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Plant Form, Function, and Edibility

Micronutrients	Macronutrients
<p>Boron (B)</p> <ul style="list-style-type: none"> Helps in the use of nutrients and regulates other nutrients Aids production of sugar and carbohydrates Essential for seed and fruit development Sources of boron are organic matter and borax 	<p>Nitrogen (N)</p> <ul style="list-style-type: none"> Nitrogen is a part of all living cells and is a necessary part of all proteins, enzymes and metabolic processes involved in the synthesis and transfer of energy Nitrogen is a part of chlorophyll, the green pigment of the plant that is responsible for photosynthesis Helps plants with rapid growth, increasing seed and fruit production and improving the quality of leaf and forage crops Nitrogen often comes from fertilizer application and from the air (legumes get their N from the atmosphere, water or rainfall contributes very little nitrogen)
<p>Copper (CU)</p> <ul style="list-style-type: none"> Important for reproductive growth Aids in root metabolism and helps in the utilization of proteins 	<p>Phosphorus (P)</p> <ul style="list-style-type: none"> Like nitrogen, phosphorus (P) is an essential part of the process of photosynthesis Involved in the formation of all oils, sugars, starches, etc. Helps with the transformation of solar energy into chemical energy; proper plant maturation; withstanding stress Effects rapid growth Encourages blooming and root growth Phosphorus often comes from fertilizer, bone meal, and superphosphate
<p>Chloride (Cl)</p> <ul style="list-style-type: none"> Aids plant metabolism Chloride is found in the soil 	<p>Potassium (K)</p> <ul style="list-style-type: none"> Potassium is absorbed by plants in larger amounts than any other mineral element except nitrogen and, in some cases, calcium Helps in the building of protein, photosynthesis, fruit quality and reduction of diseases Potassium is supplied to plants by soil minerals, organic materials, and fertilizer

Micronutrients	Macronutrients
<p style="text-align: center;">Iron (Fe)</p>	<p style="text-align: center;">Calcium (Ca)</p>
<ul style="list-style-type: none"> ● Essential for formation of chlorophyll ● Sources of iron are the soil, iron sulfate, and iron chelate 	<ul style="list-style-type: none"> ● Calcium. an essential part of plant cell wall structure. provides for normal transport and retention of other elements as well as strength in the plant. It is also thought to counteract the effect of alkali salts and organic acids within a plant ● Sources of calcium are dolomitic lime, gypsum. and superphosphate
<p style="text-align: center;">Manganese (Mn)</p>	<p style="text-align: center;">Magnesium (Mg)</p>
<ul style="list-style-type: none"> ● Functions with enzyme systems involved in breakdown of carbohydrates, and nitrogen metabolism ● Soil is a source of manganese 	<ul style="list-style-type: none"> ● Magnesium is part of the chlorophyll in all green plants and essential for photosynthesis. It also helps activate many plant enzymes needed for growth ● Soil minerals, organic material, fertilizers, and dolomitic limestone are sources of magnesium for plants
<p style="text-align: center;">Zinc (Zn)</p>	<p style="text-align: center;">Sulfur (S)</p>
<ul style="list-style-type: none"> ● Essential for the transformation of carbohydrates ● Regulates consumption of sugars ● Part of the enzyme systems which regulate plant growth ● Sources of zinc or soil, zinc oxide, zinc sulfate and Zinc chelate 	<ul style="list-style-type: none"> ● Essential plant food for production of protein ● Promotes activity and development of enzymes and vitamins ● Helps in chlorophyll formation ● Improves root growth and seed production ● Helps with vigorous plant growth and resistance to cold ● Sulfur may be supplied to the soil from rainwater. It is also added in some fertilizers as an impurity, especially the lower grade fertilizers. The use of gypsum also increases soil sulfur levels.
<p style="text-align: center;">Molybdenum (Mo)</p>	
<ul style="list-style-type: none"> ● Helps in the use of nitrogen ● Soil is a source of molybdenum 	