SMELLS LIKE S#*T!

Which scent does Callosobruchus maculatus prefer?

C. maculatus is an invasive species and the only food it gets in it's lifetime is from the bean it was born on.¹ Therefore, the choice of bean is crucial for reproductive success.

Many insects use semiochemical cues ('smell') to locate their food (beans) for ovipositioning.² The goal of this experiment was to see how familiar and unfamiliar scents affected their egg-laying behaviour in regards to choice of bean.

THE HYPOTHESIS

Where should I lay my eggs at?

2

C. maculatus will prefer familiar scents (soil) when choosing beans for ovipositioning

The findings generated in this experiement could be interesting in regards to i.a. crop protection³

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THE 'SMELLING' ORGANS (ORs)

Labial palps...

Antennaes.

Maxillary palps...

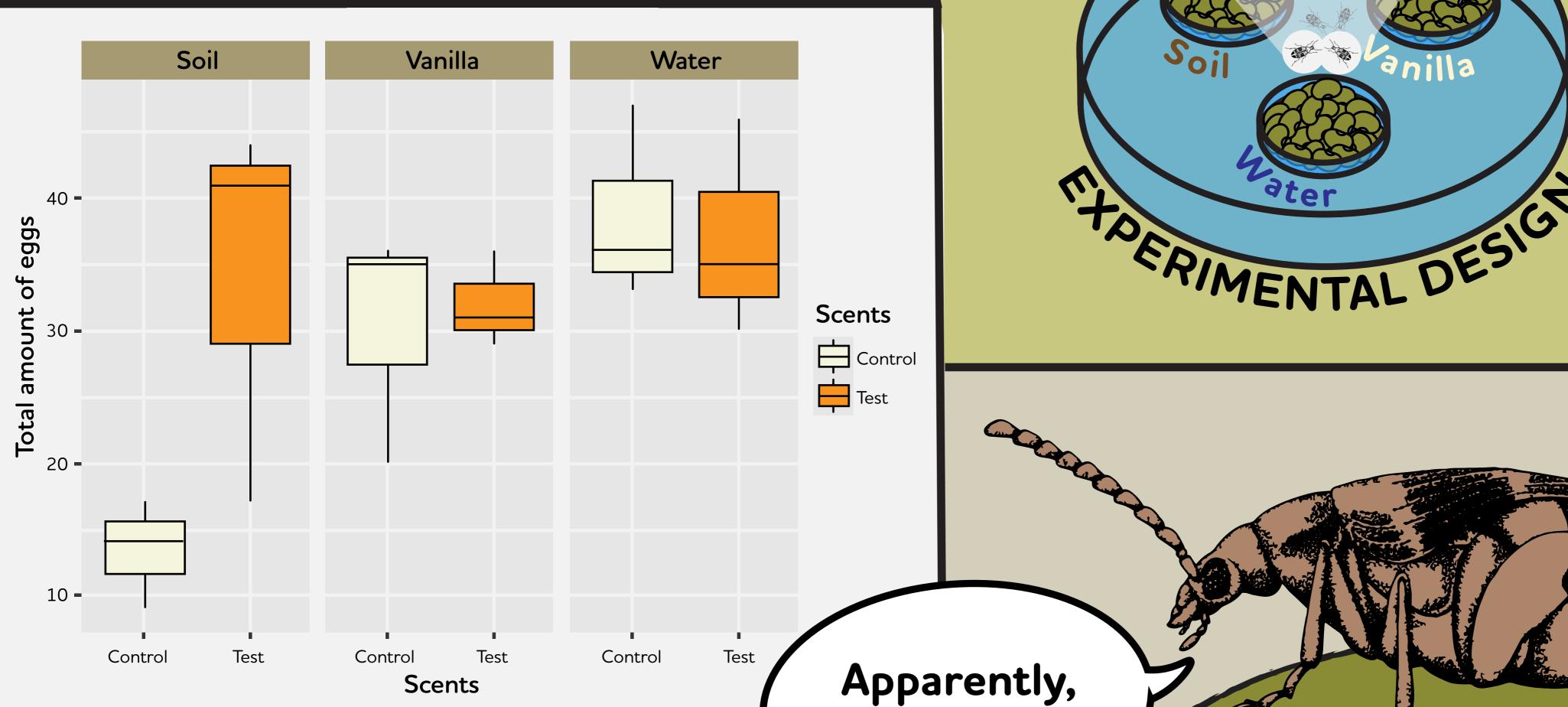


Figure 1: The egg distribution relative to the scents. The control represents the isolated scents in each control group. The test represents the specific scent in each treatment group.

KEY FINDINGS:

We did not find proficient evidence that the scent affected C. maculatus ovipositioning behaviour.

 Further research has to be done to uncover the role the ORs has in the life cycle of the bean beetle. I don't give a f@*k!

BUT WHY?

Too small sample Intraspecific competition Trade-off between quantity and quality areas. Not just one criteria

The specific scents has no effect.

for choosing beans

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2.Mbata, G.N., Shu, S., Phillips, T.W., Ramaswamy, S.B. (2004) Semiochemical Cues Used by Pteromalus cerealellae (Hymenoptera: Pteromalidae) to Locate Its Host, Callosobruchus maculatus (Coleoptera: Bruchidae), Annals of the Entomological Society of America. p. 353–360. https://-doi.org/10.1603/0013-8746(2004)097[0353:SCUBPC]2.0.CO;2
3.Arnold S.E., Stevenson P.C., Belmain S.R. (2012) Odour-mediated orientation of beetles is influenced by age, sex and morph. PLoS One. doi: 10.1371/journal.pone.0049071.



SCAN ME