QUESTIONS

1. What three elements make up a complete fertilizer?
2. What is meant by a 10-6-4 analysis?
3. What is the percentage of Phosphate expressed as P_2O_5 that is found in Super Phosphate?
4. How many lbs. of Potash in a ton of 5-10-5? In 15-5-10?
5. What is the percentage of Nitrogen in Ammonium Nitrate?
6. What is the percentage of Nitrogen in Ammonium Sulphate?
7. What does P.M.A.S stand for?
8. What is the percentage of Potash in Super Phosphate?
9. In order to apply one pound of actual Nitrogen per 1,000 square feet, how many pounds of Urea are required per acre?
10. Approximately what percent of actual Potash is in Muriate of Potash?
11. What is the average percent of Nitrogen in the Ureaform fertilizers?
12. How many yards of topdressing material are required to apply 1/4 inch to a 5,000 square foot green?
13. If a truck carries 10 yards of soil, how many truckloads would be required to cover a 5,000 square foot green with one foot of topsoil?
14. Approximately how many pounds in a yard of dry sand?
15. Would you get more sand in a yard of sand, or in a ton of sand?
16. If your spray boom is 20 feet wide - how many yards would you have to travel to cover one square acre?
17. Approximately how many square feet in an acre?
18. Approximately how many acres in a fairway 400 yards long and 50 yards wide?
19. How many gallons (American) of water in a cubic foot?
20. Approximately how many gallons in an acre inch of water? (American)
21. In warm weather - which will expand more, plastic or steel piping?
22. How much greater is the expansion of plastic pipe as compared to steel pipe. 10 times - 5 times - or 2 times?
23. How many times more water will a 2'' pipe hold, as compared to a 1'' pipe?
24. How many pounds pressure per square inch will be exerted at the base of a water tower 100 feet high?
25. What is the friction loss of 100 feet of 1'' hose at 30 gallons per minute - 5 lbs. - 15 lbs. - or 30 lbs.?
26. Which holds more water - a 5 gallon can, or a cubic foot?

Turn the pages for the correct answers.

IN YOUR GARDEN

Thin Bark Trees Need Winter Protection

Winter is hard on newly planted young trees. Last year even established plants of varieties with thin bark were severely injured. Maples, lindens and locusts were particularly hard hit.

Winter injury is caused during bright winter days when the sun stimulates the inner bark to grow. This usually happens on the south or southwest side of the tree. When the sun sets, the temperature inside the trunk suddenly drops to that of the outside air which may be well below freezing. The newly formed tissues are killed, causing the bark to loosen.

Prevent winter injury by wrapping the trunk of newly planted trees or trees winter-injured last year. To wrap the trees, use forty pound kraft paper or a tough crepe-type asphalt impregnated paper. Using three to four inch widths, start at the base and spirally wrap the tree trunk, tying with a soft cord to hold the paper in place. The paper should overlap perhaps ½ to 1 inch for more complete protection.

Another good practice is mulching the soil around the base of the plants. This prevents the bad effects of freezing and thawing which can heave and tilt the tree. Soil moisture relations are also favorable through the winter on mulched soil.

Ground corn cobs, bark, dried grass clippings, or shredded leaves are some recommended winter mulch materials.

The mulch should be six inches deep and extend one foot past the edge of the hole. Most of these materials can be left in place as a summer mulch for the next season.

James A. Fizzell
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MUMS NEED LITTLE CARE TO LIVE THROUGH WINTER

Q—Our garden mums were beautiful this fall. Is there any way to preserve them for next year's garden?

A—Most garden mums are quite hardy and will live thru the winter with a little care. When frost withers their blooms and foliage, cut the tops of the plants back to just above ground level. After the ground freezes, cover the plants with a light, airy mulch to keep the shallow roots from heaving out of the soil during temperature fluctuations. In early spring, lift the plants out of the ground and divide them. Each basal shoot taken from a clump will develop into a new plant.

Q—What causes leaves of a vigorous trumpet vine to curl at this time?

A—Aphids undoubtedly are finding the vine attractive. You can spray the vine with a contact insecticide to get rid of them, but it is so late in the season this hardly seems worth while since leaves will die off anyway.

Q—Can you advise me how to save some fibrous begonias over the winter?

A—If dug and potted before frost, begonias will thrive indoors by a sunny window. Cuttings from these plants will root easily in moist vermiculite.

Q—Would you advise cutting back a silver lace vine this fall?

A—I always prefer to wait until spring to cut back these strong growing vines. The reason for this is that if the winter is mild, die-back will be less severe and you can cut back accordingly. Pruning now may result in loss of portions of the vine that have lived thru the winter.

Q—When is a good time to fertilize some large shade trees on our property?

A—Fall or early spring are equally good times to feed the trees.

Q—Why do new leaves on my philodendron become progressively smaller? They look healthy and green.

A—When a plant produces smaller leaves than usual, it usually indicates the plant is being grown in too dark or too cool an environment. Altho philodendrons do not require sunlight, they do need good light and a temperature range of 60 to 70 degrees for best growing conditions.

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