Foliar Fertilizer

Introduction

- Importance of Foliar fertilizer
- Type of Nutrients

INTRODUCTION - Importance of Foliar Fertilization

- Foliar fertilization is a supplement for plants to absorb nutrients to replenish the nutrient deficiency caused by root fertilization.
- The nutrients required for crops are directly applied to the surface of crop leaves and exerts its functions through the absorption of the leaves.
- However, foliar fertilization cannot replace soil fertilization.

INTRODUCTION - Types of Nutrient

Nutrients required by plant can be divided into three main groups: Primary macronutrients, Secondary macronutrients and optional Micronutrients.

Primary macronutrients

- Nitrogen (N)
- Phosphorus (P)
- Potassium (K)

Secondary macronutrients

- Calcium (Ca)
- Magnesium (Mg)
- Sulfur (S)

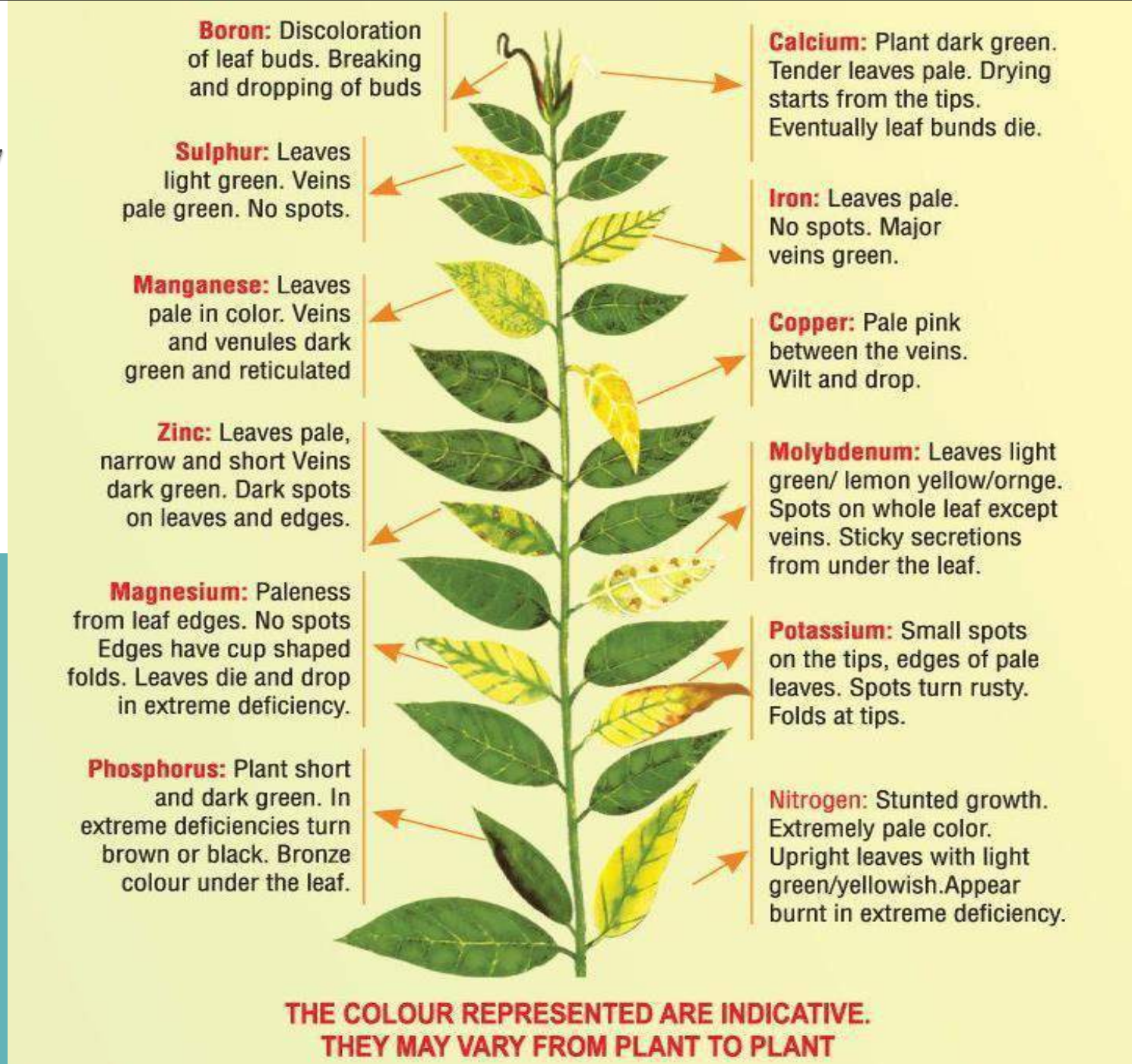
Micronutrients

- Copper (Cu)
- Iron (Fe)
- Manganese (Mn)
- Molybdenum (Mo)
- Zinc (Zn)
- Boron (B)
- Chlorine (Cl)

Importance of Nutrients

Nutrients	Functions
N	Responsible for leaf growth, lush vegetation and vegetation growth
P	Critncal in root development, crop maturity and seed production, responsible for flower and fruit development
K	Helps in root growth and stem development, activates enzymes and important to a plants abiity to withstand extreme temperatures and drought
Mg	Helps in uptake of phosphorus and regulates uptake of other nutrients
Ca	Promotes early root development and growth, encourages seed production
S	Stimulates root growth, seed formation and nodule formation
Fe	Component of enzymes, essential for chlorophyll synthesis and photosynthesis
Mn	Helps in chlorophyll formation, cofactor in many plant reactions, activates enzymes
Cu	Component of enzymes, involved with photosynthesis
B	Important in sugar transport, cell division and amino acid production
Cl	Used in turgor regulation, resisting diseases and photosynthesis reactions
Mo	Involved in nitrogen metabolism, essential in nitrogen fixation
Zn	Helps in formation of growth hormones and chlorophyll, component of many enzymes, essential for plant hormone balance and auxin activity

Nutrients Deficiency



GreenMax

GreenMax

- GreenMax is a supplement for plants to absorb nutrients via foliar to compensate for the lack of nutrients absorbed by roots.
- The active ingredient is Win Men's patented *Bacillus* strains (total viable bacteria count ≥ 10^9 CFU/g), which have high microbial activity and proliferation rate.
- GreenMax is ideal for foliar applications on fruit trees and vegetable plants.
- The nutrients in GreenMax are rapidly taken up through the plant leaves to promote even yields, crop consistency and quality of produce.
- Direction of use: Add 250ml of GreenMax into 20L of water and spray. The dilution rate is 1:80. Depending on the condition of the plant, the amount used could be increased or decreased.

Speciality of GreenMax

Specialities of GreenMax

Replenish the deficiency of root fertilization

补充根部施肥的不足

Improve yields

提高座果率

Quickly replenish nutrition

迅速补充营养

Economical

经济合算

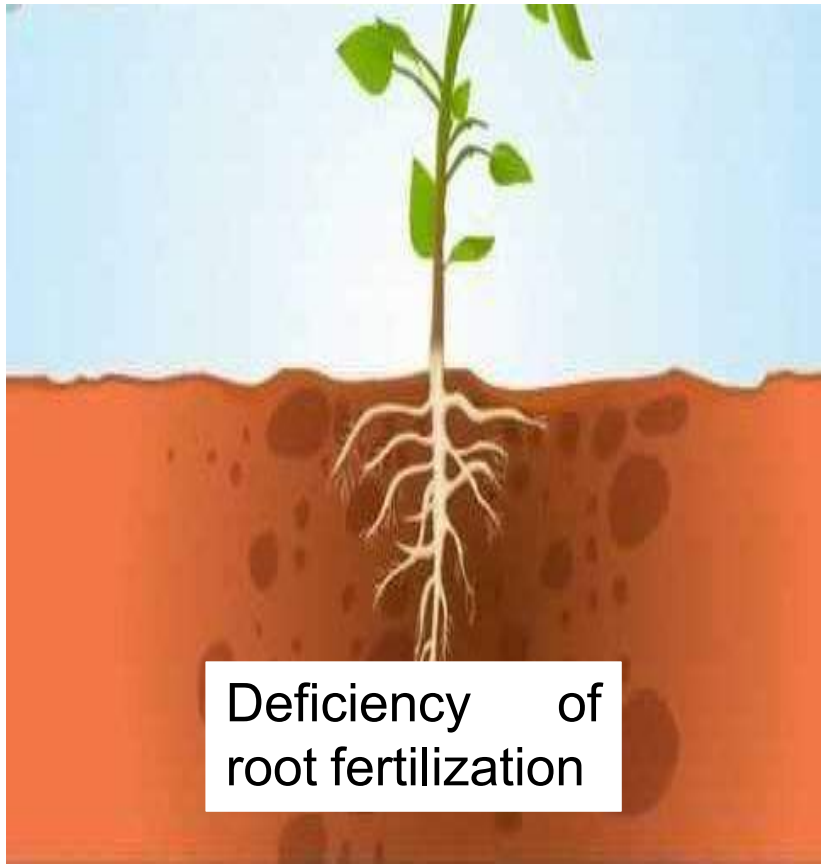
Give full play to fertilizer efficiency

充分发挥肥效

Reduce pollution to the soil

减轻对土壤的污染

1.Replenish the deficiency of root fertilization 补充根部施肥的不足



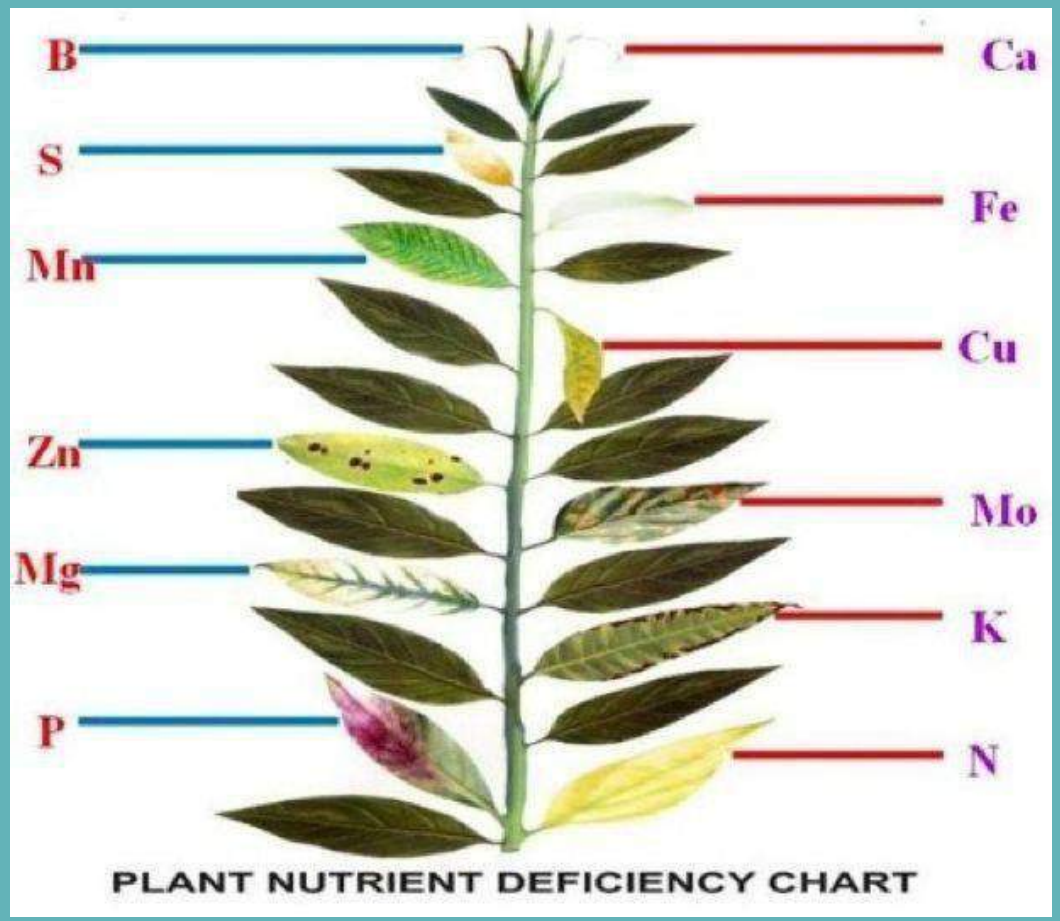
- If root fertilization cannot meet the needs of the crop in a timely manner, **GreenMax** spray can be used to replenish nutrition and meet the needs of crop growth and development.

- When crops have insufficient root fertilization, such as in the late stage of crop growth
  - root vitality declines
  - ability to absorb fertilizer is reduced

- When the soil environment is unfavorable to crop growth (excessive moisture, drought, soil overacid, and alkali), nutrients absorption in crop roots will be affected.

- Thus, foliar application of **GreenMax** will acts to alleviate the nutrients deficiency.

2. Quickly replenish nutrition 迅速补充营养



- Soil fertilization takes time before the nutrients can be absorbed by the crops.
- Thus, crops will exhibited certain nutrient element deficiencies when they are growing.
- At this time, the use of **GreenMax** (foliar fertilization) can enable nutrients to quickly enter the crop directly from the leaves, the absorption speed is fast, which can greatly increase the nutrient elements in the plants in a short time, quickly replenish the needed nutrition.

3. Give full play to fertilizer efficiency 充分发挥肥效

- Certain nutrients in fertilizer such as phosphorus, iron, manganese, copper, zinc, etc., are easily fixed by the soil and affect the application effect, if applied on roots.

- Some fruit trees and other deep root crops also have less absorption of certain nutrients. Thus, there are limitation for root fertilization as it cannot fully exert its effect.

- However, the use of **GreenMax** foliar spraying will not be limited by soil conditions. With this, **GreenMax** foliar spraying can give full play to its fertilizer efficiency.

4. Reduce pollution to the soil 减轻对土壤的污染

- Nitrogen fertilizer causes the accumulation of nitrate in groundwater and vegetables, which is harmful to human health.
- About 75% of the nitrate absorbed by humans comes from vegetables.
- On saline soil, fertilizing the soil may increase the concentration of the soil solution and increase the salinization of the soil.
- **GreenMax** reduces the usage of soil fertilization and indirectly reduce the nitrate content in plants and residual mineral nitrogen in the soil.
- Thus, **GreenMax** is an effective fertilization technology as it reduces the pollution of soil and water sources.

5. Economical 经济合算

- **GreenMax** is generally used in small amounts, especially for trace element fertilizers such as boron, manganese, molybdenum, iron, etc.
- Root fertilization usually requires a larger amount to meet the needs of crops, so it is difficult to apply trace elements evenly.
- According to research estimates, if spraying boron fertilizer on leaves, the utilization rate of boron is 8.18 times of soil fertilization.
- **GreenMax** is sprayed on the leaves of crops, and usually need only a fraction of the amount of soil fertilizer to achieve satisfactory results.
- Thus, **GreenMax** foliar spray is more cost-effective and economical.

6. Improve crop yields 提高坐果率

- **GreenMax** also able to promote the colonization of good bacteria on the phyllosphere to suppress the pathogenic bacterial populations and reduce disease incidence in plants**.**
- Spraying **GreenMax** before flowering can stably improve the fruit setting rate and reduce the occurrence of flower drop and fruit drop.
- Besides, **GreenMax** can promoting fruit expansion.
- After flowering, fruit trees demand for large amount of primary and secondary macronutrients and also micronutrients for fruiting.
- At this time, spraying **GreenMax** can improve the quality of the fruit such as bright color, sweet taste and early maturity.

Conclusion

- Foliar fertilizer is a supplement for plants to absorb nutrients via foliar to compensate for the lack of nutrients absorbed by roots.

- **GreenMax** can replenish the deficiency of root fertilization, quickly replenish nutrition, give full play to fertilizer efficiency, reduce pollution to the soil, economical and improve yields.

Thank YOU