

Hydrangea Breeding and Selection

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The hydrangea projects have gotten out of hand and Dudley Nurseries, Wight Nurseries, and McCorkle Nurseries (at Center) are assisting with seedling evaluation. The first introduction is *Hydrangea paniculata* Chantilly Lace=, saved from the compost heap by Center manager Kay Bowman. Please assess the plant for yourself and read the description that is included with the Open House materials. There is also a large population of *H. paniculata* Brussels Lace= seedlings that will flower in the summer of 2001.

Possibly the greatest return to our Georgia and southeastern nursery industry will be realized from Jeff Adkins= controlled studies for perpetual (remontant) flowering. \Rightarrow Endless Summer= is the first *true* perpetual flowering selection and will be released through Bailey Nurseries, St. Paul, MN. I discovered the plant in their test block on September 11, 1998, requested cuttings, grew them to flowering, and *knew* that the dream of repeat flowering was real. Bailey proposes to assess 0.304 royalty per plant with one-half going to the Dirr Woody Plant Improvement Program at UGA.

Since the initial discovery others (Penny Mac=, Oak Hill=, Decatur Blue=, and David Ramsey=) with similar flowering characteristics have been shared with my program. They will be utilized for breeding in future years.

The Hydrangea macrophylla improvement program has three major objectives:

- 1. Repeat flowering from May to frost on new growth.
- 2. Heavy textured, dark green foliage, mildew and leaf spot resistance.
- 3. Strong stems and more compact habit.

The learning curve has been steep for we now can flower seedlings in ~16 months from seed sowing. Superior maternal parents yield superior seedlings. >Dooley=, a mophead type, produced all mophead seedlings. The mophead characteristic appears to be a dominant trait.

>Veitchii=, one of the oldest cultivars, with white lacecap flowers, disease free, dark green foliage, has yielded a few seedlings (out of 750) that flowered in their first year (2000). >Veitchii= was outcrossed with >Nikko Blue= and >Dooley=, with the seedlings that flowered the first season consisting of 4 mophead to 1 lacecap. This again indicates that the mophead characteristic is dominant. >Veitchii= seedlings also exhibit the same superior foliage of the parent.