

## PROPAGATION OF HOLLY AT WHITESBOG

The propagation of holly at Whitesbog for the last two years has been carried on with the old equipment that I found there. The greenhouse is constructed of regulation cold frame sash with the benches at ground level and the walk between three feet deeper. The benches are six inches deep with a quarter inch mesh galvanized wire screen on the bottom. The wire screen provides good aeration and drainage for the propagation media above. A layer of sphagnum moss is placed over the screen to prevent the mixture of 60% sand and 40% peat from coming through. The sand and peat mixture is placed in the bench to a depth of 4 to 5 inches and packed down firmly then watered well.

The cuttings are taken of the new growth after it has become firm. (Usually from the middle of July on) They should be 4 to 6 inches long. A bushel basket lined with wet burlap or newspaper can be used to ~~hold~~<sup>gather</sup> the cuttings from the tree. The material should be kept fresh from the start. The lower leaves are taken off with a sharp knife or pruning shears leaving the top 2, 3 or 4 leaves that will lay flat to feed the cutting while it is trying to root. The end is recut with a sharp knife, dipped in water if it is not already wet, then dipped in Hormodin Powder #3. I tried several of the root inducing materials while a student at Ambler School of Horticulture and like the one mentioned above. A slit is cut across the bench with an old kitchen knife or a piece of box board shaped like a knife. The slit needs to be wide enough to keep the powder from being rubbed off the cutting as it is being placed in the bench. The cutting should be placed at an angle to allow the leaves to rest as nearly flat on the surface of the bench as possible but still have an inch of the stem above the surface. This position helps the cutting to get as much moisture from the surface of the rooting media as it

can. After the cuttings are in, the sand and peat should be pressed tightly around them and watered well. The watering should continue as conditions make it necessary. The bench should never be allowed to dry out below the surface. The greenhouse is supplied with lath shade to keep the direct sun light from being on any spot very long.

The rooted cuttings are taken from the bench and put in 3 inch pots filled with soil that has been mixed with a balanced fertilizer a month before if possible. Oak leaf mold with sand and peat plus a broad leaved evergreen fertilizer is what I used. The small trees are kept shaded and watered for at least two years. When they are finally planted in the open they should be mulched well with some kind of organic matter.

Miss White has been selecting varieties for over 25 years. Some that have been named by her are:

1. Manig - Dark green with clear red berries. Open grower.
2. Osa - Medium green with light red berries. Compact grower.
3. Betsy - Dark green with medium red berries. Compact grower.
4. Farage - Dark green with bright berries. Compact grower.
5. Clark - Medium green - nice hedge plant.

Selections sent to Miss White by Mr. Wheeler:

1. Sallie - Medium green with very glossy berries.
2. St. Mary - Dark green with bright red berries.
3. Emily - Small dark green leaves-large bright berries.

In a discussion at the end <sup>of my talk</sup> several types of cuttings were suggested as having done well for other members of the Society.

1. Cutting with stem split for  $\frac{1}{2}$  inch at base
2. Cutting made with anvil type pruning shears and not recut
3. Heel cutting
4. Cutting made with the full length of new growth up to a foot long or so
5. Cutting made by taking outer bark off  $\frac{1}{2}$  inch at base to expose a greater part of the cambium layer to the rooting powder used

## PROPAGATION OF HOLLY AT WHITESBOG

The propagation of holly at Whitesbog for the last two years has been carried on with the old equipment that I found there. The greenhouse is constructed of regulation cold frame sash with the benches at ground level and the walk between three feet deeper. The benches are six inches deep with a quarter inch mesh galvanized wire screen on the bottom. The wire screen provides good aeration and drainage for the propagation media above. A layer of sphagnum moss is placed over the screen to prevent the mixture of 60% sand and 40% peat from coming through. The sand and peat mixture is placed in the bench to a depth of 4 to 5 inches and packed down firmly then watered well.

The cuttings are taken of the new growth after it has become firm. (Usually from the middle of July on) They should be 4 to 6 inches long. A bushel basket lined with wet burlap or newspaper can be used to ~~trader~~ <sup>gathered</sup> the cuttings from the tree. The material should be kept fresh from the start. The lower leaves are taken off with a sharp knife or pruning shears leaving the top 2,3 or 4 leaves that will lay flat to feed the cutting while it is trying to root. The end is recut with a sharp knife, dipped in water if it is not already wet, then dipped in Hormodin Powder #3. I tried several of the root inducing materials while a student at Ambler School of Horticulture and like the one mentioned above. A slit is cut across the bench with an old kitchen knife or a piece of box board shaped like a knife. The slit needs to be wide enough to keep the powder from being rubbed off the cutting as it is being placed in the bench. The cutting should be placed at an angle to allow the leaves to rest as nearly flat on the surface of the bench as possible but still have an inch of the stem above the surface. This position helps the cutting to get as much moisture from the surface of the rooting media as it