TROPICAL GARDENING HELP: USING COFFEE GROUNDS IN GARDENS



Image source: http://cf.jiraygroup.com

People have two different beliefs about using ground coffee in gardens. I will refer to the merits and demerits of using them on your plants. Resultantly, I will say that coffee grounds should be used sparsely straight to the plants. Their best use is to add them to the organic matter in a fertilizer bag.

Amount of nitrogen present in used coffee grounds is necessary for proper nourishment of plants. In general, coffee grounds when added to the soil show a large number of benefits as the bacteria will break it down and will provide more nutriments the plants need. If the soil has high nitrogen concentration, the excess amount obtained from coffee grounds will cause a plenty of new boost that can lead to the disturbed growth of flowers and fruits.

Some researches claim that used coffee grounds contain large amount of acids and can only be applied to acid-loving plants like gardenias, ixoras, hydrangeas or azaleas. A range of acidity from highly acidic to slightly basic is observed in used ground coffee by some other researchers. One report says that unused coffee grounds are tagged with high acid concentrations which means that a higher amount of acid is found in unused coffee grounds as compared to used ones as the used grounds are found to be practically neutral. We can render them neutral by cleansing them thus lowering the acidity of the soil.

According to an article on curiosity.com, coffee grounds should not be used for land enrichment. This is because the very small grains of coffee can lock together leading to a water resisting obstruction thus susceptible to cause water lack to the plants. They suggest using this material in another way. According to them, mix the coffee grounds with organic matter like fertilizers or leaves to form a manure of different sized particles. This suggestion comes to the point of agreement by both sides of the issue.

The obvious cause of the "devastating effects on plants" as reported by the curiosity.com article is that the coffee grounds appear to make a thick blanket around plants and seeds. The coffee grounds are full of caffeine which has a disastrous impact on plants. As some plants themselves generate caffeine to get rid of competitive species, so, large amount of caffeine in soil will hamper the development of some plants.



https://www.foodinsight.org

8 milligrams of caffeine are present per one gram of used coffee grounds by the data obtained in The Journal of Agricultural and Food Chemistry. The amount of caffeine may vary as it depends on the time they remain soaked in water. This elevated degree of caffeine can choke off growth in few species. It would be reasonable to prevent the spread of coffee ground seeds or seedlings, due to the restriction in growth and germination.

"Applying spent coffee grounds directly to urban agriculture soils greatly reduces plant growth," this was the statement reported by a 2016 study in the Journal Urban Forestry & Urban Greening. Even when ground coffee was composted with other organic waste, same reduction in growth was observed. The study also found that fertilizers containing large amount of coffee grounds affected earthworms badly.

It is a false belief of having benefits by using coffee grounds in a garden, concluded botanist James Wong when studying an article for the Guardian based on his own informal gardening experiment with coffee grounds.

On the other hand, an online article by Gardening Know How at https://www.gardeningknowhow.com/composting/ingredients/coffee-grounds-gardening.htm, reported more advantages than the disadvantages and demerits. They specified that organic matter added to the fertilizer by coffee grounds helps improve water

retention as well as drainage and aeration. Coffee grounds are also advantageous for microbes as they help them flourish.

The chapter continues on the benefits of coffee grounds and further says that, coffee grounds don't add nitrogen to the soil when used alone. They action is enhanced when mixed with compost in the compost pile. They also report that presence of coffee grounds in the manure means more invites to earthworms.



Image source: http://www.westhawaiitoday.com

According to another articles, along with nitrogen; potassium and other micronutrients are also found in coffee grounds, the amounts of which may fluctuate. Coffee grounds act as slow-release manure when sprayed thinly onto your soil.

There are many widely accepted uses of coffee grounds in your fertilizer. You can increase the level of nitrogen for your plants by mixing them in you compost heap. Activity of microbes can be enhanced by mixing coffee grounds with carbon sources like shredded newspaper, leaves or wood chips. They can be regularly added to worm bins as many vermin-culture users claim that their worms love coffee grounds. They can be substituted by paper coffee filters.

The various opinions lead to a variety of conclusions. As most of us have used ground coffee in our fertilizer bags and vermin-compost bins, it would be a suggestion to use them with your eyes wide open towards their demerits. Ultimately, the final decision claims that you can use them as long as you sprinkle them or mix them with manure.

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This guest post was written by Hassan Khan Yousafzai, he is passionate about Digital marketing. Along with educational background in Software Engineering he is bridging gap between marketing and development department. At Techvando, he has been consulting brands all over Pakistan to gain online traffic and profitable leads.