Organic Fertilizer from Kitchen Waste

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Organic fertilizer is comes from the plant or animal waste products. The vegetable and fruit debris, paper, bones, and other biodegradable kitchen and food wastes are is usually broken down by other organisms over time which quickly disintegrate and produced highly organic product rich in nutrients that can use as compost to grow vegetables or flowers. It is an effective and eco-friendly cost effective way of disposing food waste from kitchen. Use of organic fertilizer in the garden is more environmentally friendly than traditional chemical fertilizers.

Benefits of using Organic fertilizer

- ✓ Serve as both fertilizers & soil conditioners-they feed both soils & plants.
- ✓ Improve soil structure, creating a better plant root environment.
- ✓ Supply significant quantities of macro & micro nutrients to soil and plants.
- ✓ Improve drainage of soil and reduces erosion.
- ✓ Improve moisture holding capacity of soils stabilises soil pH.
- ✓ Supplies the soil with beneficial micro-organisms.

Nutrient composition of the organic fertilizer

Nutrients	Values(mg kg^{-1})	Nutrients	Values(mg kg^{-1})
C	27.60	**Zn**	1.72
N	3.50	**Pb**	0.09
P	2.10	**Mn**	1.20
K	2.71	**Fe**	42.10
Na	1.91	**Cu**	0.27

How to make own organic fertilizer from your kitchen waste

1. Collect the biodegradable kitchen waste (vegetable peels, fruit peels, egg shells, used tea dust, nut shells, small amounts of wasted cooked food) in a container (avoid food packaging, grease, oils, fatty meats, and milk products). Chop large pieces of kitchen waste into smaller size
2. Collect dry organic matter (dried leaves, sawdust) in another container
3. Setup a large earthen/cement pot as compost bin in the garden or a bucket (if outside space not available) and drill 4 – 5 holes around the container at different levels to let air inside.
4. Line the bottom with a layer of straw and soil.
5. Now start adding food waste in layers alternating wet waste (food scraps, vegetable and fruit peels) with dry waste (straw, sawdust, dried leaves).
6. If possible add some cow dung in layer wise.
7. Mix the compost heap well in every few days using a long-handled fork or shovel for aeration. If the pile is too dry, sprinkle some water to moist.
8. Cover this container with a plastic sheet or a plank of wood to help retain moisture and heat.
9. The compost should have an internal temperature ranging from 60-70^{o}C.
10. Within 2 - 3 months, your pile should start forming compost that is dry, dark brown and crumbly and smelling of earth.
11. By segregating, recycling and composting, a family of 4 can reduce their waste from 1000 Kg to less than 100 kg every year and can produced sufficient amount of organic fertilizer for their kitchen & flower garden