PGE9184

HiFoliar™

PLANT NUTRIENT

Blossoming Everywhere

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• • • *expect only Quality from us™*

RM9184

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PLANT NUTRIENT

Blossoming Everywhere

Widest Range of Plant Tissue Culture Dehydrated Media and Chemicals

Customized Media - Bulk Media Order

Classical Media

- Murashige & Skoog Medium
- Gamborg B5 Medium
- CHU (N6) Medium
- Nitsch Medium
- Woody Plant Medium

Gerbera Micropropagation

Orchid Media

- Kundson Medium
- Vacin & Went Medium
- Lindemann Medium

Specialized Media for Economical Important Plants

- Banana Medium
- Gerbera Medium
- Rose medium
- Potato Medium
- Carrot Medium

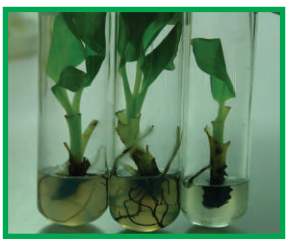
Balanced Salt Stock Solutions

Hydroponics Media

Other Products

- Plant Tissue Culture Teaching/Hobby Kit
- Plant Pathology Media
- Labware and Plastic Ware
- Plant DNA Extraction Kits

Potato Tuberization



Banana Micropropagation

Rose Micropropagation

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For life is precious

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HiFoliar Nutrient™ PGE9184

The salts of many essential plant nutrients are soluble in water and may be applied to plant leaves directly as foliar fertilizers. Thus "Foliar feeding or foliar fertilization" refers to the application of fertilizers to the plant's leaves. Foliar feeding practice has been extensively used in agriculture over the past several years as a means of correcting crop nutrient deficiencies and supplying nutrients to the plant during the peak demand when root uptake may not be adequate. Dr. H. B. Turkey and S. H. Wittwer of Michigan University in 1950 proved that foliar feeding of plant nutrients is beneficial for correcting the nutrient deficiency at faster rate compared to soil fertilization.

Foliar application of nutrients can overcome short term deficiencies since the amount applied are in small quantity and the nutrients themselves can be applied directly to the tissues showing signs of deficiency. Foliar feeding can be carried out on a regular, weekly basis or can be limited to the times when the crop needs high nutrient such as early fruit harvesting and heavy fruit loading. Often, the greatest response to foliar feeding will be observed during the active growth phases of plants. During these active growth stages, leaves show a high efficacy of nutrient absorption.

Advantages of Foliar Nutrition (FN) :

FN has many advantages over traditional soil fertilization such as

- Cost of application is very low
- Plant response is faster and therefore nutrient deficiencies may be rectified quickly
- No soil fixation
- It is Independent of root uptake and so may be applied when root functioning is declining
- May be used with other agrochemicals

How does HiFoliar Nutrient™ act :

In most of the plant leaves stomata are present either only on underside or on both sides which enable exchange of gases for photosynthesis and respiration as well as for release of water vapour by stomatal transportation. Plants can absorb nutrients through either the stomata or waxy cuticle. It is important to spray both sides of the leaves for better absorption. A very permeable pathway exists for the movement of nutrients through the surface of the leaves to the various other tissues within the plants. Most of the sprayed nutrients and additives are absorbed into plants in a day's time and move rapidly to new growing points of stem and roots thus, influencing growth and development. The foliar nutrition developed by HiMedia has exhibited the same response after spraying on the leaves during extensive field trial.

Product information :

HiFoliar Nutrient™ (PGE9184) powder is a blend of amino acids extracted from vegetables by specially developed industrial process. It is completely water soluble. The amino acid ratio in HiFoliar Nutrient™ powder is similar to the amino acid ratio in plant tissues. The amino acids are bio-compatible and very quickly absorbed and metabolized by plants. HiFoliar Nutrient™ powder provide plants a ready made source of amino acids (building blocks of protein synthesis) which they require for growth, thereby economizing on biological energy. It can be used in agriculture along with the majority of pesticides as long as these are used in recommend dilutions.

When to use the HiFoliar Nutrient™ (PGE9184) :

- Plants undergoing physiological stress
- Plants restarting new vegetative growth
- Pre and post flowering
- Pre and post fruit setting

Physical appearance : The powder is light brown to brown coloured, homogenous free flowing. It is freely soluble in pure water. At 1% (w/v) aqueous solution it is clear with light brown to brown coloured solution. The pH of the solution at reaction of 1% solution is 6.3 ±0.5 at 25°C.

Packing: 300gm of dehydrated HiFoliar Nutrient™ powder.

Directions for Use :

- Suspend 300gm of dehydrated HiFoliar Nutrient™ Powder in 10 liters water with constant gentle stirring till the powder dissolves completely.
- If desired add wetting agents to the above solution to increase the efficiency of HiFoliar Nutrient™solution. The 10L HiFoliar Nutrient™ solution can also be mixed with insecticides or pesticides etc.
- At the end make up the volume to 100 liters by adding water.
- It is recommended to carry out spraying in early morning prior to sunrise or after sunset. It means early morning before 9 AM or late evening after 5-6 PM. Better results of the foliar spray will also depend on the temperature of 20-25°C with the humidity of 65-70%.

Efficacy of the HiFoliar Nutrient™ on various crops :

Banana:

Key Results :

- Increases leaf number
- Provides strength to the plants
- Increases number of Hands
- Increases number of fingers
- Increases fruit bunch weight

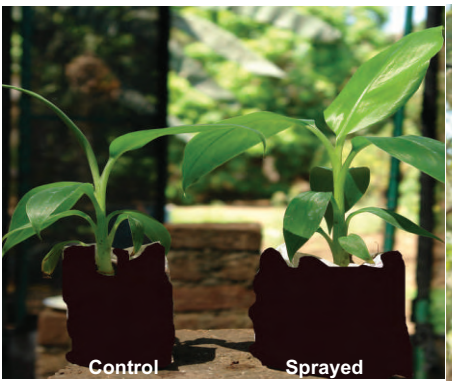

Figure1

Figure 2

Effect of HiFoliar Nutrient™ on Hardening of banana plants (Figure 1) and on fruiting of banana (Figure 2)

Tissue culture raised plants of banana were sprayed during the hardening stages with HiFoliar Nutrient™. Remarkable variations were observed on control as well as sprayed plants of banana (Figure 1). The positive effect was also observed on the fruiting of the banana when treated with HiFoliar Nutrient™ (Figure 2).

Chilli (Hot Pepper) :

Key Results :

- It increases Plant height
- It increases number of green fruits/plant.
- It increases as well as weight of the fruits
- It enhances days of flowering

Figure 3: Effect of HiFoliar Nutrient™ on Hot Pepper

Hot pepper (chillies) was sprayed with HiFoliar Nutrient™ for various durations. The results were analyzed with the control and sprayed plants on the basis of various parameters. The various parameters observed showed significant positive response with the HiFoliar nutrition compared to water spray only. The growth, fruit number and fruit weight was better on sprayed plants compared to non-sprayed (Figure 3, Figure 4 and Figure 5).

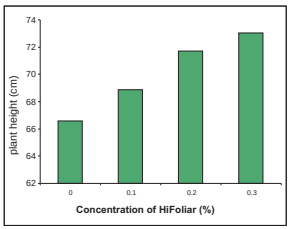

Figure 4

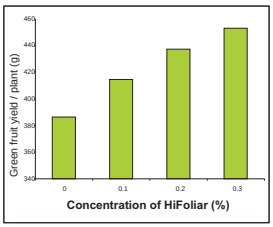

Figure 5

Effect of HiFoliar Nutrient™ on Plant height (Figure 4) and fruit yield (Figure 5)

Tomato :

Key Results :

- It increases Plant height
- It reduces days required for flowering
- It increases number of fruits/plant

Various agronomic parameters of tomato were analyzed after spraying of HiFoliar Nutrient™ to tomato. The plant height increased significantly (Figure 6). it also induced early flowering (Figure 7). The fruit numbers as well as fruit weight per plant increased significantly compared to control.

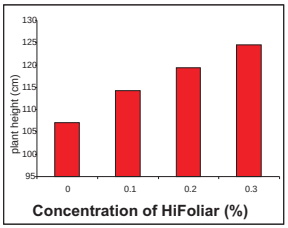

Figure 6

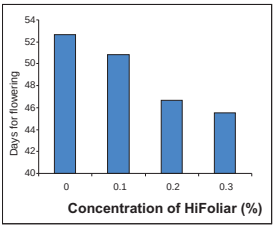

Figure 7

Effect of HiFoliar Nutrient™ on Plant height (Figure 6) and flowering days (Figure 7)

Storage and Handling :

Do not store the product at temperature above 40°C. It is recommended to use the dehydrated powder in one time. If left, keep it in original container with the lid tightly closed. Do not store with food or beverages.

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Tabel : The recommended application for various crops.

Sr. No.	Crop	First Spray	Second Spray	Third Spray
1	Grapes	First Spray when fruiting has just started	Second Spray when fruit is of sorghum size	7-8 weeks after pruning
2	Mango	First spray when flowering begins	Second Spray when fruit is of pea nut size	Third spray after 2 weeks
3	Pomegranate	First Spray when fruiting has just started	Second Spray after 2 weeks	Third Spray after 2-3 weeks
4	Fruit crops like orange, lemon, sweet lime	First Spray when fruiting has just started	Second spray after 2 weeks	Third Spray as required
5	Strawberry	First Spray when fruiting has just started	Second spray after 2 weeks	Third Spray as required
6	Muskmelon, watermelon	First Spray when fruiting has just started	Second spray when fruit is of lemon size	Third spray after 2 weeks as required
7	Guava, Fig	First Spray when fruiting has just started	Second spray after 2 weeks	Third spray as required
8	Berry	First Spray when fruiting has just started	Second spray after 2 weeks	2 weeks before harvesting
9	Cotton	First spray after 2 weeks of planting	Second spray at the time of 20 to 25% flowering (cotton bud)	Third spray after 3 weeks
10	Tomato, Chilly, Brinjal	First spray after 2 weeks of transplanting	Second spray at the time of flowering after 2 weeks	Third spray at the time of fruiting
11	Papaya	First Spray when fruiting has just started	Second spray after 2-3 weeks	Third spray as required
12	Cucurbits like cucumber, pumpkin, Ridge gourd, Bitter gourd etc.	First Spray when fruiting has just started	Second spray after 2 weeks	Third spray as required
13	Spices and Medicinal plants	First spray while fruiting	Second spray after 2 weeks	Third spray as required

Guarantee: After extensive research on the HiFoliar Nutrient™ on various crops it has been proved that the foliar nutrition has positive effect and excellent growth supporting properties for plants & fruits. For best results strictly follow the instruction of the product. It is our commitment to offer consistent quality of product. Once the product reaches to you, the storage and application at your end is out of our control and therefore we do not accept responsibility for eventual damages which may occur due to other factors.

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