

Best Half-hardy Tub Plants*

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THE topic, "Tub or Half-hardy Plants, their Usefulness and the Care of Them during the Winter," is a large, varied and very difficult one. The plants that could be made to do duty in this respect are legion, but I intend to draw attention only to a few that I consider the best or most useful that I have had to do with. The varieties of plants best suited for such purpose are as follows:

Buxus or tree box, which can be got in about a dozen varieties, green, golden and silver-leaved, large and small-leaved, standard and pyramidal forms. The *Euonymus Japonicus* as evergreen bushes can be got in many varieties, green, golden and silver-leaved, beautifully marked and of first quality.

The *Acuba Japonica*, like the euonymus, can also be got in several varieties and beautiful markings, and there is no plant grown that will stand soot, gases and dust better. The acubas are the plants that are so much used in vases and so forth, in smoky cities in the old world where little else will grow but them and the ivy. While on the ivy, let me say that if the different varieties were trained in pyramidal form on wire frames, especially the variegated forms, there are few plants that can surpass them in beauty.

The *Laurus nobilis* is probably used for this purpose in America more than any other plant, and these sweet bays can be procured in standard and pyramidal forms; their dark green, prim form claim for them a place for all decorations in church, cemetery or hall.

The *Nerium Oleander* can be used to good effect in the angles of buildings, along with them may be planted the *Elaeagnus pungens*; they can be got in different varieties of variegation, green, silver and gold.

Large plants of *Caryopteris Mastacanthus* can be used to good advantage in corners along the paths; this plant and the chaste shrub *Vitex Agnus-castus* are two of the latest to bloom and both are much admired for their fragrance.

Here and there among such plants, but separate from them on the lawn, may be placed *Hydrangea hortensis* in several varieties to give some bloom to the whole setting. *Catalpa bignonioides* var. *nana* (*C. Bungei*) is quite hardy, and, when good heads are formed, they look quite conspicuous when grafted as standards. *Ulmus parvifolia* is also hardy and will make excellent standard round-

headed plants. *Yucca gloriosa* and *Y. aloifolia* should be used in such planting and would tend to give a more tropical effect. *Abelia floribunda* and *A. grandiflora* make excellent tub plants and bloom all summer if kept in cold storage all winter. *Thuyopsis dolobrata* and its variegated form should also be employed in such planting since they are evergreens of choicest quality.

USE OF WIRE BASKETS

I have been mentioning the above as tub plants, but tubs at their best look out of place, are expensive, and require constant care and watering. In place of tubs, I use baskets made of half inch mesh chicken netting. They can be made by any handy man. Line the same with moss or thin tough sods. Place the plants and fill up tightly with soil. Water well by dipping. They are then ready to be planted where wanted, as if planting a tree with a ball of soil attached to it. It will be seen that by adopting this method the plants can be lifted in the fall without disturbing the roots. The plants will require no care with water from the time that they are planted until they are taken up again in fall.

STORAGE FOR WINTER

For storage for the winter, I build a cold storage pit—a hole dug in the ground twenty-five feet by fifty and ten feet deep. Against this soil, there was a wall built of concrete all around except a space for a door to let in or out the plants. This wall was built up to the surface of the ground and joists were thrown across every two feet. On top of this was built a green house roof—bars fastened to a ridge pole; the bars were made to hold glass on both sides with air space between. At the ends of the house was left a space for a small door to act for an entrance to the loft above, to give air and let out excess of moisture. In the bottom of this cellar was placed from two to three feet of good loamy soil, and a month before planting the soil was saturated with water, or rather a month before the danger of severe frost.

When it became dangerous to leave the plants out any longer, they were collected and planted in the soil in the aforesaid cellar, baskets and all, the same as they were outdoors. In this position again, the plants get no water until they go out next spring, the moisture in the soil being sufficient. The joists overhead in this cellar are used to run rolls of tar paper along when the temperature reaches zero outdoors. When fifteen degrees below zero outside, I had seventeen degrees of frost in the cellar. Here lies the secret to

success: While the plants and soil is frozen keep them dark; as soon as the frost is gone give them the light again. I have taken such plants out in zero weather in an open wagon to decorate without any apparent harm to them.

THE BEST PLANTS

The following is a full list of the plants that may be used for a changeable garden, and will do well in such a cellar as I have just described:

Yucca gloriosa, *Y. aloifolia*, (variegated), *Nerium Oleander*, *Abelia floribunda*, *A. grandiflora*, *Thuyopsis dolobrata*, *T. dolobranta* var. *variegata*, *Hydrangea hortensis*, *H. h.* var. *Thos. Hogg*, *H. h.* var. *variegata*, *Elaeagnus pungens* var. *maculata*, *E. p.* var. *variegata*, *E. macrophylla*, *Caryopteris Mastacanthus*, *Vitex Agnus-castus*, *Buxus sempervirens*, *B. s.* var. *pendola*, *B. s. aurea*, *B. s. aureo-marginata*, *B. s. argenteo-marginata*, *B. microphylla*, *Euonymus Japonicus*, *E. J. aureus*, *E. J. aureo-variegatus*, *E. J. macrophyllus*, *E. J. medio-pictus*, *E. J. albo-marginatus*, and *E. J. argentiuo-variegatus*.

An Uncommon Cactus

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Mamillaria nivea cristata is one of the rarest forms of the cactus family, seldom seen in cultivation, and highly prized by those fortunate enough to possess one. It is extremely odd in its style of growth, constantly becoming more twisted and contorted as it increases in size. In its original form it is a simple, round specimen of the pin-cushion shape, the change in character being due to the coxcomb-like growth taking place, after which it never reverts to the parent form.

It needs greenhouse or conservatory treatment, sometimes being grown under glass domes, and thriving in the limited air space thus provided. When



Mamillaria Nivea Cristata

well established it is of easy growth, and may be watered with impunity, but needs careful handling while being rooted. Its most successful treatment, however, is by grafting, when results are rapid and satisfactory.

*Extracts from a paper read at the last convention of the Ontario Horticultural Association.