BEAN BEETLES PREFER ORGANIC

RESEARCH QUESTION

Do female bean beetles have an oviposition preference between organic and inorganic black-eyed peas?

INTRODUCTION

The bean beetle (Callosobruchus maculatus):

- Agricultural pest that lay eggs on legume seeds in the genus Vigna
- Larvae burrow into and feed on the seed until it emerges as an adult

Prediction:

• Assuming inorganic beans are treated with synthetic fertilizer and pesticides: > The females will prefer organic beans over inorganic



References: Beck, C. W. & Blumer, L. C. (2014) A Handbook on Bean Beetles, Callosobruchus maculatus. Available at : https://www.beanbeetles.org/handbook/



Significantly more eggs on organic beans (p=0.014)

SAMPLE SIZES:

Organic beans: N = **618**

Inorganic beans: N = **476**



CONCLUSION

Future research:

Look at emerging adults: Compare offspring survival

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The female beetles prefer organic beans

