**MORINGA OLEIFERA LEAF EXTRACT BASED BIO STIMULANT**

**(BOTANICAL –BIOSTIMULANT)**

**1)WHAT IS MORINGA OLEIFERA :**

Moringa oleifera is a fast-growing, drought-resistant tree having growth enhancing compounds like ascorbates, phenolics, cytokinin and other antioxidants along with macro- micro nutrients in its leaves so that their leaves extract can be use as a natural growth enhancing substance.

**2)ROLE OF MORINGA OLEIFERA LEAF EXTRACT AS BIO STIMULANT :**

Moringa oleifera leaves are potential source of protein, vitamins (A, B, C), essential minerals (K, Ca, Fe) and amino acids. Its leaves contain powerful natural antioxidants (Ascorbate, Phenolics) Moreover, moringa leaf extract is enriched with cytokinins, auxins and Abscisic Acid (ABA) like growth substances . Hence, its leaf extract contains growth enhancing substances and can be used as biostimulants .

The main ingredient is Moringa oleifera protein which has several role in plant development:

* **It is** essential for normal growth and development it regulate the cell division and cell growth
* It stimulate the plant growth
* increase crop yield,
* it enhance the growth of young plants, strengthened plants
* improve resistance to pest, diseases.

it also regulates abiotic and biotic stress response in plants.

**3)BENEFIT OF** **MORINGA OLEIFERA LEAF EXTRACT BASED BIO STIMULANT :**

* foliar application of Moringa oleifera leaf extract beneficial for the vigour growth, deeper root development and better seed germination , delay of fruit senescence and improve yield quality/quantity and also impart on the ability of crops to withstand adverse environmental conditions

**4)TARGET CROPS**

**It** is use in all crops like Cereals , Vegetables, Pulses, cotton, Plantation crops , Fruits, Spices , Flowers , Medicinal crops , Aromatic Crops , in any stage of crop development like germination stage, nursery stage, establishment stage, vegetative growth stage, flowering stage , fruiting and harvesting stage

**4 ) COMPOSITION OF MORINGA OLEIFERA LEAF EXTRACT BASED BIO STIMULANT :**

|  |  |
| --- | --- |
| **Composition** | |
| **Ingredients** | **Percent** |
| Moringa oleifera protein | 8-10 % |
| Moringa oleifera leaf extract | q.s. |
| Total | 100% |

**5) PHYSICAL PROPERTY OF MORINGA OLEIFERA LEAF EXTRACT BASED BIO STIMULANT :**

|  |  |
| --- | --- |
| **Physical Properties** | |
| Physical Appearance | Liquid |
| Odour | Characteristic |
| Solubility | Water soluble |
| pH | 4.5 ±1 |

**6) Method of application :** foliar application

**7) Application Dosage :** 1.5-2.5 ml/ ltr of water

8) Application schedule(protocol) :

|  |  |  |  |
| --- | --- | --- | --- |
| Timing of application | stage | Purpose | Dosage |
| Foliar application |
| The first application  Timing: | Eshtablishment stage | Establishment of plantlets in soil | 1.5ml/ltr of water |
| The second application timing: | Vegetative growth and flowering stage | Vegetative development , improve flower number | 2 ml/ltr of water |
| The third application timing :  . | Post flowering and Harvesting stage | Fruits development ,and enhance yield | 2.5 ml/ltr of water |

**10) STORAGE :** it is kept under normal storage condition.

11) COMPATIBILITY : It can be apply directly with water or mixed with any fertilizer, pesticide, PGR,ect

**12) PACKAGING :** Available in, 500mL, 1 litre & in 200 liter capacity HDPE or as per Client’s request

**13) SHELF LIFE:** it is stable for a period of 3 years from the date of manufacturing If it is kept under normal

***For further information please write on*** [sales@ezzyint.com](mailto:sales@ezzyint.com), [info@ezzyint.com](mailto:info@ezzyint.com) .