

Chapter 10

1. The process by which growers increase their supply of a type of plant is called (1)_____.
2. Propagation which does not involve flowers, seeds or sexual reproduction is called (2)_____ propagation.
3. Some methods of vegetative propagation make use of propagation structures formed (3)_____ by the plant.
4. Natural methods include using food storage organs such as (4)_____ and (5)_____ and making use of plantlets. A (6)_____ is a miniature plant attached to a (7)_____ plant. Plantlets are found at the ends of (8)_____ (horizontal stems) and at the edges of some plants' leaves. Others take the form of side shoots called (9)_____ formed at the base of the parent plant.
5. Some methods of vegetative propagation can be used to increase the supply of the plant by (10)_____ means. Plants are often propagated by taking (11)_____. When a (12)_____ cutting is taken, the stem is normally cut just below the (13)_____ because the node is a point of growth. It will respond to the cut (wound) by developing (14)_____. Some plants can be propagated using (15)_____ cuttings.

6. The development of roots by a cutting is often promoted by applying a chemical called (16)_____ powder to the cut surface.
7. A stem cutting with many leaves may lose too much water and die before its roots develop. To prevent this happening, most of its (17)_____ are removed or it is given conditions with an increased level of (18)_____. This can be done by enclosing it in a (19)_____ bag or by putting it in a (20)_____ propagator.
8. Plants can also be propagated artificially by (21)_____. This means pegging the stem down in the soil until roots form at the nodes. Sometimes the stem is (22)_____, part the way through, below a node before being (23)_____ down.
9. An advantage of layering is that it can be used with plants that are (24)_____ or impossible to propagate from cuttings.
10. Supplying the plants being propagated with (25)_____ may be of advantage if it leads to (26)_____ growth and/or prevents (27)_____ damage. However these benefits have to be balanced against the possible disadvantages. These include wilting of plants (caused by high (28)_____ loss in warm conditions), rapid spread of (29)_____ and high (30)_____ costs.

artificial bulbs cut cuttings difficult disease
energy faster frost heat humidity layering leaf
leaves mist naturally node offsets parent
pegged plantlet plastic propagation rooting roots
runners stem tubers vegetative water

-----Word Bank-----

Chapter 10

1. The process by which growers increase their supply of a type of plant is called propagation.
2. Propagation which does not involve flowers, seeds or sexual reproduction is called vegetative propagation.
3. Some methods of vegetative propagation make use of propagation structures formed naturally by the plant.
4. Natural methods include using food storage organs such as bulbs and tubers and making use of plantlets. A plantlet is a miniature plant attached to a parent plant. Plantlets are found at the ends of runners (horizontal stems) and at the edges of some plants' leaves. Others take the form of side shoots called offsets formed at the base of the parent plant.
5. Some methods of vegetative propagation can be used to increase the supply of the plant by artificial means. Plants are often propagated by taking cuttings. When a stem cutting is taken, the stem is normally cut just below the node because the node is a point of growth. It will respond to the cut (wound) by developing roots. Some plants can be propagated using leaf cuttings.
6. The development of roots by a cutting is often promoted by applying a chemical called rooting powder to the cut surface.
7. A stem cutting with many leaves may lose too much water and die before its roots develop. To prevent this happening, most of its leaves are removed or it is given conditions with an increased level of humidity. This can be done by enclosing it in a plastic bag or by putting it in a mist propagator.
8. Plants can also be propagated artificially by layering. This means pegging the stem down in the soil until roots form at the nodes. Sometimes the stem is cut, part the way through, below a node before being pegged down.
9. An advantage of layering is that it can be used with plants that are difficult or impossible to propagate from cuttings.
10. Supplying the plants being propagated with heat may be of advantage if it leads to faster growth and/or prevents frost damage. However these benefits have to be balanced against the possible disadvantages. These include wilting of plants (caused by high water loss in warm conditions), rapid spread of disease and high energy costs.