

## **SOIL APPLICATION - BEGINNING DEFICIENCY**

### General Information

Excel Triple 5 is a high phosphate product and contains calcium. This combination is unique to only a few products, where both calcium and phosphate remain in true solution. Baicor researchers have produced Excel Triple 5, which incorporates high amounts of calcium, phosphorus and also potassium. Calcium is primarily taken up through the underdeveloped root tip in the soil. At times of peak demand, although there is adequate calcium in the soil, the plant may experience deficiency. This may result in blossom end rot in tomato, bitter pit in apple, internal brown spot in potato, etc. Foliar addition of calcium may assure adequate nutrients for growth and development. Phosphorus is present in high amounts in the only plant usable phosphate form, phosphate. The highest concentration of phosphorus within the plant is in the cell plasma; it is intimately involved in all energy-related reactions. Plants with adequate phosphorus are more resistant to all stress conditions including disease infections.

Potassium is required in large amounts by the plant. It is involved in over 40 enzymatic reactions, which are crucial in plant metabolism. The opening and closing of stomates, water relations and membrane integrity require the essential potassium nutrient.

Nitrogen is required in high amounts for critical structural and metabolic roles, i.e. synthesis of building- block amino acids and complex metabolites such as proteins, nucleic acids and porphyrins. Nitrogen is present in the most usable nitrate form for uptake and translocation.

### Limitations, Restrictions, and Exceptions

Do not apply directly to seeds unless it has been determined/tested by the consultant or grower that it is not harmful or injurious to the seed.

### Method

[Soil application](#)

### Rates

[field\\_rates 0](#)

- 

Timings

[N.A.](#)