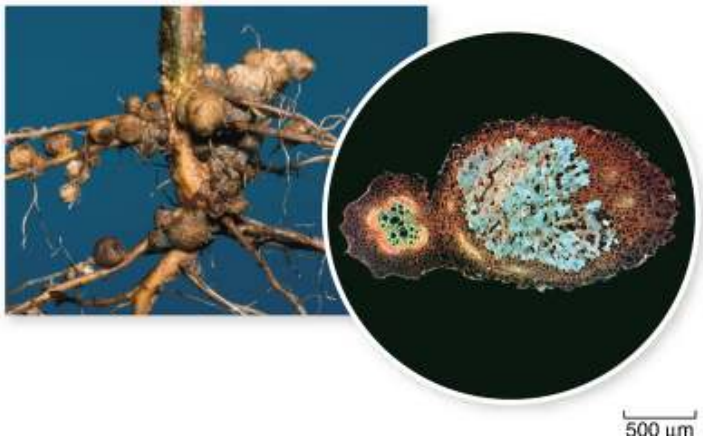
Chapter 39 - Plant Nutrition and Soils



1. What is soil composed of ?

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2. How do nutrients enter plants?

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3. Most roots grow in the _____ .

4. How do plants absorb cations from the soil?

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5. Loss of topsoil is a major problem. What is contributing to this situation?

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6. How does pH and salinity affect a plant's ability to absorb water and nutrients?

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7. What is the difference between **macronutrients** and **micronutrients**?

8. Why is magnesium important to plants? _____

9. What is **hydroponics**?

10. Why are root hairs important to plants?

11. Describe the path of nitrogen from the atmosphere to plant protein. Include the role of each of the following:

a. **Nitrogen-fixing** bacteria_____

b. **Ammonifying** bacteria _____

c. **Nitrifying** bacteria _____

d. **Denitrifying** bacteria _____

12. Describe the following unique nutritional relationships:

a. ***Rhizobium*** bacteria & **legumes** _____

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b. **Mycorrhizae** _____

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c. Parasitic plants _____

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d. Carnivorous plants _____

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13. Why have CO_2 levels increased so much in the last 250 years?

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14. How do increased CO_2 levels affect nutrient balance in plants?

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15. What is **phytoremediation**? Provide examples.

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