## The 5th International Electronic Conference on Agronomy



15-18 December 2025 | Online

### Comparative Study on the influence of Liquid Fertilizers on Cabbage Growth and Productivity

Dilki Amanda Pathirana\*1, Anusiya Muralitharan1, Karthigesu Jeyavanan2

¹Department of BioSystems Technology, Faculty of Technology, University Of Jaffna, Kilinochchi, Jaffna 44000, Sri Lanka

²Department of Agronomy, Faculty of Agriculture, University of Jaffna, 44000 Jaffna, Sri Lanka

dilkiamandapathirana@gmail.com\*1, anusiyam@univ.jfn.ac.lk1, kjvanan@univ.jfn.ac.lk2

#### INTRODUCTION & AIM

#### Why LIQUID FERTILIZERS?

❖ As eco-friendly alternatives to conventional chemical inputs for a sustainable agriculture.

#### Aim:

\*To examine the impact of different liquid fertilizers on the growth and yield of Cabbage (*Brassica oleracea* var. *capitata*) under insect-proof net house conditions.



**Figure 01**: Fermented cow urine as a liquid fertilizer

# Flow chart 01: Processes The state of the s

#### **Step 01:**

- Pot experiment
- Ten replicates
- Four treatments
- CRD method

#### **Step 02:**

- Liquid fertilizer application
- Monitor and observe the growth conditions.

#### Step 03

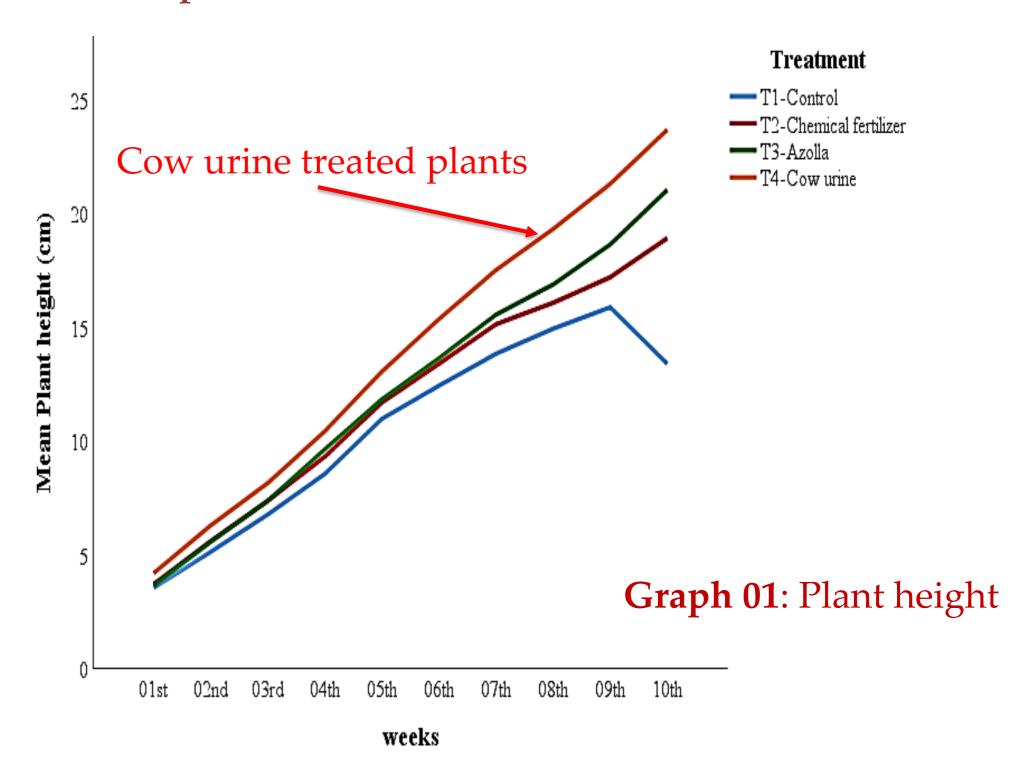
- Harvesting
- Measure yield components.

**Table 01**: Foliar treatments

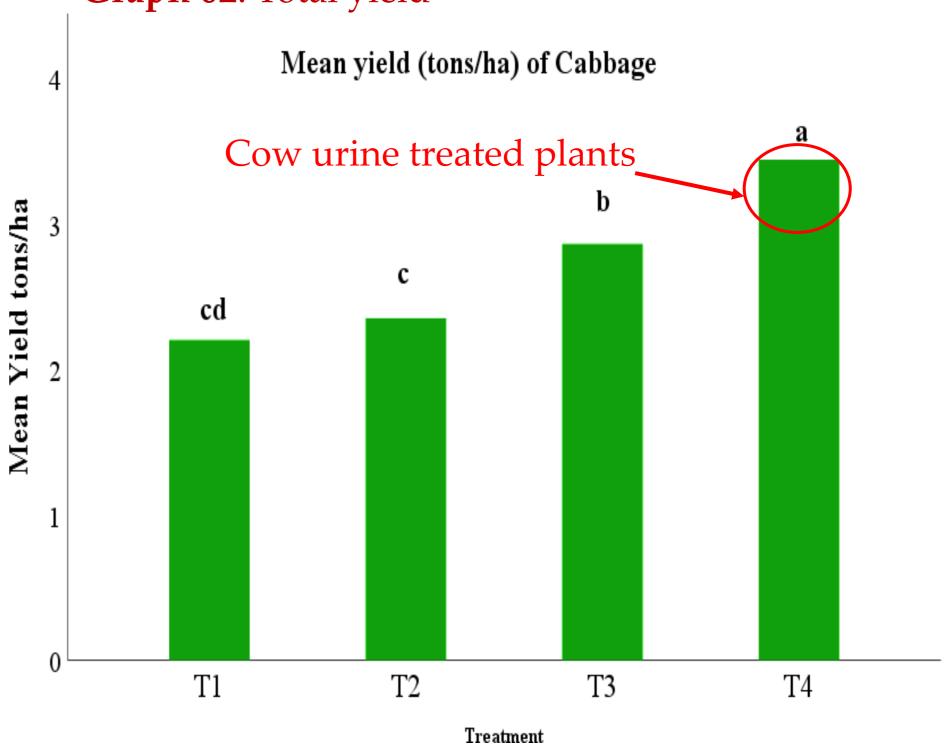
Treatment Number	Liquid fertilizer
T1	control
T2	chemical growth promoter
T3	Azolla
<b>T4</b>	Cattle urine

#### **RESULTS & DISCUSSION**

#### Growth parameters



#### Graph 02: Total yield



#### CONCLUSION

- ✓ Fermented cow urine (T4) significantly enhanced plant growth parameters and as well as yield parameters.
- ✓ Also fermented cow urine acts as a cost-effective, ecofriendly alternative method.

#### FUTURE WORK / REFERENCES

☐ Much more beneficial results in growth and yield can be obtained by integrating different combinations with cow urine (Ex-: banana pseudostems).