

Coconut Buttermilk Ghol - A Green Alternative to Inorganics

Varshith Nalla ^{1*}, Shaik Sana ¹, Anuhya Thallapally ¹, Gudipati Manichander ¹, Adepu Nikhil ¹, Sumit Ray²

¹School of Agriculture, SR University, Warangal, Telangana, India ²Department of Agronomy, School of Agriculture, SR University, Warangal, Telangana, India

ARTICLE ID: 16

Summary

In modern agricultureA, there is a use of olden farming methods to overcome disease which may tolerate inorganic pesticides and fertilizers. This coconut buttermilk ghol is an organic method, which helps to grow crops organically and reduce pests and diseases. No pollution will take place. The solution is a byproduct of coconut water and buttermilk. It mostly reduces fungal diseases, improves seed germination and acts as a rooting agent etc. Using organic methods in the agriculture field makes a way for healthy future generations.

Introduction

How foolish a man is! They have forgotten about ITK'S since the day farming was started by human beings which came from innovation and discoveries regarding farming equipment and planning methods. As the years passed, some methods like ITK (Indigenous technical knowledge) originated naturally i.e., ITK the name itself reflects how those methods are generated.

ITK these are organic methods used in the olden days. As technology develops use of pesticides also increases to get more yield in less duration. ITK methods mostly influence farming minds i.e., choosing those methods in this artificial way of living is controlling regarding the health issues.

Coconut buttermilk ghol is made by fermenting the products i.e., Buttermilk, Coconut water, Waste fruit juice, Turmeric and Hing. Turmeric acts as a natural pest control and can be used as a rooting agent. It works as an anti-fungal for the crop. Along with this the part where fungus attacks and causes injury, turmeric spray is done for protection. Asafetida, also known as Hing, is used for the management of plant diseases like leaf curl viruses and repel rodents. The solution also helps in soil fertility and higher gains in yields. Buttermilk is used to protect



(e-ISSN: 2582-8223)

plants from fungal diseases like powdery mildew, yellow rust and white rust. Waste Fruit juice contains many bioactive substances with functional ingredients that have antioxidants, antibacterial, and other properties. Coconut water helps to boost the germination of seeds and helps in seed development.



Fig.1.1- Hing &Turmeric

Fig. 1.2- Bucket & Coconut Water



Fig1.3- Buttermilk &

Fig1.4- Day 1- Day 7

Waste Fruit Juice

Materials And Methods for Preparation of Coconut Buttermilk Ghol

Coconut buttermilk ghol is a low-cost organic formulation that uses buttermilk and coconut water are its primary ingredients. For the preparation of 3lit coconut buttermilk ghol,1 litre of fresh buttermilk, 1 litre of coconut water, 500 ml of waste fruit juice or fresh fruit juice,50 gm of turmeric and at least 10g of Hing are used. All the ingredients are mixed well and transferred to a small bucket or earthen pot. In case buckets and earthen pots are not available, glass jars can be used. The bucket should be covered with a lid or with a clean piece



of cloth tied properly and left for fermentation for 7 days. During these 7 days, the coconut buttermilk ghol is mixed with a clean stick, after 7 days, the coconut buttermilk ghol should be extracted into a 2 liter bottle and stored in a shaded place for further use.

Things To Know About Coconut Buttermilk Ghol

How Is Coconut Buttermilk Ghol Used

The coconut buttermilk ghol is applied in the field through a drip or sprayer. 50 ml of coconut buttermilk ghol should be added in 1 litre of water. The solution can be stored for 4 weeks. It should be shaken well before use and should be kept away from direct sunlight. The advantages of coconut buttermilk ghol are,

- Buttermilk is sprayed mostly on the foliage of the plants
- Used to dislodge any fungal infection and insects.
- It is used as a natural fungicide
- It is a good substitute for phosphate and acts as a good fertilizer for vegetable plants.
- Fruit reject can be used which helps in developing resistance against fungal diseases.
- Plants grow healthy and begin to flower profusely.

Conclusion

Nowadays- days farmers mostly prefer to go with inorganic pesticides and fertilizers in the concentration of gaining high yields by utilizing high yields varieties. As we investigate organic farming, it is one of the best in all sectors of farming. So, using some organic varieties regarding ITK to improve yields like coconut buttermilk ghol can act as a game changer. The solution enhances plant growth and increases resistance to fungal diseases. With all these advantages, Coconut Buttermilk Ghol is surely the best alternative to Inorganics.

References

Aykan.Y, Sezgin.E. 2008. Use of replacers in the production of reduced-calorie vanilla ice cream. *European journal of lipid science technology*. 110: 516-520

Babal.A, Misran.M. 2014. Effect of vegetable milk on the physical and rheological properties of ice cream. *Food science technology research*. 20(5) 987-996