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POTOMAC BONSAI ASSOCIATION
% U.S. NATIONAL ARBORETUM
3501 NEW YORK AVE. NE
WASHINGTON, D.C. 20002

PBA NEWSLETTER:

Published by the Potomac Bonsai Association, Inc. [PBA], a non-profit organization, in the interests of its affiliate member clubs and societies.

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Over 400 internationally on a monthly basis.

SUBSCRIPTIONS:

PBA membership includes 12 monthly newsletters covered by part of the annual membership dues. Corresponding membership: \$5.50 for 12 monthly newsletters. Make checks payable to Potomac Bonsai Association and mail to M. Herish, 102 Devon Ct. Silver Spring, MD 20910.

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EDITOR:

J. F. Koetsch, 6709 Coneel Ct., Springfield, VA 22152; [703] 564-9378.

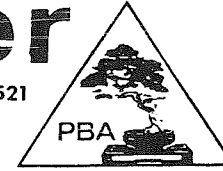
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POTOMAC
BONSAI
ASSOCIATION

Newsletter

ISSN 0160-9521



VOL. 18 NO. 2 FEBRUARY 1988

CALENDAR OF EVENTS

13 February Saturday

NORTHERN VIRGINIA (703) 591-0864: Green Spring Horticulture Center at 10:00 a.m. Annual soil mixing session headed by Roy Kopp and Bill Merritt. Come prepared to get your year's supply of bonsai potting soil. There will be meetings/workshops of the groups specializing in black pine, azalea, maples, etc.

20 February Saturday

WASHINGTON (202) 583-2676: National Arboretum at 2:00 p.m. SKETCHING: THE PRELUDE TO STYLING. A continuation of a fun winter-time event. Come and learn how to style your tree with an eraser before you make the first cut. Bernice Barsel, a Club member, will be the instructor.

21 February Sunday

BALTIMORE (301) 235-5336. Loch Raven Branch, Baltimore County Public Library. BEGINNER WORKSHOP 1:00 to 1:30 p.m. - wiring basics, copper wire versus aluminum wire; 1:30 to 1:45 p.m. - coffee; 1:45 to 3:15 p.m. - indoor bonsai, rare tropicals by Helen Lauenstein; 3:15 to 3:30 p.m. - coffee; 3:30 to 4:30 p.m. - problem tree, to air-layer or not to air-layer problem ficus.

25 February Thursday

BROOKSIDE (301) 381-6549: Argyle Community Center. 7:00 p.m. BEGINNERS' CORNER. 7:30 p.m. - regular meeting. This meeting will cover the topic of BONSAI SOIL: - How to get the ingredients to make your own. Also to be discussed will be the related topics of fertilizers and pesticides. There will be a BONSAI VIDEO.

28 February Saturday

WOLF TRAP NURSERY (703) 759-4244, 9439 Leesburg Pike (Rte 7), VA, at 11:00 a.m. "PRUNING and WIRING DECIDUOUS BONSAI".

Due to limited space, phone reservations are advised. (Topic and date subject to change.)

March

BALTIMORE (301) 235-5336. (1). Collecting trip with Brookside Bonsai Society, - time and place to be announced.

(2). Collecting trip to Christmas tree farm, - time and place to be announce.

8 March Tuesday

NATIONAL ARBORETUM 1:00 p.m. BONSAI REFINEMENT WORKSHOP.

Robert Dreschler, Curator of the National Bonsai Collection, will conduct a Bonsai Refinement Workshop in which he will assist individuals in repotting or refinement of their own bonsai plants, according to seasonal requirements. Participants must bring their own bonsai plants, bonsai tools, wire, container, and soil if repotting is planned. The Arboretum will provide no supplies or equipment.

Advance registration is required, and enrollment is limited to five (5) persons. To register, please phone the Education Department at 475-4857. A fee of \$12.00 sent in advance to the Education Department, will be charged. A reduced fee of \$10.00 will be charged to FONA members. All checks should be made out to Friends of the National Arboretum and sent to the Arboretum Education Department, 3501 New York Avenue, N.E., Washington, DC 20002.

Bonsai Refinement Workshops will be held on the second Tuesday of each month. PREREQUISITE: A BEGINNING BONSAI CLASS.

12 March Saturday

NORTHERN VIRGINIA (703) 591-0864: Green Spring Horticulture Center at 10:00 a.m. Grafting and air-layering demonstrations and workshops. There will be meetings/workshops of the groups specializing in black pine, azalea, and maple, etc.

17, 22, 24, and 29 March Tuesdays and Thursdays

10:00 a.m. to noon, BONSAI CLASS FOR BEGINNERS to be taught in the U.S. National Arboretum Administration Building Classroom. Mr. Robert Dreschler, Curator of the National Bonsai Collection, will conduct the class. The U.S. National Arboretum offers the class which is designed to introduce students to the basic techniques of developing and growing bonsai through lectures, films, and workshops.

This class will include a short history of bonsai, basic principles, culture and styles. Primary techniques of branch pruning, root pruning, wiring, and potting will be discussed.

22 March Tuesday

BEGINNERS' BONSAI COURSE. 7:00 to 8:30 p.m. at Green Spring Horticulture Center. For more information telephone (703) 642-5173.

24 March Thursday

BROOKSIDE (301) 381-6549: Argyle Community Center, 7:30 p.m. BONSAI GURU. Name is to be determined. If you have any requests, please call David Cuddington at (301) 381-6549.

26 March Saturday

WOLFTRAP NURSERY AND GREENHOUSE (703) 759-4244. SPRING REPOTTING, also USING STONES IN PLANTING. Due to limited space, phone reservations are advised. (Topic and date subject to change.)

29 March Tuesday

BEGINNERS' BONSAI WORKSHOP. 7:00 to 10:00 p.m. at Green Spring Horticulture Center. Beginners will design, style and pot a bonsai to take home. For more information telephone (703) 642-5173.

31 March Thursday

BEGINNERS' BONSAI WORKSHOP. This workshop will be the same as the one listed for 29 March for those who can't make the previous one.

4, 6, 11, 13 April Mondays and Wednesdays

INTERMEDIATE BONSAI COURSE at the U.S. National Arboretum, 6:00 to 8:30 p.m. This is one of the U.S.D.A. Graduate School's evening program series. Mame outdoor material will be supplied for 5 different species so that the students can practise different styles as related to different plant materials. Everything will be provided and one need not have to bring tools. Applicants should have had a previous bonsai or at least one year's experience working with bonsai. Course is limited to 12 students. The fee is \$38.00 which will include the cost of the materials. Contact (202) 447-5885 during working hours to sign up or for more information.

18, 20, 25, 27 April Mondays and Thursdays

BONSAI for BEGINNERS at the U.S. National Arboretum, 6:00 to 8:30 p.m. This is one of the U.S.D.A. Graduate School's evening program series. Material will be provided. Contact (202) 447-5885 during working hours to sign up or for more information. The class will be limited to 14 students.

2, 4, 9, 11 May Mondays and Thursdays

BONSAI for BEGINNERS. This is a repeat of the class starting on 18 April. See the above listing.

THE NATIONAL BONSAI FOUNDATION

DEDICATED TO CREATING A MUSEUM OF THE WORLD'S TREES THROUGH THE ART OF BONSAI AT THE U.S. NATIONAL ARBORETUM

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November 11, 1987

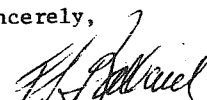
Mr. Fred Mies
President
Potomac Bonsai Association
11712 Smoketree Road
Rockville, MD 20850

Dear Fred:

On behalf of the entire board, many thanks for the support of the PBA indicated by your generous contribution of \$2500 to the "Committee of Thousands." As you know, we want to break ground for the Naka North American Pavilion as early in 1988 as possible. PBA's support and help in encouraging others will assure that North American bonsai will take its rightful place alongside other national treasures.

We will keep you posted on our progress and hope you will continue your support by inspiring others to follow your lead.

Sincerely,


Frederic L. Ballard
President

FLB; jd

CLEFT GRAFTING

(EXAMPLE: BLACK PINE)

Cleft grafting is a technique used in Japan to enhance the structure of a tree which in this article involves the adding of a branch to the trunk of a tree or the addition of one or more branches to fill large vacant spaces on branches thereby not leaving to chance that somewhere in the dim, distant future adventitious buds will break through just where you want them to start those new branches. Unfortunately trees like the pine do not lend themselves to the process whereby a hole is drilled through the trunk of the tree and a living branch is threaded through it to instantly form a relatively large branch at the desired location. With the pine, a scion is grafted at the desired location and in time the branch will develop. But what else is new with bonsai? Some things take longer than others.

There are a number of areas in bonsai where there seems to be a diversity of opinions due mainly to variations in techniques and grafting is one of those areas. The basic principles of grafting can best be cited by repeating the description in reference (a):

"In the grafting operation the theory is to place the living cambium tissue of scion and understock in contact with each other. This is simply done by making the proper kind of cut into the understock and gently slipping the whittled scion into it. This operation must be done when both scion and understock are about ready for active growth. Actually it is a greenhouse operation where the understock, in a pot, has already been forced into active growth and the scion is yet dormant. Usually February or March is grafting time indoors.

"As soon as the scion and stock are slipped together, they are bound tightly in place to prevent movement between them. Flat rubber bands are specially made for this and are ideal since they can be bound just tight enough to hold the two together, but loose enough so that the rubber will give a little as the new graft

increases in circumference. This 'tie' remains on for a few months until stock and scion have closely knit, when it is cut and simply left on the union to eventually fall off.

"Grafting is also done out of doors at a time before vigorous growth commences on the understock. This is usually confined to trees that are being 'made over' Grafting small plants out of doors does not result in as much success as doing it inside under controlled temperature and moisture conditions.

"Factors other than timing must be right. Air temperature must be in the 70's or conducive to continued plant growth. Moisture must be present - the graft union must not be allowed to dry out in any way. Disease spores must not get into the union. These are the reasons why grafting is usually carried out in the greenhouse in 'grafting cases', places enclosed by glass or polyethylene with high humidity. This is also the reason why the graft union is covered with wax or polyethylene film as soon as it is made to keep the tender new-forming cells from exposure and possible drying out.

"The most difficult time for the new graft is when it is noted that the scion has started into active growth. It must be kept in active growth, yet too high a temperature and too much moisture in the grafting case may cause it to grow too rapidly and fail to make a successful union. Here experience certainly aids the individual in properly regulating moisture and temperature."

Reference (b) contains an excellent article titled "Japanese Black Pine Branch Grafting Techniques" and addresses the grafting of scions to the trunks of black pines. If the reader has that issue of "International Bonsai", the content can be compared to the techniques which follow and which have been adapted from reference (c) and illustrate grafting side-branches to a branch. In either case the grafting techniques can be used for grafting scions to both trunks and/or branches of species of trees other than black pine.

The following description of grafting applies to filling in empty spaces on branches. Before attempting any of the steps outlined below and in the sketches, one must have on hand all the items

pictured for the grafting operation. This is extremely important because once the grafting effort begins, it is essential that no time is lost mating the scion to the understock. Also insure that all the items are clean and sterile using tools that have been cleaned with denatured alcohol and unused grafting tape. This should prevent the introduction of any spores that might cause fungus or wilt of the scion when grafted.

Grafting Location The place where the graft is to be made will be slit at a 30 to 40 degree angle (see the sketch) to a depth of 2 cm or about 1-inch. Hence whether it be the trunk or branch where the graft is to be made, there should be enough material left after making the slit so that the branch or trunk can support itself and not collapse around the slit. This implies that for branch grafting, the pine may have to be upwards of 10 years old. Yet to obtain as bonsai starter material a pine with good trunk thickness, one must turn to one that is about 10 years old or older. In that case, it is most likely that the side-branches on a branch are widely spaced, new intermediate branches are desired, and the main branch is thick enough to permit grafting. In addition, it may be desirable to make grafts on the trunk to fill in voids.

CAUTION: DO NOT MAKE THE SLIT UNTIL AFTER THE SCION HAS BEEN PREPARED

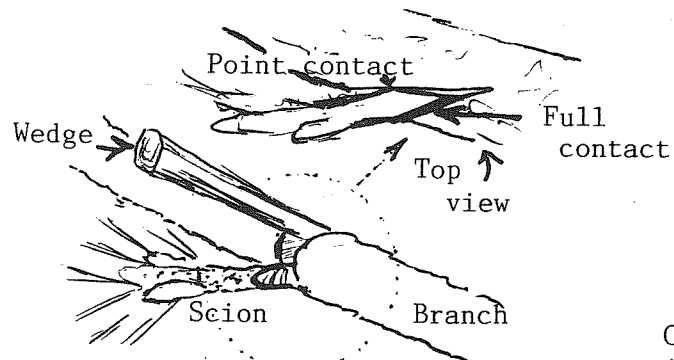
Scion Preparation The scion is either taken from the same tree or a tree whose quality is identical to the one on which the graft is to be made. In other words, the scion must be healthy with an indication of good energy in the previous year's needles at the tip. Hence the scion is a 1-7/8 inch or slightly longer and is taken from the end of a branch on the pine on which the graft is to be made or a like species. The sketch indicates that the two cuts on the end of the scion are made so that the scion when inserted into the branch, will have the three buds lying in a horizontal plane. This will result in the buds producing side branches in a horizontal vice a vertical plane.

The angle cuts on the scion are made with a very, very sharp

knife so as not to crush any of the fibers. To that end, one approach is to make the second cut while the flat side of the first cut is resting on soft material. The alternate approach is to literally follow the word "whittle" cited in the opening paragraphs and hold the scion in one's hand and whittle the side away without the scion resting on any surface. A third cut may be in order,-- to trim off any feather edge left by the two cuts which if it remains, will prevent the scion from going completely into the slit in the understock. The cut end of the scion should be slightly shorter than the slit in the understock so that the scion will go into the slit and leave no part of its cut surface to extend beyond the end of the slit.

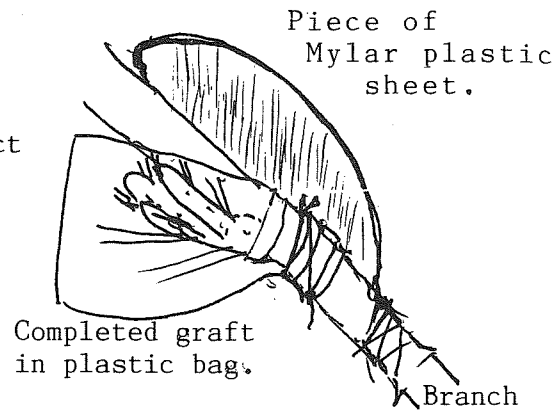
The objective in placing the scion into the slit that is made in the branch or trunk is to mate as much of the cambium layer of the scion with the cambium layer of the understock. To do this, it is recommended that the scion be inserted into the slit of the understock so that it is slightly angled in the slit and not in-line with the slit, thereby insuring that the cambium layers of both scion and understock cross in at least two places vice not at all.

It is important that the cambium layer of the scion not dry out once the two cuts have been made. Common practise is to place the cut end of the scion in one's mouth making certain that it touches no part of the mouth and is not wetted by saliva while one's lips seal it in. (You need not hold your breath during this time period.) Hence the scion is cut first because it can easily be protected from becoming dry by being held in one's mouth while the chisel is used to make the slit in the understock. The next step must immediately follow the making of the slit in the understock. The scion is then immediately inserted into the slit thereby minimizing the likelihood that either cambium layers have dried. It would be ideal to keep the slit slightly more ajar so that the scion could be placed in the opening rather than be forced by pushing the scion into the slit and thereby possibly damaging the cambium layers. If the understock is thick enough so that the scion will fit into one side of the slit and a wedge such as a flat sided nail be inserted in the other side, it may be possible to open the slit a little wider for the scion to slip



A wedge could be used to slightly open the slit so that the scion can be inserted without undue pressure.

The top view shows how only one side of the scion will be flat against the understock, - the other side makes only point contact.



A piece of thin Mylar plastic sheet is fastened in place so that the sheet shields the graft from the direct rays of the sun.

into place rather than be forcefully wedged into the slot. The wedge would be removed once the scion is properly aligned in the slit.

Protection of the Graft Once the scion is in place, it must be kept from moving. In the opening paragraphs, mention was made of using flat rubber bands with the advantage that they would expand with the growing/swelling of the graft union. Another practise cited in reference (b) is to use raffia which has been soaked in water prior to using it to bind the graft. However, while in Japan on a John Y. Naka bonsai tour, one of the bonsai masters whose nursery we visited, was doing an extensive amount of grafting on black pine, and he swore by the vinyl tape for grafting which came in rolls about 1/2 inch wide with no adhesive on either side. Hence you are left to chose from one of three ways for binding the scion to the understock.

Reference (c) suggests that 5 turns of vinyl tape be wound tightly around the graft union. Next sphagnum moss is inserted around the scion as shown in the sketch. The sphagnum moss had to be well-soaked in water and then wrung out by hand before it is

applied. Finally, the vinyl-bag is slit and tied in place over the graft with the aid of two turns of thin wire to hold it in place.

Placement of the Grafted Tree The newly made graft should be protected from direct sunlight and placed in the shade. This protection from the sun if given to the entire plant, as it probably must be, is contrary to providing conditions conducive to growing healthy black pines, - a full day's sunlight. Again on that John Y. Naka bonsai tour, we were introduced to a bonsai collection by a Japanese monk who was an expert on grafting. He used thin Mylar plastic sheet which allows only certain light to pass through. Small pieces had been cut and fastened in place so that they would lie against the plastic bag and shield the contents from direct sunlight.

In spite of all of the above precautions, it still may be possible for the air in the plastic bag to reach a point whereat it endangers the survival of the graft. This is recognizable when there is a clouding up of the air in the plastic bag. Whenever this occurs, one must take immediate corrective action and inject 10 cc of water using a hypodermic syringe. (I hate to have to mention using the syringe with all the goings on these days concerning drugs.) The cloud will disappear immediately as the water will cool the air in the bag and also some of the air will have been forced out of the bag to be displaced by the water. Here once again reference (c) suggests using shade as the means for preventing bag overheating. An added caution is that the water when injected with the syringe, should be allowed to pool in a corner of the plastic bag away from the location of the graft.

Watering and Fertilizing The soil in the bonsai pot should not be allowed to dry out and the bonsai should be moderately fertilized while the graft is taking hold.

Gradually Accustoming the Graft to the Open Air When the candles lengthen and touch the plastic bag, cut the corner of the bag so that the contact between the two does not occur. Also the graft can be exposed gradually to full days of sun vice half days of shade. As

the needles emerge on the scion and strike the inside of the bag, gradually slit open the top of the bag until the top has eventually been opened all the way.

Bag and Sphagnum Moss Removal After the new needles have completely formed, the plastic bag is removed as well as the sphagnum moss.

Vinyl Tape Removal The vinyl tape should be removed by August 1st through 10th because the scion and the understock will have filled out to a point where they will begin to eat into the tape. At any rate, you will know by that time whether or not the graft took. - if it didn't, you will have a brown, dried out scion.

Epilogue The above dissertation should point out to the reader that there are both consistencies and inconsistencies in the procedures used by grafting experts, especially if one reviews reference (b) against reference (c). It should be an indication that there still is ground for experimentation and improvement on the techniques to obtain a good success rate. If any readers have any suggestions or comments, please submit them to the editor (see the last page of the Newsletter) so that other readers can be let in on them.

I have yet to seriously try grafting, but this Spring I'm going to give it a whirl. I'll probably wind up like one other FBA member who confided in me that his unsuccessful attempts only resulted in a number of holes in the tree. If you are hesitant about trying the grafting procedure, especially on a bonsai that you do not want to damage and consider valuable, it may be wise to go to an expert.

Once again - the grafting procedures described in this article can be applied to many species of trees.

SCHEDULE

MARCH 1 - 10 Locate the place or places grafts are to be made and select the scion/s. Make the graft and bind the graft with vinyl

tape and sphagnum moss. Cover the graft in a bag. (Keep in the shade all day until the candles start to lengthen. Then remove to half-day shade.)

April 1 - 10 Watch for fungus or wilt. Venting the plastic bag may possibly curtail the fungus from spreading.

April 20 - 30 Begin fertilizing at a reduced rate.

May 20 - 31 Expose the graft to one-half-a-day shade. Gradually open the plastic bag to the open air.

June 10 - 20 The mouth of the plastic bag is completely open.

July 1 - 10 The plastic bag is removed completely.

July 20 - 31 Remove sphagnum moss.

August 1 - 10 Remove vinyl tape.

October 1 - 10 Give the final fertilization for the year.

Jules Koetsch

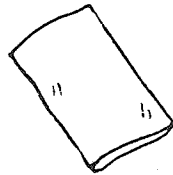
References

- (a) WYMAN'S GARDENING ENCYCLOPEDIA, by Donald Wyman; MacMillan Publishing Co., Inc., N.Y.; 1977
- (b) JAPANESE BLACK PINE BRANCH GRAFTING TECHNIQUES, by Japanese Edition: Yoshiharu Takeshita (author), Kyosuke Gun (illustrator) and English Edition: H. Carl and Shin Young (translators), W. N. Valavanis (editor); International Bonsai, Volume 1 Number 4, Issue Number 4, Winter 1979.
- (c) CLEFT GRAFTING PROCEDURES, by Shin Chikashara; Shinkosha Publishing Co., Ltd., Japan; 1978 (in Japanese).

EQUIPMENT FOR GRAFTING



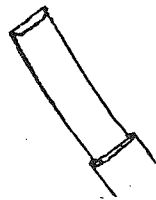
Sharp pointed knife (grafting knife).



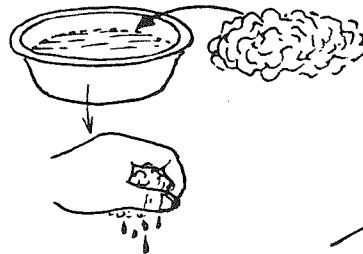
Clear plastic bag.



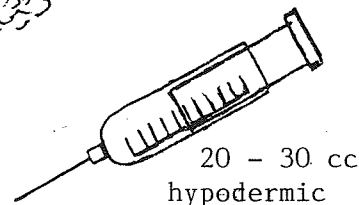
Vinyl tape for grafting.



Flat, square ended chisel.



Sphagnum moss which has been thoroughly soaked in water and then squeezed

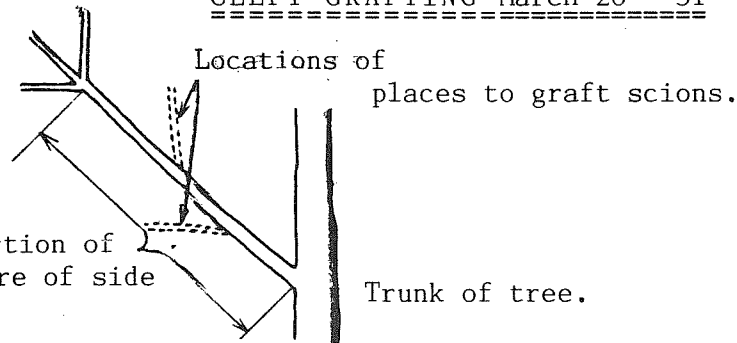


20 - 30 cc hypodermic syringe.



No. 23 gage fine wire.

CLEFT GRAFTING March 20 - 31

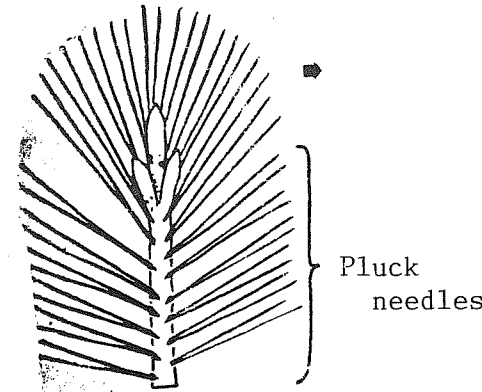


Grafts are to be made on the branch to fill-in the void.

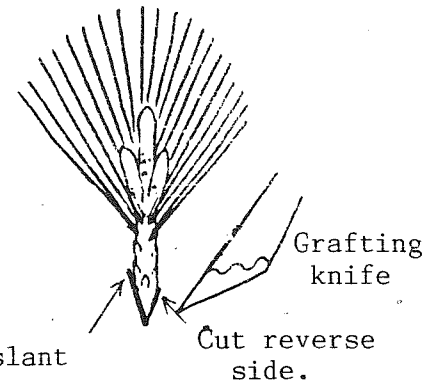
GRAFTING PROCEDURE

Remove Old Needles from Scion

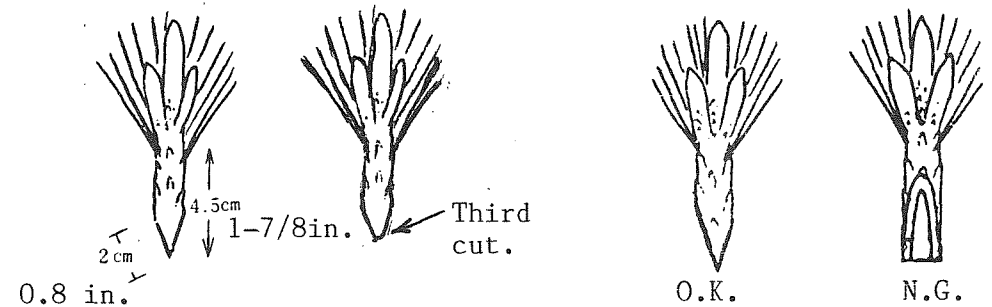
Trimming Scion



The scion is taken from the end of a branch and needles are removed from around the scion until 6 to 7 needle pairs remain.



After the needles have been removed, two slanting cuts are made.



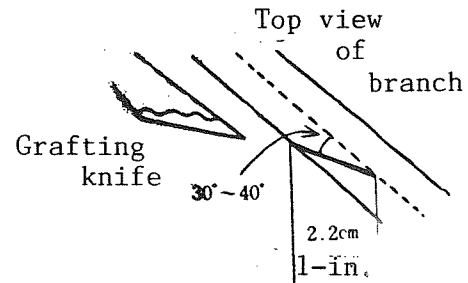
Size and Locations of the Cuts

The second of the left two sketches shows a third cut which is strongly recommended by some experts. The third cut removes a feather edge that may remain after the first cuts have been made. If left on, it may not be possible to push the scion far enough into the slit in the branch to ensure tight contact of the mating surfaces.

The third and fourth sketches show the correct way the cuts

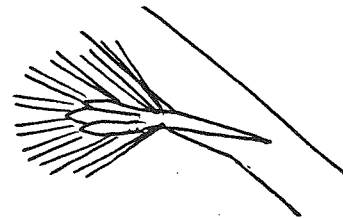
are to be made, the one marked "O.K", and the incorrect way,- the "N.G." one. The reasoning for the above is that the scion is to grafted into a branch to grow out from the side of the branch. Hence it is desirable to have the buds at the end of the scion aligned so that the growth will not emerge in a vertical plane.

Cut Into Branch



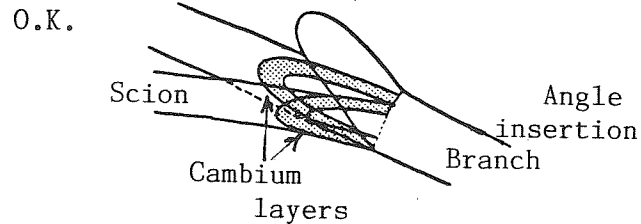
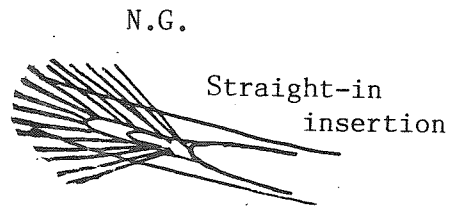
At the place for the union of scion and branch, use the grafting knife to make a slit of about 1-inch in length.

Inserting Scion



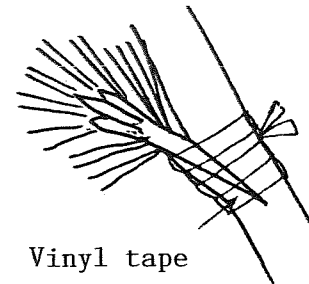
The scion is quickly inserted into the slit in the branch making certain that it does not protrude from the end of the slit. Hence the slit is cut a little deeper than the wedge at the end of the scion.

Insertion of the Scion



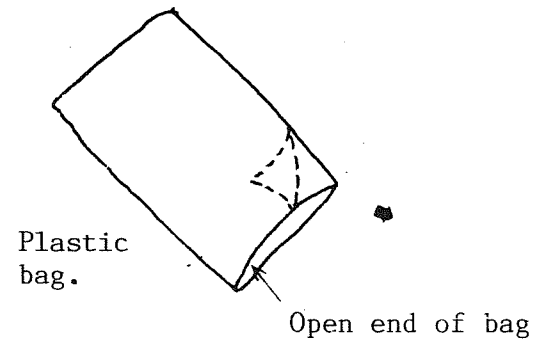
For the scion to graft to the branch, the scion's cambium layer which because it is very thin, must be positioned so that there is the higher likelihood of it touching the equally thin cambium layer of the branch. The N.G. sketch depicts the least likely way for that to occur,- a straight-in insertion of the scion. The O.K. sketch shows the preferred way,- at an angle.

Affixing Scion with Tape



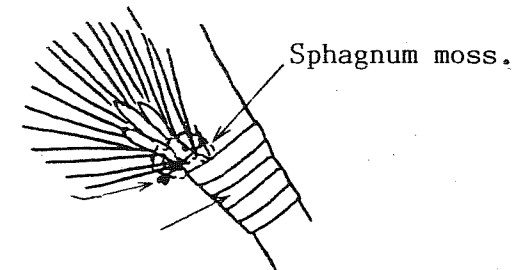
The scion must not be allowed to move. It is bound tightly in place with vinyl tape. Overlap 5 turns of the tape.

Cutting Plastic Bag



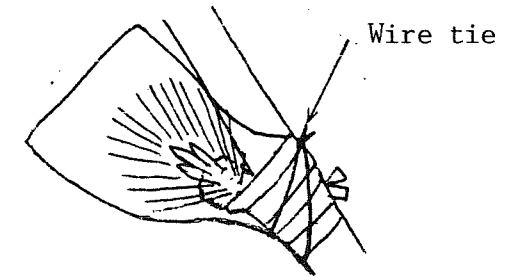
The side of the plastic bag is cut so that the flaps can be opened to accommodate the branch or trunk.

Attaching Sphagnum Moss



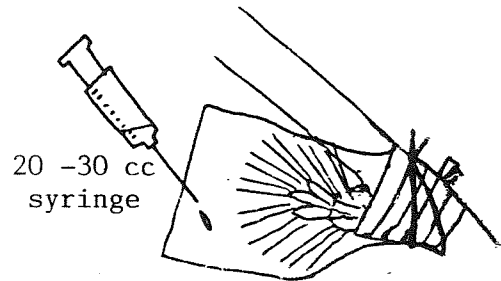
Tightly squeeze the water-soaked sphagnum moss to wring out excess water. Then pack it around the graft union.

Protecting the Graft Union



The plastic bag is placed over the graft and bound in place with thin wire making the combination air-tight.

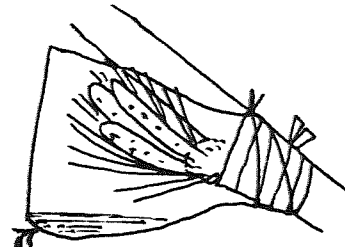
Water with Hypodermic Syringe



20 -30 cc syringe

The temperature in the bag can get elevated since the bag is air-tight. When a cloudiness appears indicating potential damage, use the hypodermic syringe to inject about 10 cc of water

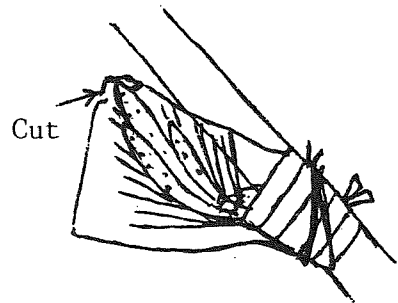
Grow in Half-day Shade



Keep water collected in bag away from the graft.

Place the plant so that the graft is in one-half-a-day shade while the candles lengthen.

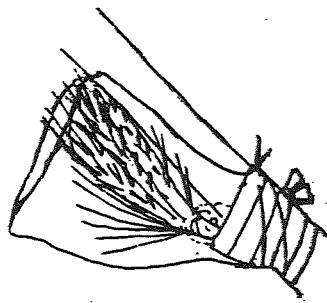
Cutting Corner of the Bag



Cut

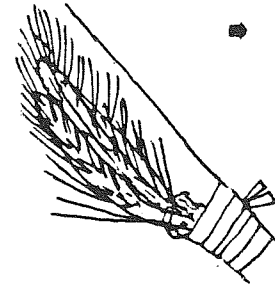
When the growth on the scion touches the plastic bag, cut a corner of the bag to eliminate any contact between bag and the growth on the scion.

Opening Bag to Air



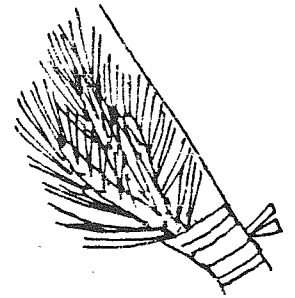
Gradually open the mouth of the bag over a period of days to slowly accustom the scion to the open air.

Removing the Bag



The plastic bag is removed in about one-half a month only after the the new needles have completely formed.

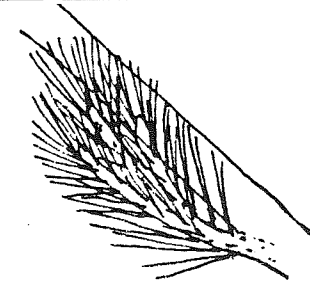
Plucking the Sphagnum Moss



In addition to removing the bag also remove the sphagnum moss in that one-half month timeframe.

Removing the Vinyl Tape

August 1 to 10th



During the period of August 1st to 10th the scion and also the branch will thicken, and the vinyl tape should be removed at that time.



SEPT. 30TH - OCT. 2ND 1988

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THE TOPICS

Each program will be devoted to another aspect of tray landscapes including: the use of the effect of water; of rocks; of secondary plantings; of color; of texture; composition; creation of depth; transferring two dimensions to three; choosing a tray; the art of display; topography; technical aspects of the planting; computer simulation; and others.

THE SPEAKERS

Our speakers have been confirmed, and they will be Dr. Leon Snyder, Dr. David Andrews, Marian Borchers, Marion Gyllenswan, Mike Kling, Cliff Pottberg and the landscape painter Robert Butler.

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A three day workshop! After the other programs on the first day, we will design and plan our landscapes with our workshop leader. On the second day we will choose our materials and on the third day we will execute! Attendance in the workshop is free to all conference participants; however the materials cost will depend strictly upon the design and size of landscape that is decided upon with the workshop leader. There will be a limit to ten participants in each workshop with observers allowed.

The conference will be held, as last year, in the excellent facilities of the Admiral Benbow Inn in Tampa, Florida. Room rates are extremely reasonable.

THE DATES ARE FEBRUARY 26-28, 1988

For further information, contact Cliff Pottberg or Mike Kling at The Ranch Nursery, (813) 856-3378 or Alexis Bearer at (813) 862-7582.

The registration is \$195, with a \$35 discount until ~~December~~ ^{January} 1. You may reserve a place at the conference with a \$50 deposit, and a \$20 deposit toward the materials fee of the workshop if you wish to actually create a landscape in the workshops. The deposits are refundable until February 1.

_____ Yes, here is my deposit of \$50; please reserve my place.

_____ Please send me more information about "The Florida Conference on Tray Landscapes".

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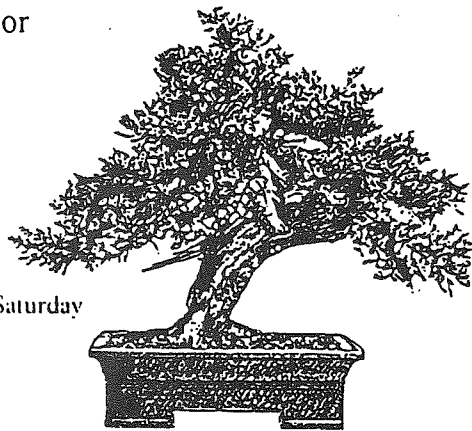
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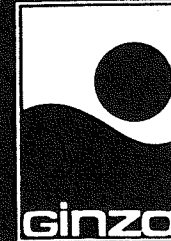
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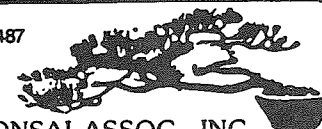


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