

Management of ascochyta blight (*Ascochyta rabiei* (Pass.) Labrouse) using chickpea-based mixed cropping systems through different combinations of companion crops

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ORIGINAL PAPER



Management of ascochyta blight (*Ascochyta rabiei* (Pass.) Labrouse) using chickpea-based mixed cropping systems through different combinations of companion crops

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Hybrid (Transformative Journal). [How to publish with us, including Open Access](#)

1.400 (2021)

Impact factor

26 days

Submission to first decision
(Median)

80,028 (2021)

Downloads

1.651 (2021)

Five year impact factor

Background

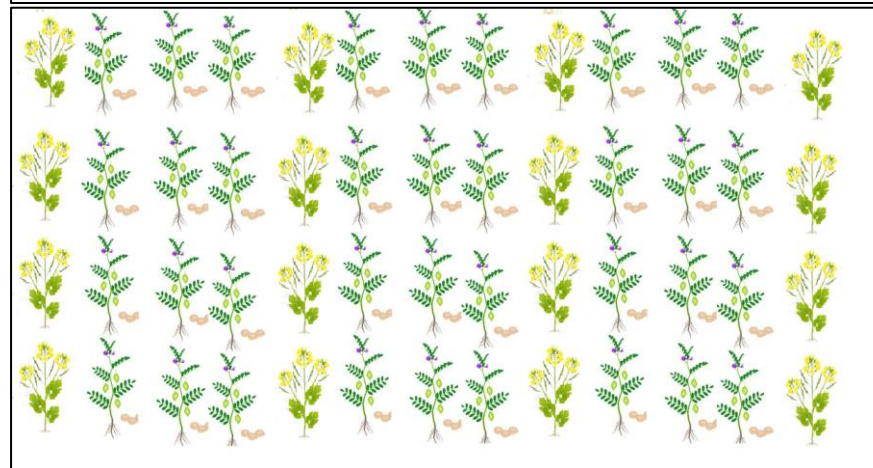
- Chickpea ascochyta blight (*Ascochyta rabiei* (Pass.))



The experiment

- Field trial
- RCBD in 3 replications
- Companion crops
 - Wheat (*Triticum aestivum* L., cv. Aksad)
 - Broad bean (*Viciae vepae* L., cv. Oscar) and
 - Oilseed rape (*Brassica napus* L., cv. Pactol).
- The combination with the companion crops was in a 3 + 1 system (3 rows of chickpeas paralleled with 1 companion crop)

The experiment



The experiment

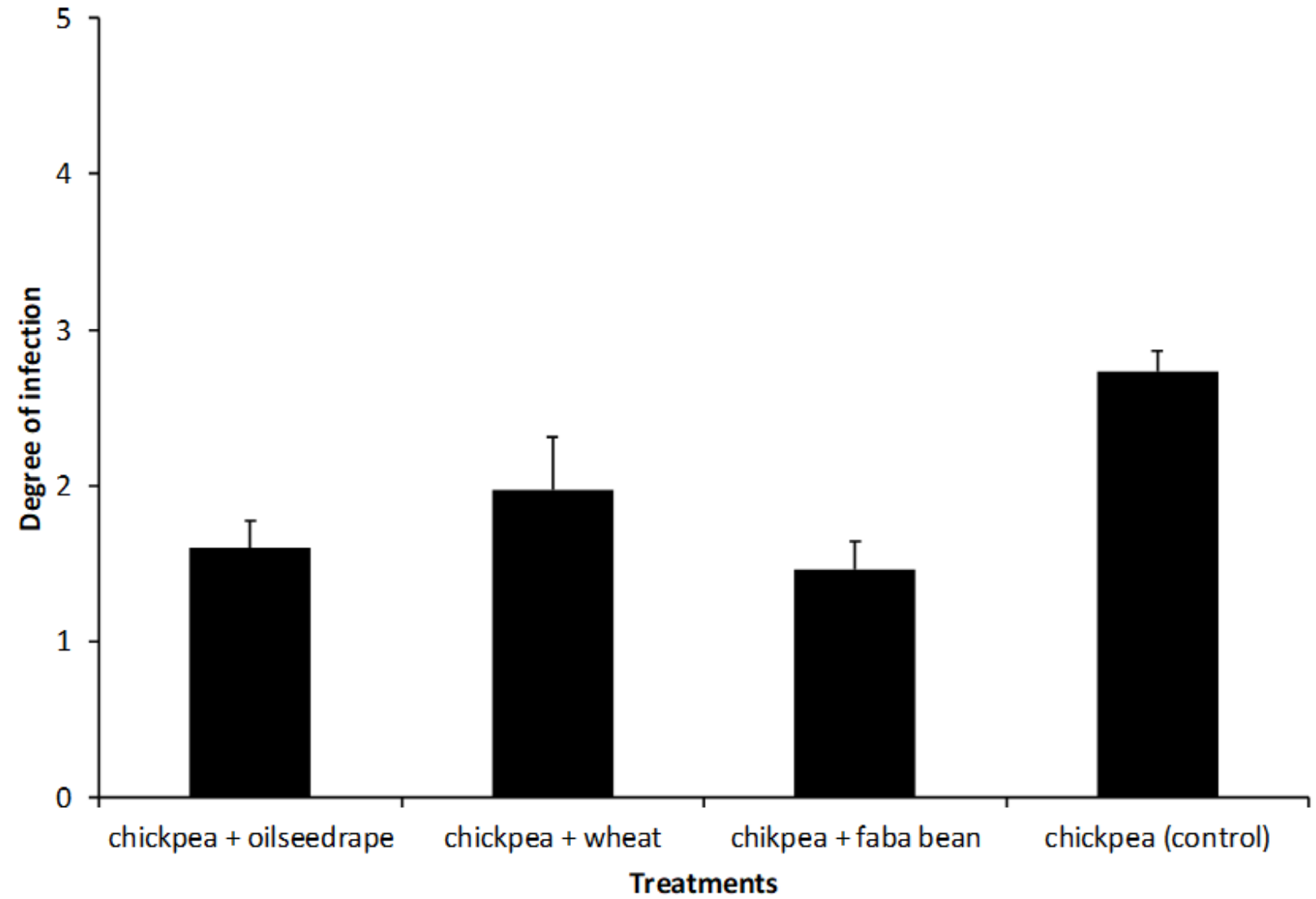
Measured parameters:

- Degree of infection (disease severity)
- Percentage of pod infection, and
- Crop Yield

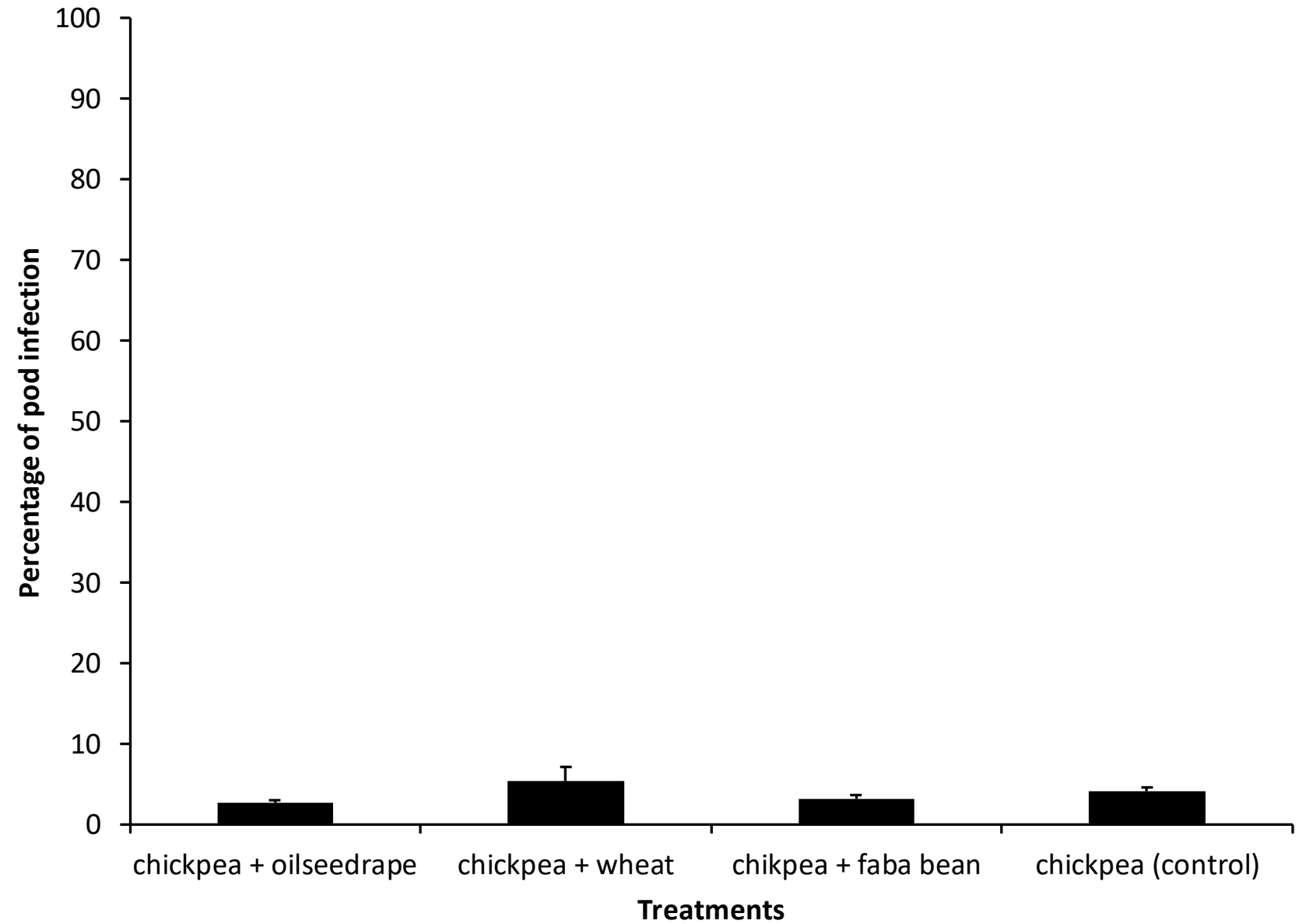
Objectives

- To determine the effects of companion cropping system on the chickpea blight severity in the field
- Production of disease-free seeds
- Zero incorporation of chemicals

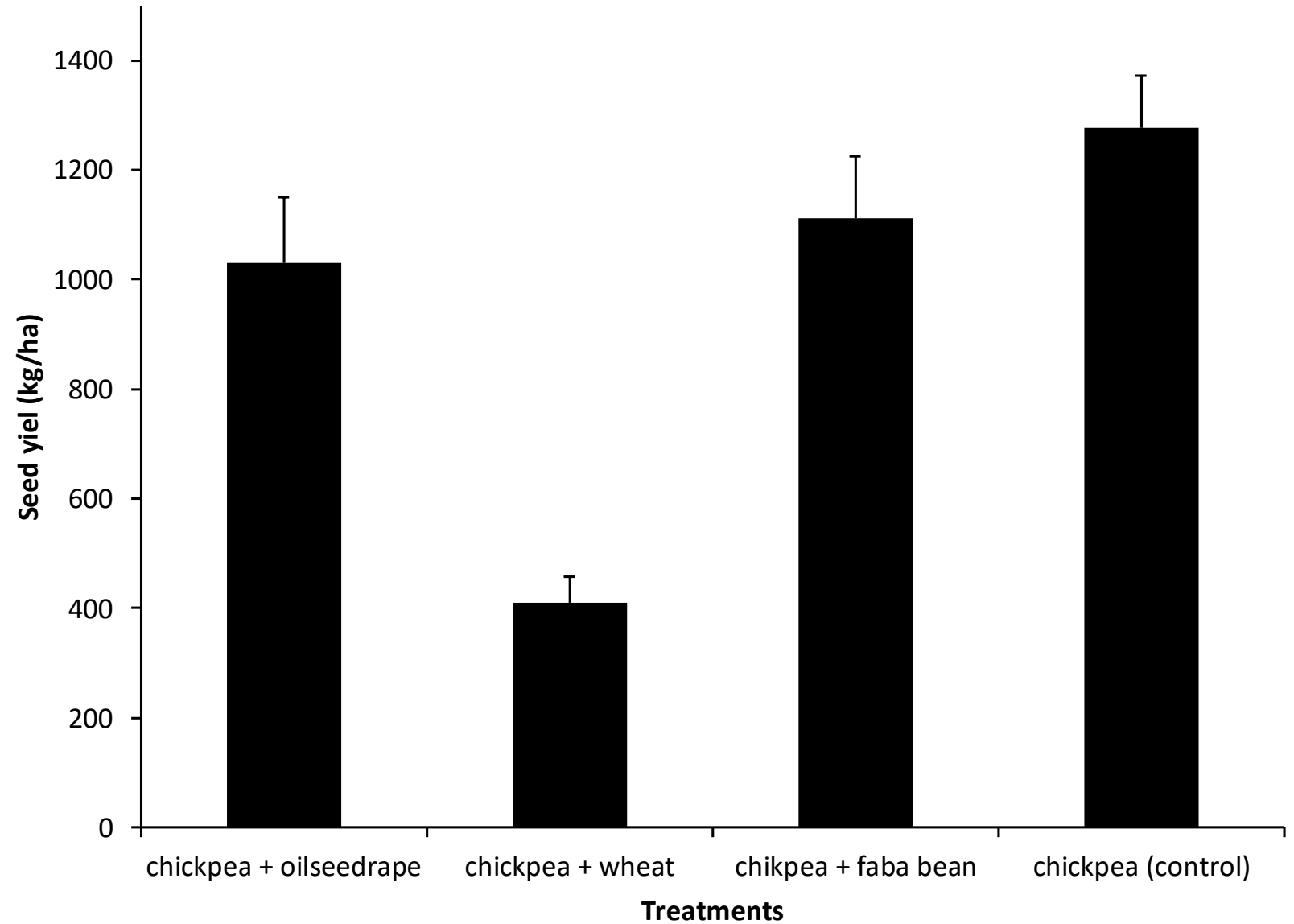
Outcomes



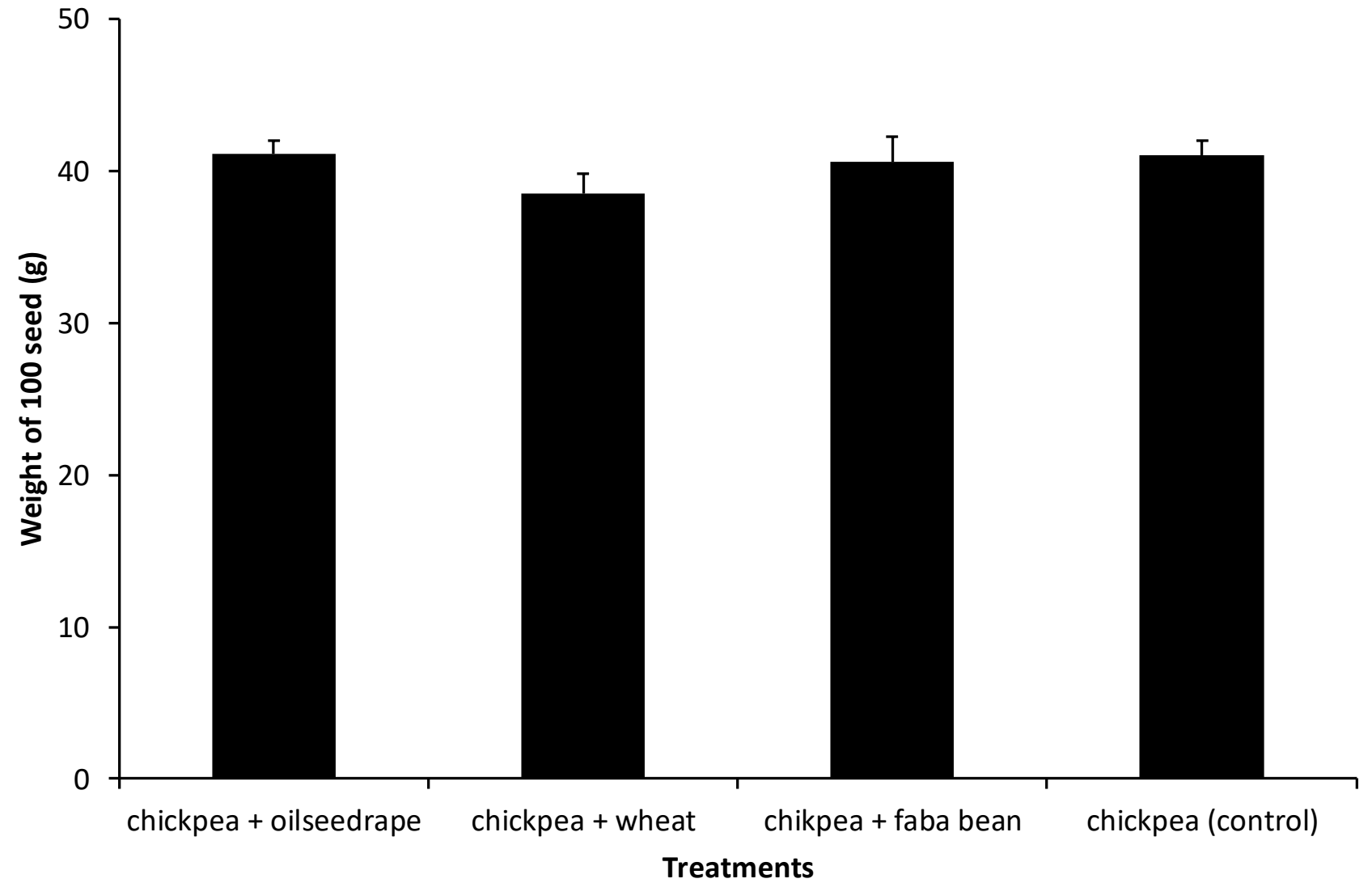
Outcomes



Outcomes



Outcomes



Conclusions

- Companion crops as a new approach promote a decrease in disease incidences especially those disseminated as air or water splash-borne diseases to the plant vicinity.
- Companion crops play as physical barriers that prevent the further spread of the disease.
- Some combinations (as with the chickpea-wheat combination) may compromise crop yield.

Thank you