

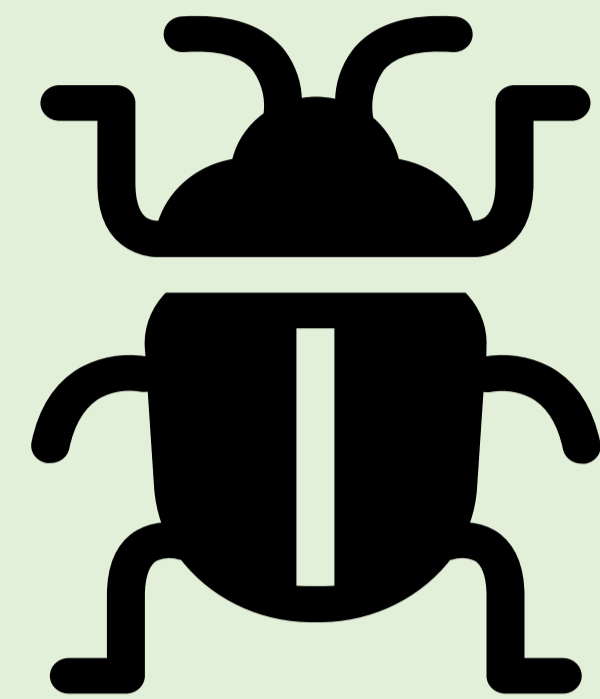
Home court advantage: do female *Callosobruchus maculatus* prefer mates from their natal bean?

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INTRODUCTION

This experiment utilized *Callosobruchus maculatus*, a model biological species with short generation time and minimal food and water requirement.

Experimental question: do female beetles prefer male mates from their same natal bean? Number of eggs laid was used as a proxy for mate preference.



METHODS

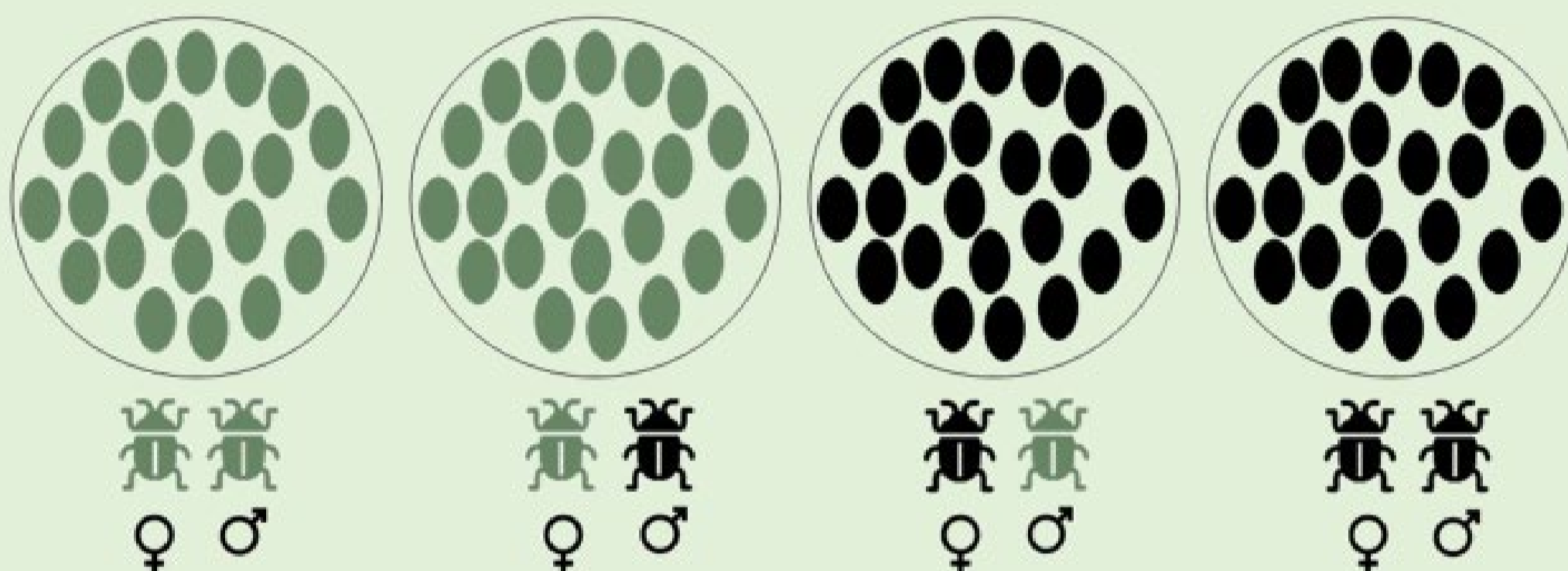


Fig 1: Four treatments, each with 5 replicates. Half had m/f beetles from same natal bean, half from different. Green = mung beans, black = black eyed peas.

DATA ANALYSIS

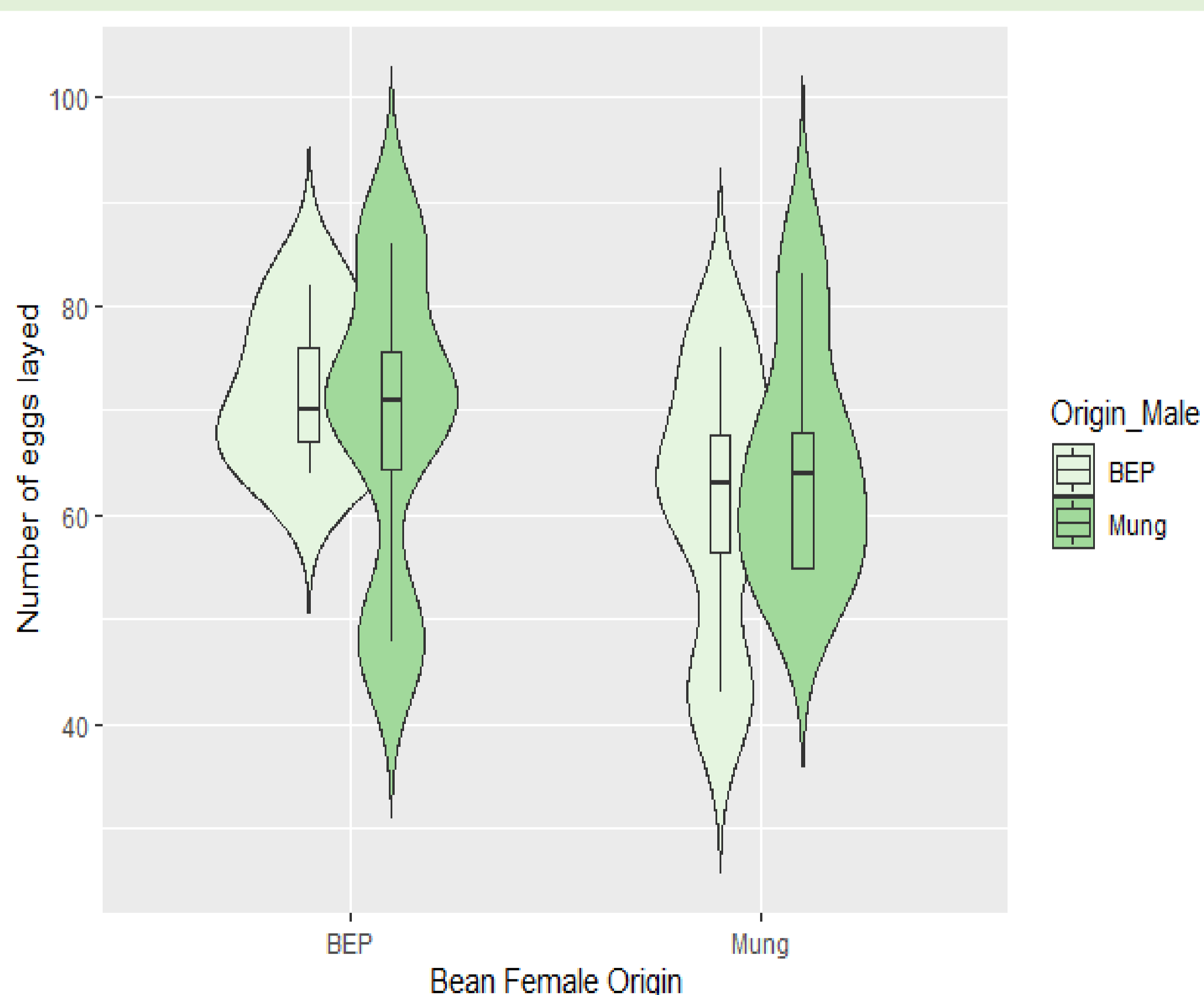


Fig 2: Violin plot of number of eggs laid in function of female and male origin. Width increases with probability density. BEP=Blackeye peas. Mung=Mung beans.

KEY RESULTS

Female bean beetles have **no statistically significant** origin-based mate preference ($p > 0.3939$) that results in more eggs laid (Fig 2).

Lower spread in amount of eggs laid when both beetles originate from BEP. This **could be related to bean size**, which was not accounted for in our experiment¹.

Due to a short experimental time frame, data was only collected from one generation, but **different results could be found** after several^{2,3}.

REFERENCES

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