

Whitened buds will remain practically dormant, whereas unprotected buds frequently burst into growth during warm spells, as already mentioned. Experiments have shown that whitened buds blossom six days or more later than those unsprayed.

Whitewashing for winter protection should be done early in winter; apply two coats, and repeat as often as necessary to keep the trees white. Usually two or three sprayings are sufficient. The following formula was used in some

experiments personally conducted by the writer at the O.A.C., Guelph, and gave good results: Lime (unslaked), 2 pounds; water, one gallon; skim milk, one quart; salt, five ounces. These figures merely indicate the relative proportions of a quantity sufficient to spray one good-sized peach tree. Slake the lime in warm water, stir to slake quickly and well, add the remaining ingredients, and mix thoroughly. The skim milk is not essential, but it is thought to add to the effectiveness and

adhesiveness of the material. When thoroughly prepared, strain the mixture through a fine-meshed sieve and apply hot.

The use of the lime-sulphur wash has a similar effect, but, as it is not applied until early spring, its value in this respect is not marked. Before the customary time for applying this wash, peach and other tender trees are liable to injury. For purposes of winter protection a lime wash must be applied in early winter and repeated often enough to keep the trees white.

Some City Garden Troubles*

AMATEUR gardening has its portion of troubles. Like the professional florist, the commercial fruit grower and the truck farmer, the amateur is occasionally the victim of adversity, due to inexperience, insect and fungous enemies, unfavorable conditions and other causes.

MEALY BUGS

On greenhouse and indoor plants, mealy bugs are troublesome. They derive their name from the fact that they are covered by a white, powdery substance, which is really a secretion of the insects themselves. By this characteristic they are easily identified.

Mealy bugs thrive best in a high temperature. Spraying with cold water usually will hold them in check. They are destroyed also by contact poisons. A dilute kerosene emulsion is satisfactory. Where the number of plants is small, they can be cleaned of the pest by touching the infested parts with a brush dipped in methylated spirits.

"AMERICAN BLIGHT"

On apple and crab apple trees in city gardens, where spraying is not practised, the woolly apple louse, or "American Blight," as it is called in England, may accumulate and do much injury. They appear like tufts of cotton attached to the leaves and bark. They secrete a fine cottony fibre, beneath which they are concealed. The eggs may be found singly in the bark crevices during winter. Where the cottony masses are too numerous to destroy by hand, the best remedy is kerosene emulsion.

CHERRY TREE TROUBLES

Like the commercial orchard, the city man's fruit garden has a host of troublesome pests. During the past season in Toronto many newly-set cherry trees did not do well, owing either to lack of proper attention or to insect and fungous enemies. To grow and thrive from the start, a cherry tree must be planted right. Long exposure

of the roots to sun and air is injurious. The tree should be properly pruned when set. All ragged and bruised roots ought to be removed and cut off clean, and the tops should be pruned and thinned out to counterbalance the loss of roots. The hole to receive the tree must be large enough to take in the roots without cramping. It is necessary, also, to pack the soil firmly about the roots. Water poured into the hole will make the operation more safe.

The Cherry Aphis has done much damage on trees in Toronto gardens. Unless the owner is observant, the aphids multiply rapidly and badly injure the foliage before they are noticed. This insect winters in the egg stage, the eggs being laid on young twigs close to the buds. Trees that are badly infected should be trimmed thoroughly in winter and the cuttings destroyed. The eggs are of a reddish color, and can easily be seen upon close inspection. Where pruning or destroying the eggs is not desirable, much can be done by spraying the trees as soon as the eggs hatch in spring with kerosene emulsion—one part in 12 parts of water.

SALVIA SPLENDENS

The Scarlet Sage, *Salvia splendens*, is a well-known and popular tender perennial. It blooms late in fall and makes a fine effect in beds or borders. It is easily transplanted, and when removed to the house in fall, the plants continue in bloom for some time. Unless a rare strain or variety, it is not necessary to carry plants over winter. Should this plan be desired, it is best to take up from the garden early enough to make good roots; cut back to get cuttings, and later strike the cuttings in sand.

New plants may be got from seed. Sow in February. When seedlings are large enough, pot them. Good plants may be had in plenty of time for planting out in spring.

GROWING DAHLIAS

The dahlia is an old favorite. Even the formal flowered types have a place in the appreciation of many home gardeners. The loose-flowered forms and

the improved single sorts are favored by everybody. The single varieties may be grown from seed, but the double sorts should be grown from cuttings of the young shoots or from division of the roots. If cuttings are to be made, it will be necessary to start the roots early, either in hotbed or house. The cuttings should be made when the growth is four or five inches long, usually May or June. Take care to cut just below the joint, as a cutting made between two joints will not form tubers. Pinch out the terminal bud. Start the cuttings in sandy soil near a fence or building. Later they should be transplanted to desired position in the garden.

The later that dahlias are started, the greater the chance of freedom from injury by the dahlia "bug." Late-planted dahlias produce the best blooms. They do best in cool, moist seasons. In dry seasons, the striped dahlia "bug" is most active. It is difficult to combat, but when conditions are unfavorable for it, such as inferred—cool, moist weather, and plants started late in season—it will not do much damage.

Dahlias flourish best in a deep, rich, moist soil. Clay should be avoided. Sandy soil will do, provided plant food and moisture are furnished. In most home gardens, the plants are allowed to reach their full height, and are tied to stakes. To grow them without stakes, pinch out the centre of each plant after it makes two or three joints. Thus, the lateral branches will be made to start near the ground; the plant will be stiff enough to withstand the winds.

After the first frost in fall, lift the roots. A little earth may be left on them, but it is not necessary. Let them dry for two or three days and protect at night with a covering of paper. Trim off the tops to within six inches from the roots. Store them in a cellar. Do not allow them to freeze, but keep them at a fairly low temperature. Canna roots may be treated similarly, except that, in their case, it is best to allow the earth to adhere. It prevents shrivelling.

*The topics that make up this article were discussed at a recent meeting of the Toronto Horticultural Society.