

Tips_On_Plant_Propagation_By_Cuttings_1994.txt

How to "MAKE PLANTS MULTIPLY" at practically no cost!

...or How to on Utilities On a Shoestring!

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Please PASS THIS INFORMATION ON to everyone else you know.
Use fax, e-mail, photocopies, etc. Let's spread it out!

Plant with "cuttings!"

WHY? According to an article published in the "Ont Shade Tree Council Newsletter" we need half a mile of trees to clean the air between our homes and polluting roadways. Otherwise, our HEALTH is AT RISK!

Trees can block and absorb the pollutants from auto exhaust. But we need a "green belt" of at least half a mile wide to soak up all the pollutants from vehicular exhaust. (Reference: "Plants, People, and Environmental Quality," Ont Shade Tree Council News, Winter, 1994.)

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FINANCIALLY, we can also benefit. Trees and shrubs act as natural air-conditioners during summer (thru evaporation and shading.) In winter, they are windbreaks and therefore thermal barriers. The benefit is substantial, specially when evergreens (like cedars and junipers) are planted near windows.

CUTTINGS: A no-cost (or Low-Cost) way of making trees and shrubs multiply quickly. If done right, can be more effective than "seeding."

THIS ARTICLE describes, in outline form, the essence of successful Plant Propagation By Cuttings. Some techniques here have never been published elsewhere.

TIPS ON PLANT PROPAGATION BY CUTTINGS using a "direct-to-ground" method

NOTE: The tips below are for planting cuttings DIRECTLY into the target area (not growing cuttings in covered bags until roots appear.) Consequently, this method is for MASS-PLANTING PROGRAMS where large losses can be tolerated because of the overall quantity of cuttings planted will offset the losses from dehydration.

SUCCESS RATE: Could be as low as 1% or as high as 95% depending on

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factors below. On average, you should get 30-50%
to survive using the information below:

- Soil type, suitability, and drainage.
(i.e. Willows like water-logged areas, but Staghorn Sumacs will "drown" in that same spot.)
- Weather (cuttings are vulnerable to dehydration until the roots form -- read "Catch-22" below)
- Ground temperature (cuttings need approx 21 degrees Celcius to form roots quickly -- read "rocks" below)
- Shade (a slightly shaded location prevents dehydration)
A shady location is the MOST IMPORTANT factor!
- Time of the Year (generally Spring and Fall are best, but most can be planted anytime)
- Type of plant and cutting (cuttings from younger plants do better)

BEST AREAS FOR CUTTINGS: Normal soil, not too hard, preferably with some peat moss evident. Clay-type soils are the toughest -- use Staghorn Sumacs for clays.

DONT PLANT WHERE IT'S GOING TO BE MOWED!

This may sound like plain common-sense, but it's not always easy to tell where the maintenance people mow, specially in very early

spring.

FIND SOME ROCKS OR GRAVEL

This is the secret to high success rates! A rock is nature's heat sink. A large rock will also provide some shade and reduce dehydration.

Roots grow quickly if they are kept warm. Rocks and gravel absorb heat from the sun and pass it on to the nearby plants. Therefore, your cuttings will thrive if planted near rocks and/or gravel. Sumacs have a success rate of nearly 100% if cuttings are planted into good soil covered with a layer of gravel stones. (By "sumacs" I meant Staghorn Sumacs.)

"CATCH-22" OF PLANT PROPAGATION BY CUTTINGS

Here's why some cuttings don't survive: Not enough heat at the root zone and lack of moisture. The roots need to be at approx. 21 degrees Celcius. However, this usually means that water evaporates quickly. If possible, try to water the cuttings during dry weather (when the cuttings are within range of your garden hose) until some roots form.

FINDING COST-FREE CUTTINGS

- * Look for some vacant land with signs saying, "An Apartment Complex Will Be Build Here by ____."
- * Ask your friends to let you know when they are pruning branches.

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- * Ask landscapers and commercial yard maintainers. In the spring, look for crews pruning shrubs around industrial and commercial plaza's.
- * Other vacant fields (ask for permission to avoid being charged with trespassing.)

WHAT SPECIES? These are easy to grow even in tough places:

Recommended trees and shrubs include -- (Ontario & NY)

Russian Olive, Staghorn Sumac, Forsythia
Common Lilac (not the "fancy" or hybrid "French" lilacs.)
Willows (near water ONLY)
Roses
Cedars and Junipers

** Magic: RussOlives & Sumac can grow ON CLAY! **

MANY OTHER TREES AND SHRUBS will also grow from cuttings, EXCEPT:

Firs, Balsam, and Pines.

HOW TO MAKE THE CUTTING:

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Generally, you cut about 5-8 inches from a branch. You should have at least one leaf but no more than three leaves per cutting.
(Note: Forsythias/lilacs can grow from leaf-less cuttings, provided the buds have appeared.) Remove all leaves from the lower portion, as that is where the roots will sprout from.

Do not use cuttings from "flowering branches" as the plant is using most of its energy for the flowers. Select a "leafy" branch instead. Or, wait until the flowers are gone from those branches.

WHAT TIME OF THE YEAR?

Anytime except very early spring (too cold to form roots) or during summer's peak, when the soil may be too hard and too dry for new roots to break into.

HOW TO INSERT THE CUTTINGS INTO THE GROUND

To avoid injuring the cutting, use a tool (I use the business end of an open pruner) to gouge a hole into the ground. This is important specially when the soil is hard.

You can insert up 1/2 - 3/4 of the cutting into the ground.

TOOLS: I use a pruner only. The pruner can be used to DIG. Just use the cutting end to "slice" a slit into the ground. Insert the cutting

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into the slit that has been gouged.

BEST TIME TO PLANT CUTTINGS

The soil should be soft and moist. So you should wait for a good thundershower. The cuttings will also do better if it rains for the next few days.

Advise: Look up the long-term weather report and check the week's weather. Don't plant if the weather will be hot and dry for the week. (However, you can use "moisture retention crystals" also. These are planted with the cutting. These crystals absorb huge amounts of water and release them slowly. The crystals are sold at most garden centers. I don't know if they are safe to use or environmentally friendly, so I avoid them.

HOW TO PREPARE CUTTINGS:

Dip the ends into a pail of water overnight, if possible. This is not necessary if you will plant them immediately. However, do NOT drown the entire cutting in water.

GOOD BOOK TO READ:

"Tough Plants For Tough Places" by Rodale Press.

ROOTING POWDERS AND HORMONES:

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I avoid them because they are hazardous and toxic. Also, using too little is just as bad as too much. Every plant requires differing amounts of rooting powder, and this becomes too complicated in field planting.

For Your Information

OTHER WAYS TO GROW CUTTINGS: You can grow cuttings INDOORS by placing them in pots covered by plastic bags (to retain moisture.) Grown indoors, you will have an extremely high success rate.

Another good trick is to propagate cuttings under porch decks, just within range of some sunlight. The deck will provide shade and a gravel layer will retain the heat needed for rapid root development. (We have a success rate of 95% growing cuttings under out deck.)

IF YOU HAVE THE TIME, plant cuttings only after they have grown roots. This way, your tree will have a much higher chance of survival. However, this method is much slower and transplanting also delivers a "shock" to the young seedlings.

I don't do it this way, relying on "sheer numbers" and speed to plant hundreds of no-root cuttings in an afternoon.

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