Crop Information

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The Essential Role of Foliar Nutrition for Vegetable Production

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Yield and Quality

* Profitable vegetable growing depends upon the production of high yields of top quality crops
* Size, shape, appearance, taste and shelf life are factors of major importance

Leaf and Stem Crops

* Visual appearance is very important
* Leaf chlorosis, stem cracking or mis-shapen crops must be avoided
* Important nutrients are:
o Magnesium, Iron and Manganese (chlorosis)
o Boron and Calcium (cracking, distortion, tip burn)

Root Crops

* Size and shape are important
* Stunted, mis-shapen or split crops must be avoided
* Boron is of particular importance

Fruiting Crops

* Number, size, appearance, taste and shelf life are important
* Irregular size, uneven ripening and poor shelf life must be avoided
* Important nutrients are:
o Boron, Phosphorus and Zinc (number, size and shape)
o Calcium (shelf life)
o Potassium (taste)

General Characteristics of Vegatable Production

* Fertilizer Use
o High NPK Application
* Soil Type
o Soils with high Organic Matter
o Sandy Soils

* Deficiency leads to reduced growth (stunted crops) and chlorosis of leaves affecting yeild and appearance of crops
* Often problem is caused by organic soils or high pH soils, cold wet conditions or high levels of phosphorus in the soil
* Foliar spraying overcomes the problem

Calcium (Ca)

* Deficiency leads to damaged growing points, tip burn of leaves, small fruit and poor shelf life affecting yield and appearance of crops
* Often problem is caused by acidic or sandy soils, drought or uneven irrigation
* Foliar spraying overcomes the problem

Phosphorus (P)

* Deficiency leads to reduced flowering and pollination and poor shelf life affecting yield and appearance of crops
* Often problem is caused by either acidic or calcareous soils or cold or wet conditions

particularly early in the season on crops with a poorly developed root system
* Foliar spraying overcomes the problem

Potassium (K)

* Deficiency leads to reduced flowering and pollination and poor shelf life affecting yield and appearance of crops
* Often problem is caused by either acidic or calcareous soils or cold or wet conditions particularly early in the season on crops with a poorly developed root system
* Foliar spraying overcomes the problem

Magnesium (Mg)

* Deficiency leads to leaf chlorisis (older leaves) affecting yield and appearance of crops
* Often cause of problem is high potassium levels in soil or high application of potash fertilizer

* Foliar spraying overcomes the problem

Boron (B)

* Deficiency leads to death or distortion of growing points and poor flowering or fruit set affecting yield and appearance of crops
* Often cause of problem is sandy or calcareous soils, high levels of nitrogen application or periods of drought (uneven irrigation)
* Foliar spraying overcomes the problem

Iron (Fe)

* Deficiency leads to chlorisis of younger leaves affecting yield and appearance of crops
* Often problem is caused by high pH or calcareous soils, high levels of copper (from repeated fungicide use) or poor drainage
* Soil or foliar application of iron chelate overcomes the problem

Maganese (Mn)

* Deficiency leads to choloris of leaves affecting yield and appearance of crops
* Often problem is caused by organic, high pH or sandy soils or wet conditions
* Foliar spraying overcomes the problem