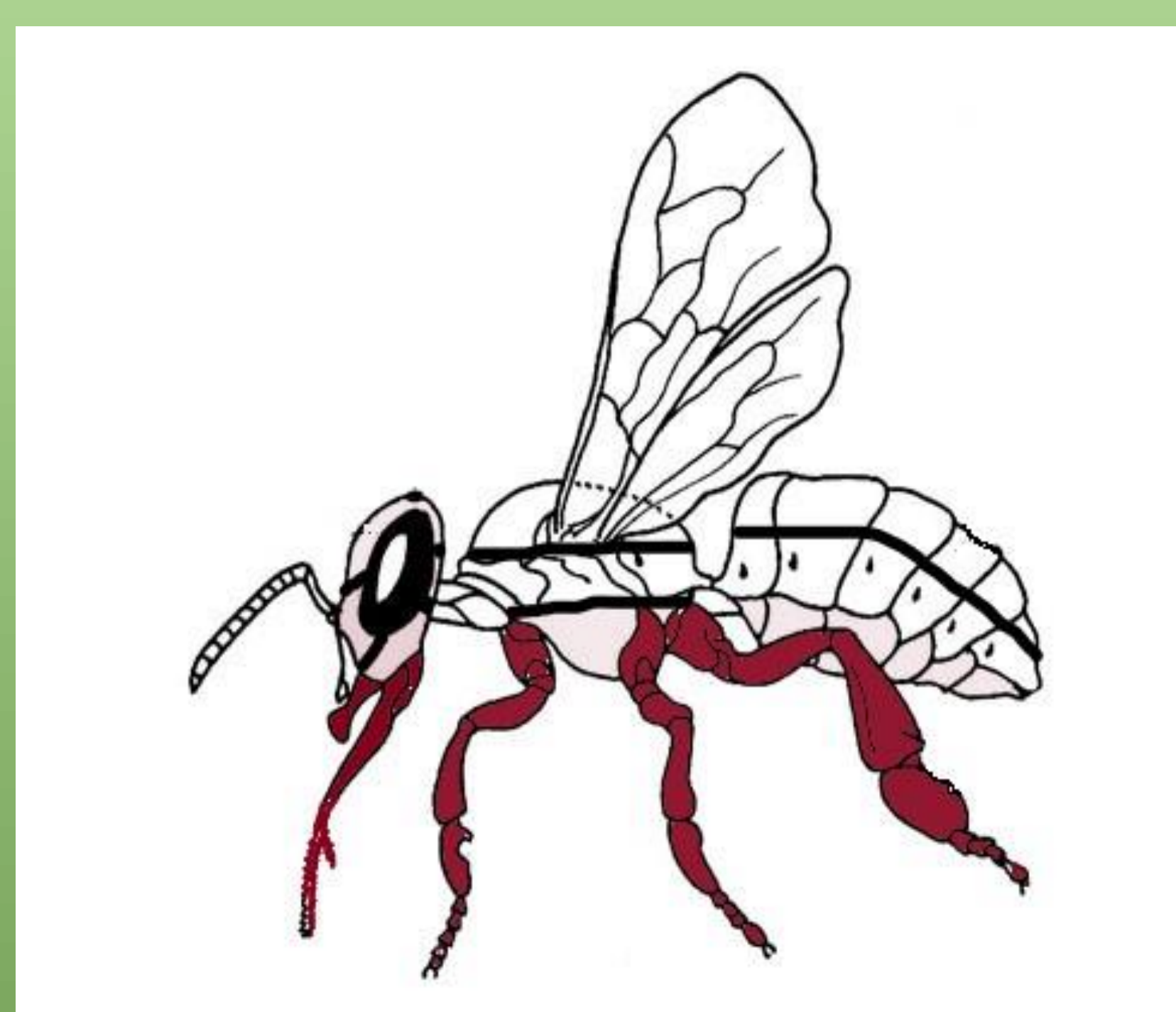
How do differences in anther position affect pollen placement on pollinator bodies?

Slow motion videos of pollination events, coupled with ImageJ analysis of pollinated flowers, are allowing us to determine what parts of pollinators' bodies contact anthers and how that relates to the varying levels of separation and exsertion.

Contact with anthers is most frequent at legs across small bees (mean exsertion=0.019 mm) and syrphid flies (mean exsertion=0.078 mm)



Small Bee Anther Contact by Percent, 7-7-2021; n=6 visits



Syrphid Fly Anther Contact by Percent, 7-7-2021; n=11 visits

As more data are analyzed, patterns will become more evident and shed light on the selection process.



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References:

Conner et al. 2009, *Annals of Botany*. Waterman et al. *in prep*. Blackiston, dummies.com.

