

## **KEM ADVANZ**

ADVANZ is a premium quality Plant Biostimulant, biologically synthesized through a multi-stage fermentation process. Protein-rich substances are subjected to three stages of microbial fermentation process under sterile conditions to break down the proteins biologically and stabilized in a concentrated aqueous of mineral-rich biomass.

KEM ADVANZ is rich in organic carbon, protein hydrolysates, precursors of various essential enzymes, cytokinin, auxins, free amino acids, and traces of plant nutrients in chelated form. The thick viscous liquid is easily soluble in water and is absorbed quickly by the plants through stomata, lenticels, cuticular fission, and root hairs. ADVANZ is eco-friendly and non-toxic to crops and safe to the environment.

KEM ADVANZ is an essential specialty input for CLIMATE SMART AGRICULTURE.

### **Mode of action:**

- The active compounds work synergistically with cellular functions to bring about enhanced uptake of native and added nutrients, stimulate the synthesis of essential growth factors, and increase the physiological efficiency of the crops.
- The growth factors actively promote vegetative growth, ensure profuse flowering, increase fruit set, and retain them through maturity.
- The biochemical compounds stimulate critical pathways to trigger necessary defense mechanisms to alleviate physiological stresses caused by climatic aberrations.



## **Commercial Benefits:**

Scientific application of Advanz is found to increase the economic returns of various crops as they derive the following benefits:

- Breaks seed dormancy improves germination, and crop stand of grain crops.
- Enables plants to adapt to high temperature, soil moisture stress, heavy metal toxicity, etc. to make them climate smart.
- Bounce back quickly from stressful situations, without compromising on yield assimilation and ultimate yield harvested.
- Ensures to reduce the yield gap between physiological yield and actual yield harvested.
- Significantly increases the marketable yield and its quality to ensure higher returns to growers.
- When applied on the root zone of the crops (recommended for tree crops), the active principles improve soil microflora by promoting beneficial microbial populations.

## **Dosage & preparation of spray solution.**

ADVANZ is easily soluble in water and is to be diluted in clean water at the rate of 2ml / 1 lt before use. Since the formulation is a thick viscous liquid, shake the bottle 4 to 5 times before opening the bottle.

Pour the required quantity of the formulation in a small quantity of clean water and mix thoroughly. Make up this solution with mild agitation to prepare the required quantity of the spray solution.



### General recommendations:

The dosage of the formulation per Ha varies from 500 to 750 ml depending on the requirement of spray solution to cover the crops effectively. The general recommendation based on the feedback from the trial plots of growers is given below.

CROPS	DOSAGE PER ACRE
Millets	500 ml per Ha / application
Pulses & beans	650 ml per Ha/application
Seasonal oil seeds	650 ml per Ha/application
Vegetables & tubers	650 ml per Ha/application
Seasonal fruit crops	500 ml per Ha/application
Fruit & nut trees	750 ml per Ha/application
Tubers & bulbs	600 ml per Ha/application
Coffee, Tea, Cardamom	650 ml per Ha/application
Flowers	500 ml per Ha/application

The exact requirement of the formulation varies with respect to the quantity of spray solution consumed depending on the Agro-climatic situation at the time of application.

### Method of application:

KEM ADVANZ can be applied on the depending on the desired results. It is suitable for treating the seeds for breaking the seed dormancy as well to enhance the establishment of young plants to get better and uniform crop stand (density). It is also recommended to use as Foliar spray using hand held sprays or boom sprays for field crops & crops having short canopy. For tall tree crops it is recommended to apply in the soil to drench the root zone environment.

**a. Seed treatment:** Soak the seeds in the solution of ADVANZ, one hour prior to sowing.

**b. Foliar application:** Spray the solution of ADVANZ profusely on the foliage covering both sides of the leaves till run off stage using regular sprayers.

Spray during morning or evening hours on a rain less day. If it rains within six hours of spraying, repeat the application.

**c. Soil Application:** Apply the solution of ADVANZ through drip irrigation so as to reach the root zone.

KEM ADVANZ is highly compatible with other agrochemicals and water-soluble fertilizers.

**Time of application:**

The ideal time of the application of KEM ADVANZ is during the active growth stages and early flowering stages of annual and seasonal crops. For perennials, apply during the emergence of new flushes and during the early flowering stage of the crop.

**Pack sizes:**

KEM ADVANZ is available in pack sizes of 1.00 Lt, 5.00 Lt, 20.00 Lt and 200 Lt. The product is packed in HDPE bottles and virgin plastic barrels.

