

The Principal Role of Organic Fertilizer to Enhance Soil Fertility

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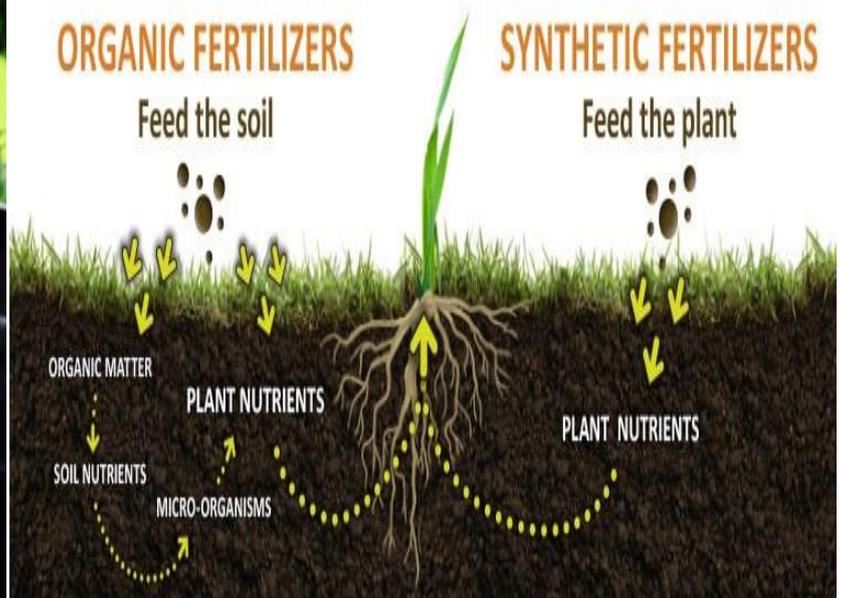
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SUMMARY

Organic fertilizers are an essential source for plant nutrients and a soil conditioner in agriculture. Organic fertilizers are made from mined rock minerals, and natural plant and animal materials. They include ingredients like manure, guano, dried and powdered blood, ground bone, crushed shells, finely pulverized fish, phosphate rock, and wood. While inorganic, or synthetic, fertilizers may contain some organic ingredients, the main difference is that they act quickly to simply feed the plant without actually enriching the soil, and may contribute to a toxic build up of salts in the soil when over applied.

INTRODUCTION

Organic fertilizers contain plant or animal based materials that are either a byproduct or end product of naturally occurring processes such as animal manure and composted organic materials. Organic fertilizers are naturally available mineral sources that contain moderate amount of plant essential nutrients. They are capable of mitigating problems associated with synthetic fertilizers. They reduce the necessity of repeated application of synthetic fertilizers to maintain soil fertility. They gradually release nutrients into the soil solution and maintain nutrient balance for healthy growth of crop plants. They also act as an effective energy source of soil microbes which in turn improve soil structure and crop growth. Organic fertilizers are generally thought to be slow releasing fertilizers and they contain many trace elements. An organic fertilizer is a fertilizer that is derived from organic sources, including organic compost, cattle manures, poultry droppings, domestic sewage green manure and composted agricultural wastes, are currently in use.



Importance of Organic Fertilizer

Organic fertilizers were different from chemical fertilizers in that the materials were a by-product of vegetables, animals or minerals. The decomposing matter from these sources, break down naturally and would provide nutrient and minerals to the soil. When considering lawn maintenance, it was necessary to make sure that the lawn or garden gets the all of nutrients that it needed for health growth. Although nutrients were available in regular soil, fertilizers can provide and ensure that the plant had a balance and suitable access of nutrients, proper lawn care include providing for the health of the lawn and garden. One of the benefits of organic fertilizer was that the nutrients were related more slowly than chemical fertilizers. This slower process allows the plant to process the fertilizer in a more natural way and will not result in over fertilizing which could damage the plant. The soil drainage and air circulation of the soil can also be improved. Having a compost pile

was also a great way to get rid of food waste and still contribute to your lawn care and environment. It was an important valuable option that would help the soil and environmental be health and produce the best plant



Basic types of organic fertilizers

Manure

It is made from animal excreta (cow dung & goat droppings). Cattle Manure is a good source of nitrogen and organic carbon while goat manure is rich in nitrogen and potash.

Compost

It is organic matter decomposed through composting. The organic matter used here can be vegetable and plant waste, animal excreta.

Rock Phosphate

It is sedimentary rock which contains high amount of phosphate minerals. It is used naturally to fix phosphate levels of soil.

Vermicompost

It is a product of organic material degradation using various species of worms, to create a heterogeneous mixture of decomposing food waste.

- Offer the best nutrients for effective plant growth
- Much more gentle than chemical fertilizers
- Less likely to overfeed your plants
- Not immediately absorbed into the plants
- Can withstand heavy rainstorms and irrigation sessions that could wash away chemical fertilizer
- Soil structure is improved
- Helps for soil to retain nutrients and moisture
- Long-term environmental benefits as they are less likely to contaminate lands and waters
- Far safer to the overall crop for both grazers and farmers

CONCLUSION

Organic and synthetic fertilizers had a role in on soil properties and agriculture and the good points of each should be acknowledged. But inorganic fertilizer had more demerit than organic fertilizer. Organic fertilizers are fertilizers derived from animal matter, human excreta or vegetable matter (compost, manure). Organic farming is a production system that avoids or largely excludes the use of synthetic fertilizers, pesticides, growth regulators and livestock feed additives and rely on crop rotation, crop residues, animal manures, legumes, green manures, off-farm organic wastes and mineral bearing rocks. Organic farming aspires to a combine mixture of organic, environmental, social and ethic objectives. For instance, compost provides air, water, organic matter, and microorganisms to your plants, thus enhancing their growth. It also maintains a healthy atmosphere for the soil and hence keeps insects, plant diseases, and weeds away.

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