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IMPERATIVE OF FISH AMINO ACID IN MEDICINAL AND AROMATIC CROPS

Ragul P

Department of Plantation, Spices, Medicinal and Aromatic Crops,
HC & RI, TNAU, Coimbatore, Tamil Nadu.
e-mail: pandianragul572@gmail.com

INTRODUCTION

Organic agriculture in substantial process to attain stable food security and human live hood. Fish amino acid (FAA) has gained significant recognition as a formidable bio-fertilizer in various agricultural practices. Its application has shown astonishing gain in promoting the growth and enhancing the yield of medicinal and aromatic crops. In this review, we will explore the essentiality of fish amino acid and its impact on these specialized crop varieties, emphasizing its contribution to sustainable agriculture and the potential for improving plant quality in alkaloid of secondary metabolites and productivity. Foliar organics of fish amino acid as a bio-fertilizer in medicinal and aromatic crop production holds immense promise for sustainable agriculture. Its application not only enhances growth, yield, and quality but also promotes stress tolerance and disease resistance in plants. The eco-friendly nature of FAA makes it an attractive choice for growers, contributing to a more environmentally conscious approach to farming. As we strive to meet the increasing demand for medicinal and aromatic crops, embracing the imperative of fish amino acid can pave the way for a greener and more prosperous agricultural future The positive influence of organic compounds secondary metabolites of alkaloid principle in plants high medicinal value good products.

INGREDIENTS

- 1kg of fish waste
- 1kg of jaggery
- Plastic air container
- Muslin cloth & Hand gloves

PREPARATION OF FISH AMINO ACID

1. Fish waste without any intestine parts was collected from nearby fish market.
2. The collected fish waste was finely chopped.
3. One kg of jaggery was collected from nearby market and made into fine powder.
4. Equal amount of fish waste and jaggery were taken in the ratio of 1:1.
5. The jaggery and fish waste were filled in the container in alternate layers till 2/3 of the jar.
6. The jar was tightly closed and left undisturbed for fermentation process.
7. After sixty days the mixture turned into dark brown colour having a fruity odour.
8. The mixture was neatly filtered in a nylon mesh and used.

APPLICATION

If crop stress condition foliar spray FAA @ 3% solution at 15 days interval. Prepared by

dissolving in 3ml of foliar organics and in 1 liters of water.

ROLE OF FISH AMINO ACID IN PLANTS AND SOIL

1. An enormous inflow of earthworms moves towards the soil surface as a result of soil aeration and expand soil fertility.
2. Plant nutrition is enhanced by introducing amino acids into the soil, which aids in the enrichment of soil micro flora and the efficient absorption of nutrients.
3. Protein hydrolysate, commonly referred to as liquid amino acids, and foliar spray offer readily available components for triggering protein synthesis through foliar nutrition.
4. Fish amino acids synthesized from glutamic acid, aspartic acid, and lysine are utilized in foliar spray. This application enhances the production of secondary alkaloids in plants, improves root architecture, promotes chlorophyll synthesis, and modifies plant nutrition to enhance resistance against pathogens.

CONCLUSION

Organic farming practices in through foliar organics of fish amino acid increase the N- fixation as well quality content of leaves increase the yield. Microorganisms are multiple in soils improve the organic matter content in soil. Usually naturally of medicinal leaves repellant pest and against diseases. Utilizing liquid organic nutrients for soil fertility maintenance offers advantages such as increased microbial population and a sustainable food production system with high nutritional value. This cost-effective liquid technology has the potential to significantly contribute to environmental preservation, enhance the presence of living organisms in arable soil, and improve agricultural yields in the future.