



Search for new agronomic techniques for improving seed yield and quality of field crops

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Ph.D Workshop – 2020, December 4th



Objectives and roadmap





Controlled environment trials





Test of mycorrhizal inocula in greenhouse conditions on inbred line

- ➤ 3 fungal species:
 - Species 1, granular inoculum (G1)
 - Species 2, granular inoculum (G2)
 - Species 3, seed applied inoculum (Sa)
 - + Untreated checks (CTRL)
- Test conducted in cold greenhouse conditions

Objectives and roadmap

> Controlled env. trials

Field trials

Conclusions

Controlled environment trials













Field trials







2 locations:

- Piacenza area
- Bologna area

> 2 fungal species:

- Species 1, granular inoculum (G1)
- Species 2, granular inoculum (G2)

+ Untreated check (CTRL)

- > 2 application times:
 - Planting
 - Sidedress
- Same granular inocula and same inbred line as in the greenhouse trial

Objectives and roadmap

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Field trials





Objectives and roadmap

G2 Soledin

Controlled

Field trials

Conclusions

Conclusions and future perspectives



Granular inocula of the tested species demonstrated to be able to create endophytic symbiosis on corn roots Seed fungicides aren't stopping the symbiosis

Promising results from field experiments



Objectives and roadmap

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Field trials

Need to better assess and validate field results

Opportunity to increase the use of mycorrhizae especially in limiting environments

Better understanding of the role of microbial biodiversity on field results

Conclusions

Other projects





More info at this project's webpage...

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Thank you for your attention!

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