

Functions of HappyGro®

1. Characteristics

The active ingredient of HappyGro is kinetin, a Cytokinin. Kinetin was first isolated and crystallized from yeast DNA by Miller and Skoog in 1955. Kinetin can occur in nature and is a cell division agent. Kinetin is safe to humans and animals, and is widely used in plants and microorganisms. Kinetin at 0.1% is found in cosmetic products for anti-wrinkle skin care.

HappyGro is absorbed through the leaf, stem, fruit, root and germinated seed, then moves slowly into the other parts of the plants. This specially formulated HappyGro moves quickly from the points of application directly to the target parts of the plant; or it can indirectly by acting as a messenger promote a physiological process. This is demonstrated by the quick results after the application.

2. HappyGro vs. other Cytokinin products:

- 1) HappyGro contains the highest percentage of cytokinin available in the marketplace today (0.5% Kinetin or 5,000 ppm). At the recommended spray concentration kinetin is 5 ppm on the leaf.
- 2) It is especially formulated with supporting ingredients to enhance the movement and effectiveness of Kinetin in the treated plants.

3. Physiological actions and mechanism of Kinetin:

- 1) Promotes cell differentiation, cell division and cell growth.
- 2) Promotes formation of flower buds and blooming.
- 3) Increases the flower sets.
- 4) Promotes fruit formation and increases the fruit size.
- 5) Can delay the aging process of leaf and plant if applied late in season.
- 6) Enhances the root development when applied in combination with an auxin by maintaining root juvenility.
- 7) Regulates opening of leaf pores in the defense against plant stress.
- 8) Retards apical dominance at the growing tips and stimulates side branching.