

The effect of insect frass on the tomato transplant growth and nutrient content

Margit Olle
NPO Veggies Cultivation
<https://www.veggiescultivation.com/>

INTRODUCTION & AIM

Sustainable insect manure is a 100% natural fertilizer that includes nutrients the plants can well obtain and metabolize. Manure produced by insects is a high-quality and innovative organic fertilizer that is obtained from plants fully digested by insects and therefore combines a balanced fertilizer and biostimulator in one product. Insect manure components support plant growth; they are of natural origin, stimulate plant growth, and support root development.

PROBLEM → No information about insect frass influence on tomato transplants growth and nutrient content.

AIM → The purpose of this investigation was to assess the influence of insect frass on the growth and nutrient content of tomato transplants.

METHOD

Tomato variety Valve.
7 treatments, 3 replications.
The experiment was repeated twice.
Usual growing technology.
Bugimine Ltd. do not want to give accurate recipes as it remains their property right.

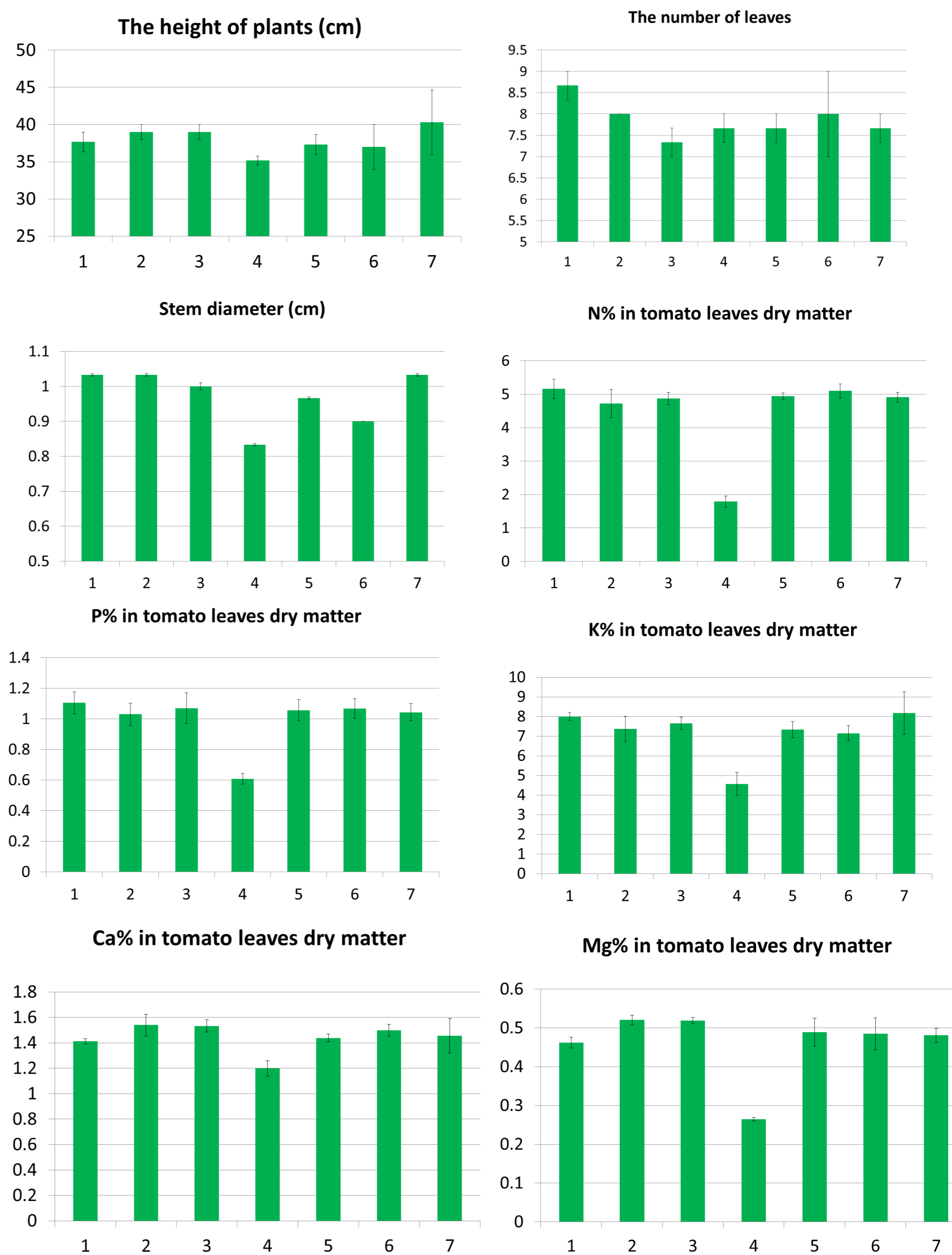
Treatments:

1. Matogard substrate + Insect frass
2. Matogard substrate + Insect frass + spraying with insect frass solution
3. Matogard substrate + Insect frass + spraying with water
4. Control - Matogard substrate
5. Matogard substrate + Insect frass + EM
6. Matogard substrate + Insect frass + UBP
7. Matogard substrate until pitching then + Matogard substrate + Insect frass



Picture of tomato transplants.
Treatments 1 to 7, from left.

RESULTS & DISCUSSION



CONCLUSION

- All insect frass containing treatments showed great results compared to control treatment.
- It can be concluded that the usage of insect frass makes tomato transplant better growing (plants were higher and stem diameter larger) and containing more nutrients making them perfect to use as transplants to get good yield also.

FUTURE WORK / REFERENCES

The results showed that insect frass had very good influence on tomato transplants. Therefore, in future the work will continue with other greenhouse plants.