

# Yield effect of intercropping dry beans with oyster mushrooms

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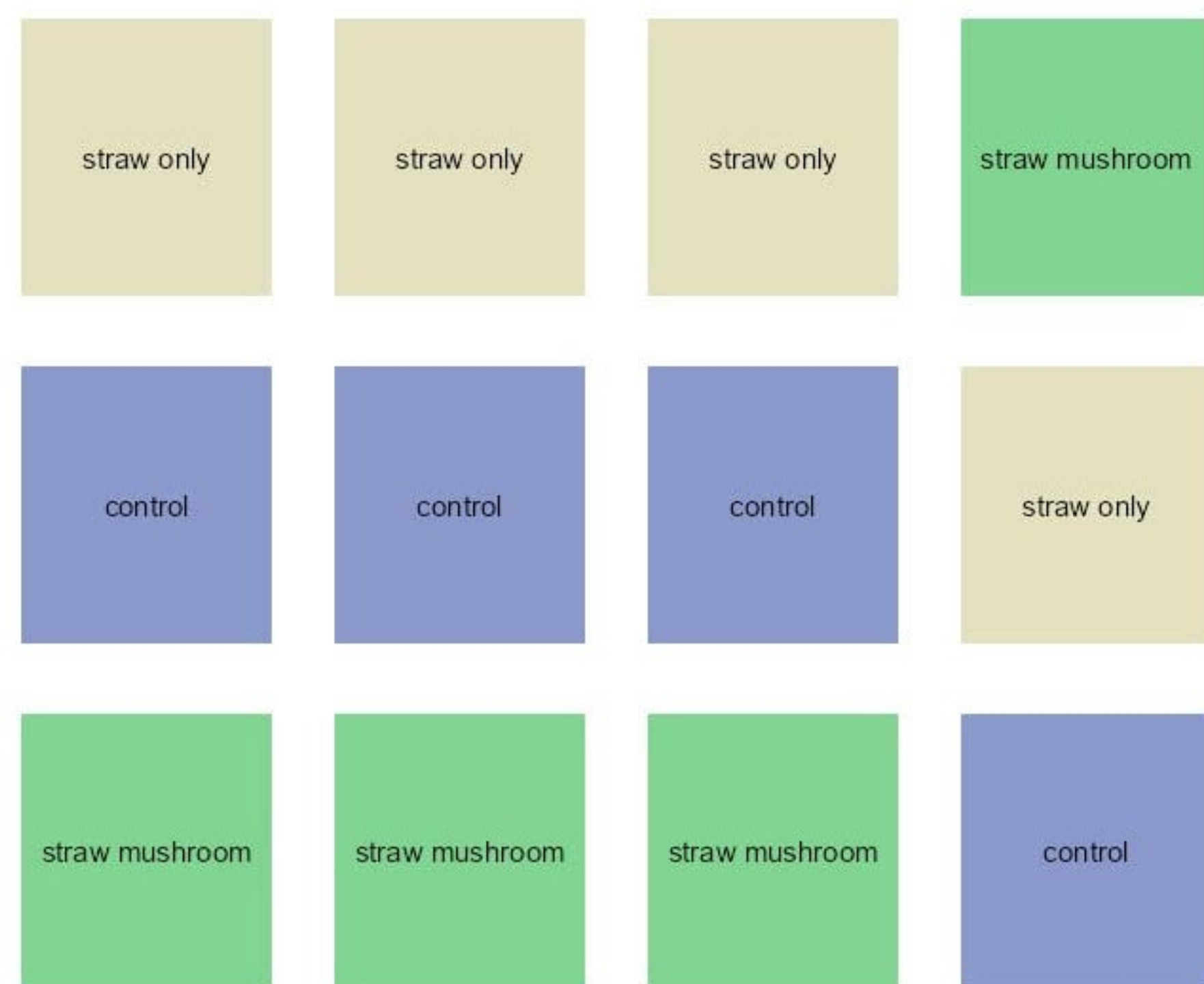
# Intercropping with oyster mushroom does not increase bean yield.

## Introduction

- Fungi do not compete with plants for sunlight and may be an ideal understory intercrop
- Previous studies have found increased vegetable yields when intercropped with mushrooms
- This study aimed to replicate that effect and to determine whether it was separate from the effect of the straw mulch substrates used in previous studies

## Methods

- Randomized complete block design with four replicates
- Three treatments: control, straw only, and straw with mushroom spawn



### Randomized complete block design

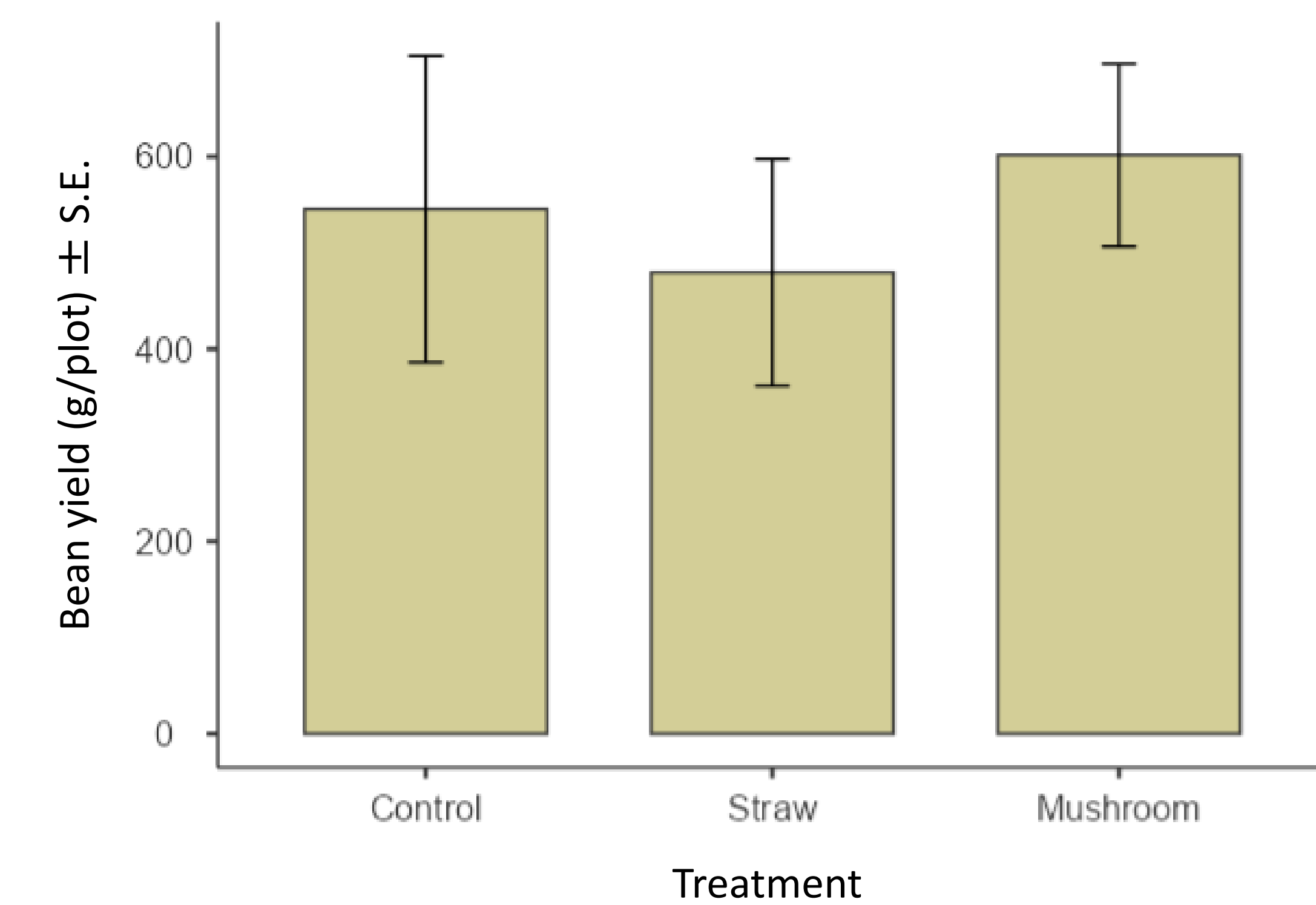
Each of the three treatments was randomly assigned a plot in each of the four blocks (columns).

- Crops:
  - Roccador bean (*Phaseolus vulgaris*)
  - Yellow oyster mushroom (*Pleurotus ostreatus*)
- Dry bean seed yield measured at end of growing season



## Results

- Mushroom yields ranged from 2 to 23 grams per plot.
- Bean yields showed no significant difference between treatments



### Bean seed yield by treatment

The dry bean seed yields for each treatment with standard error bars. There were no significant differences in bean yields between the control, straw, and straw with mushroom spawn treatments.

## Conclusion

Understory oyster mushrooms did not increase Roccador bean yield, and mushroom yield was not sufficient to provide a marketable crop.

## Acknowledgements

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