

Plant Nutrition

Questions (think of questions that might be on the exam)

3 ways to increase yields

1. Select good _____ crop
2. Select the best _____ practices
3. Good _____ conditions

Plant nutrition –

The availability and types of basic chemical elements required by the plant – to _____ & _____.

Plant Fertilizer –

The process of _____ to the soil or leaves so these chemicals are added to growing environment.

How do plants uptake nutrients?

- _____-water solution
- _____ obtained in soil-water solution
- _____ directly from soil

Primary Nutrients in Agriculture

- Macronutrients – are needed/used in large amounts
- _____, _____, _____
- C, H, O, Ca, Mg, S

Primary Nutrients

1. Nitrogen (N) – is needed for vegetative growth and dark green color. (easily leached out)

- _____ is the most important nutrient.
- Deficiency signs – reduced growth & yellowing of lower leaves.
- _____ is called Chlorosis

2. Phosphorus (P) – important for _____ and young plant growth and develop good root system. (not easily leached out)

- AKA – Potash
- Deficiency signs- reduced growth, poor root systems, reduced flowering. Also thin stems and browning or purpling of foliage.

What if there is too much water?

If a plant receives too much nutrients, what is it called?

Plant Nutrition

Where does the plant get C,H,O?

3. Potassium (K) – _____ and made into a fertilizer – can be leached.

- Deficiency signs – reduced growth, shortened internodes and some burn, scorched marks (brown leaves).
- Too Much (K) – can cause nitrogen deficiency.

Secondary Nutrients

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Micronutrients in Agriculture

They are used in small quantities – and obtained from the soil. (excess amounts are toxic)

- _____
- _____
- _____
- _____
- _____
- _____
- _____

16 Essential Nutrients for Normal Plant Growth

- The absence of any one essential plant nutrient will cause the plant to _____ or show signs of _____
- C Hopkns Cafe Mg (10)
- B, Cu, Cl, Mn. Mo, Zn (6)

If there is too much fertilizer what could happen?

Ways to apply Nutrients

Application Methods

1. _____ – applied before germination
2. _____ – done early in plants life
3. _____ – done later in plants life

Types of fertilizer

1. Organic > liquid or dry
2. Inorganic > liquid or dry

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In the space below, write a 5-7 sentence summary: