wanda organic

plantmate®

organic fertilizer

N:P:K – 2:3:3

&

prime ec®

foliar plant food

N:P:K – 10:6:4

These organic fertilizers are the breakthrough results of over 40 years in biotechnological research and are being widely used in South East Asia, Australia and The Middle East.

With the usage of these products farmers will begin to embrace more progressive and sustainable agricultural practices that can increase their productivity and profitability

The two products can be used individually but it is recommended as twin products in order to achieve maximum results.

1. **Plantmate (Basal Fertilizer):** This product is produced from a mixture of plant and animal wastes through an advanced bio-fermentation process using a catalyst known as the Bio-PLUS Activator which contains 22 naturally occurring beneficial microorganisms growing in a scientifically blended food base made of chelated trace elements, enzymes, amino acids and organic acids, growth promotants and functional compounds e.g. emulsifier, surfactant, stabilizer and anti-oxidants.

   The 22 beneficial microbes:
   a) 7 Bacteria for decomposition, enzyme production and nutrient transformation
   b) 2 Actinomycetes for decomposition of polysaccharides and enzyme production
   c) 3 Bacillus sp. for enhanced decomposition, compost 'sweetening' and probiotics production
   d) 5 Nitrifiers for nitrogen fixation and nutrient transformation
   e) 5 Thermophilic Fungi for decomposition, probiotics production and nutrient transformation

It is dark brown to slightly black in colour and friable in texture. It is currently packed in a 50-kg polypropylene bag with polyethylene liner both of which have excellent biodegradability properties. The product is applied into the soil as basal fertilizer and can also be used as a side dressing material. It is safe and effective for a wide variety of crops.

Ingredients	%
Chicken Manure	20
Sawdust	20
Filter cake or mud press	20
Carbonized rice husk	10
Soyameal	10
Coco Peat	10
Molasses	5
Chelated trace minerals	2.5
Growth promoting substances	1.5
Functional compounds	1

Key benefits

Soil organic matter turnover/stubble decomposition

a) Provides the soil good tilth - a condition that will encourage more vigorous and profuse growth of root hairs as well as deeper and wider root zone of the plants.
b) Builds up the organic matter content of the soil

Nutrient turnover

a) It builds the Cation Exchange Capacity (CEC) of the soil. The CEC refers to the nutrient binding and storing capacity of the soil.
b) Provides the plant with essential nutrients and also certain microbes promote nitrogen fixation as well as that of the other major elements thus the plant has all the necessary nutrients in the form and time it needs them.
c) Transform the insoluble inorganic elements supplied through chemical fertilizers and/or those found in the soil into metabolites or highly assimilable nutrients ready for plant use

Disease Control (suppression)

a) Some microbes also produce probiotics (precursors or source of penicillin, terramycin, aureomycin, bacitracin, polymixin, etc.) that will protect and/or increase the resistance of plants against bacterial, fungal and viral-borne diseases.
b) Rhizosphere competency – blocking pathogen access to plant roots.

Plant growth promotion

a) Contains beneficial microbes that have the ability to produce natural enzymes and growth hormones.
b) A good source of organic acids that can improve the absorption of soil minerals by the plant.
c) Contains substantial amounts of humus – a material that can absorb water three times its weight. Soils fertilized with it will retain more moisture – a condition that is significant especially during droughts or prolonged dry season.
d) Humic acid that is found in humus is also beneficial for plant growth and development.

Soil aggregate stability

a) It is an excellent soil conditioner.
b) Minimizes sharp fluctuation of soil temperatures; hence, minimizing the stress in plants.
c) Promotes soil balancing - physically, chemically and biologically for maximum productivity.

Pesticide and herbicide degradation

a) Contains microbes that breakdown pesticide and herbicide residues thus detoxifying the soil.

2. **Prime EC (Foliar Plant Food):**

It is an emulsified concentrate that is highly miscible with water, compatible with commonly used crop protection sprays and is highly effective in small doses.

It contains all the necessary nutrients vital to plant growth and development. The plant nutrients including the trace elements are in chelated form and highly assimilable. Chelation is a process, which provides the elements to be "locked-up" while in solution, and then released gradually at the rate that the plant cells can absorb them through the cell wall openings i.e. the stomata. As the solution is sprayed onto the plant foliage the positively charged elements are naturally attracted to the negatively charged plant tissues. As soon as the elements are harbored onto the leaves the locking mechanism provided by the organic chelating compound is triggered signaling the release of the nutrients. This timed-release process enhances absorption efficiency of the plant tissues and minimizes losses of nutrients due to volatilization.

The product also contains other functional compounds such as an emulsifier, surfactant, stabilizer and sticker all doing their specific functions to make the product more effective and efficient as a foliar fertilizer.

It is dark moss green in colour with a PH of 6.5 (due to the organic acids) and is non-toxic and eco-friendly. It is currently packed in a 1-liter bottle where 1 liter of concentrate is mixed with 200 liters of water. It can be used either in foliar or drench methods. It is safe and effective for a wide variety of crops including vegetables, ornamentals and cereals.

Ingredients	%
Soya Extract	40
Seaweed Extract	30
Humic Acid	11
Amino Acids	10
Molasses	4
Chelated Trace Minerals	3
Growth Promoting Substances	1.5
Others	0.5

Key benefits

Increased root growth

a) Increased germination and healthier seedlings thus reducing transplant shock and faster root development.

Increased leaf vigor

a) Increased rate of photosynthesis in the leaves and thus stimulates nutrient absorption by plant roots.

Bud, flower and fruit enhancer

a) Growth hormones stimulate budding, flowering and fruit development.

Improved marketable yields and crop quality

a) Increased reproduction and growth
b) Improved crop immunity
c) Improved crop quality (more nutritious)

Improved resistance to crop stresses

a) Stimulates plant defense mechanism against diseases and insects
b) Improved endurance to changes in climatic conditions

Contacts

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