

no one else knows just how many plants are being produced.

Lastly, the grower or buyer assumes the purchase of a good, well-selected and well-tested plant, or it wouldn't be offered for sale. Each of the different levels of the system seems to be falling into the trap of shifting the final responsibility for this evaluation function to another level. The grower needs to be more thoughtful in this matter. Also there is a need to apply more common sense in trying out new items. The process makes it a bit too easy to move faster than one should. The glamour of the new items and the low cost of an initial start tends to undercut those parts of the process which normally would provide resistance to buying in more than a grower.

The old system sort of took care of many of these potential problems over the more considerable span of time involved. We will benefit greatly from the advantages of tissue culture if we all apply our very best efforts to correcting these basic flaws. I believe that this can be done simply by taking the time to put to work what we already know.

MAINTAINING CREDIBILITY IN PLANT INTRODUCTIONS III

RICHARD A. JAYNES

*Broken Arrow Nursery
13 Broken Arrow Road
Hamden, Connecticut 06518*

First, let me give you a little background. I was trained as a botanist, worked for 25 years at the Connecticut Agricultural Experiment Station as a plant breeder and horticulturist, and since 1984 have been a self-employed nurseryman and Christmas tree grower. I have selected and bred mountain laurel (*Kalmia*) for 27 years and am responsible for naming about half of its new cultivars. I also serve as the International Registrar for the genus. So, if you are naming and releasing a new mountain laurel, let me know.

I am delighted to serve on this panel because I find I have somewhat ambiguous thoughts on naming and releasing new plants. On an intellectual level I am conservative and would argue for thorough testing before release. However, in the real world I am more pragmatic and, quite frankly, have been willing to release material without acquiring some of the information it would be nice to have.

The criteria for selecting and naming a new cultivar is going to vary somewhat depending on the genus, the number of cultivars

already named in the group, the uniqueness of the selection, ease of propagation and production, and perceived demand in the market place. Fifteen years ago you could not give away new *Kalmia* selections for propagation. Twelve years ago there were virtually no newly named *Kalmia* cultivars; however, numerous unique and attractive selections were available, tissue culture of Ericaceous plants was just beginning in earnest and there was a perceived, growing demand for mountain laurel in the market place. The result has not been too surprising. In the past 12 years we have had a mini explosion of 45 new cultivars introduced, with the count steadily increasing.

Do we need all these cultivars? Not really.

Will more be named? Most certainly.

Was it a mistake to name so many? No, each was justified in its time. The chance of uncovering some truly great selections is increased by thoroughly testing many superior plants, i. e. the newly named releases.

What is justified? A new selection should be clearly superior to other previously named cultivars in one or more traits and there should be a potential market for the plant. When and how we judge "superior" is a problem.

What criteria do I use to name a new selection? Typically a new selection will come from a field of several hundred other mountain laurel seedlings all grown from controlled crosses. In addition to the seedlings in the field, it will also be compared to already named cultivars. The new plant must be clearly superior and unique. It should jump out at you. If it takes a hand lens to see the difference, forget it. It is observed for at least 3 years after initial selection to confirm the initial judgement, whether the trait is floral, foliage, plant habit or something else. The opinion of others is solicited and definitely considered.

My new selections at the time of release have generally not been tested in climates other than that of the nursery, they have not been container-grown, nor have they been rigorously screened for common disease and insect problems. Such screening is desirable but may not be practical. It would certainly delay release by several years.

A profusion of new selections is not all bad. Sure it creates confusion, but it also creates interest. It becomes a contest to select and grow the best of what is being made available. If the system works properly the best cultivars will be the survivors until they are replaced by another generation of even better ones.

The following are some of the advantages or reasons *not* to spend too many years on screening a new selection before it is released under name:

- 1) Plants sent out under number or code receive scant attention at most nurseries or institutions.

2) Through micropropagation immediate demand can be satisfied without a long delay. After 5 to 10 years of additional testing it may be difficult to rekindle that same demand.

3) The marketplace is the ultimate and final testing ground. The winners and losers will actually be sorted out more quickly in the marketplace resulting in better cultivars sooner.

4) Plants held too tightly and too long by an individual or institution may die with that individual or disappear with termination of a program.

Of course, none of this relieves us from the responsibility of being very honest in our claims for the virtues of new selections. It's a little like during your dating years with a new girl friend or boy friend, they may look good but it takes a lot of time and experience to determine their real worth. So it is with plants, we need to be very selective in naming and introducing new plants, but not so cautious that we are afraid of a few failures.

Let me try to summarize my thoughts on the release of new plants. Be as convinced as you can that the selection is better than anything else in the marketplace. Do not rely on one year's observations. Tout its merits when released but do not make unwarranted claims.

And for those of us purchasing and growing new releases, it behooves us to not commit too heavily until we are quite certain that the plants will perform up to expectations.

MAINTAINING CREDIBILITY IN PLANT INTRODUCTIONS IV

WILLIAM FLEMER III

Princeton Nurseries

P.O. Box 191

Princeton, New Jersey 08540

In considering the introduction of a new plant to the nursery trade, the first qualification must be that the new plant is recognizably different from existing clones or cultivars and genuinely superior to them. There is really no point in introducing a new plant which duplicates ones already established in the horticultural world. If, for example, I were to find yet another witches' broom on Norway spruce (*Picea abies*) I would not consider growing it and offering it for sale because there are already over 60 clones which were described and grown in the past, a large number of which are identical from a horticultural point of view, and the chances of coming up with a really superior clone are remote.

A corollary of this principle is to avoid too many new clones of a given species or group of hybrids. Plant breeders are like the proud