

PLANT TREE AND SHRUB SEEDS PROMPTLY

BY Ray R. Rothenberger

While walking in the woods or cleaning up the lawn we are often tempted to save seeds of especially beautiful trees or shrubs. Oak, hickory, walnut, maple, sweetgum, hawthorn, redbud and dogwood are some of the many that may tempt us. Seeds of many woody plants do not store well under home conditions, so prompt planting is important.

Prompt planting also takes care of another characteristic of the seeds of many woody plants — a built-in dormancy. This dormancy must be broken before germination can take place. Mother nature is able to provide the special treatments necessary to break these dormancies when seeds are planted outdoors in the fall.

One of the simplest types of dormancy is seed coat dormancy. In this type, the seed covering simply prevents germination, usually by preventing the movement of water through it. Seeds of plants in the legume family such as redbud, honey locust and Kentucky coffee tree are good examples. Seed coat dormancy is also found in buckthorn and sumac.

In nature, soil organisms gradually break down this seed coat to allow oxygen and water to penetrate. We can accomplish the same thing by mechanically removing a portion of the seed coat. For only a few seeds that are large enough to be held, we can rub them on a file or other rough surface to wear away a spot until it is very thin. Smaller seeds can be tumbled in a drum containing abrasive materials.

The most common seed dormancy is internal. In such seeds, the condition of the stored food or the embryo itself must be changed before seedlings can develop. To overcome internal dormancy without the help of nature, a process known as cold stratification is used. In its simplest form, this means exposing seeds to temperatures between 34 and 42 degrees F. for one to four months while they are in a moist material.

These chilling requirements may be attempted by placing seeds in a refrigerator. Since they must

be moist, but not wet, during the chilling period, they should be planted in trays containing sand, peatmoss or a mixture of such materials. By enclosing the container in which the seeds have been planted in a plastic bag with a few holes in it, rapid drying is prevented, but good air exchange still exists. Keep seeds moist at all times.

Although the length of time necessary to break dormancy varies, it is best to keep the seeds in this condition for at least two to three months before attempting germination. If in doubt, the longer time period will not be detrimental, but removing them too soon can result in poor germination.

After the chilling is completed, the pots or flats should be brought into temperatures close to 60 degrees. As soon as seedlings appear, they should be placed in very bright light.

Needless to say, even though this procedure is oversimplified, the easiest way to grow your own trees and shrubs from seeds is to plant them promptly outdoors in fall and let nature do the work.

As for planting any seeds, prepare a good seedbed in well-drained soil. Plant seeds about twice as deep as their largest dimension. After seeds are planted, place wire mesh or hardware cloth over the bed to discourage squirrels or mice that may seek these seeds or nuts. Over the wire place a mulch of leaves or straw to keep the bed uniformly moist.

Many woody plants are genetically quite variable. Seeds selected from a tree or shrub with unusual size, shape, fall color or fruit color may not produce seedlings identical to the parent plant. If possible, plant plenty of seeds so that the chances of getting the desired type are increased.

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