

Science

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(Chapter – 15) (Improvement in Food Resources)

(Class – IX)

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Q.1 What are macro-nutrients and why are they called macro-nutrients?

Sol. Macro-nutrients are nutrients required in relatively large quantities for growth and development of plants. **They are six in number.** Since **they are required in large quantities,** they are known as **macro-nutrient.** The six macro-nutrients required by plants are **nitrogen, phosphorus, potassium, calcium, magnesium, and sulphur.**

Q.2 How do plants get nutrients?

Sol. Plants require **sixteen essential nutrients** from nature for their growth and development. All these nutrients are obtained from air, water, and soil. Soil is the major source of nutrients. **Thirteen of these nutrients are available from soil.** The remaining three nutrients (**carbon, oxygen, and hydrogen**) are obtained from air and water.

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Q.1 Compare the use of manure and fertilizers in maintaining soil fertility.

Sol. **Manures increase soil fertility by enriching the soil with organic matter** and nutrients as it is prepared by the decomposition of animal excreta and plant wastes. On the other hand, **fertilizers are mostly inorganic compounds whose excessive use is harmful to the symbiotic micro-organisms living in soil.** Their excessive use also reduces soil fertility. Hence, fertilizers are considered good for only short term use.

