

THE PLANT PROPAGATOR AND NEW PLANT CULTIVARS

RALPH SHUGERT
American Garden Cole, Inc.
Circleville, Ohio 43113

The plant propagator, in our nursery community, is confronted with daily challenges and for those of us who grow plants from seed, added challenges present themselves. The so-called "new plant" is quite often there before us, but due to lack of motivation, lack of interest and too often the over-emphasis on numbers, we do not take the time to explore seed beds for the unique and unusual seedling that could indeed give us the "new" plant.

When one reviews the past issues of the Proceedings of our beloved Society, we read papers discussing plant discoveries and new woody ornamental cultivars. In 1971 Donald Egolf (1) told us that a new cultivar may arise as a selection from a seedling population derived from introduced seed, a naturally occurring or induced mutant, or a hybrid resultant from a controlled pollination. I shall limit my discussion to the former — selections from seedling populations. I will try to point out the unlimited possibilities in the selection of outstanding plant material from seedling beds.

I am the first to recognize that the glamour and mystique of plants discovered in exotic lands has more romance than that unusual seedling found in your own back yard. It would be my wish that when all of us relate plant expeditions to the four corners of the earth we include our own nurseries. We have all read of people bringing plants from one part of the world to another since the earliest days of civilization. It most definitely is fascinating reading, and many of us have marveled at the journeys of one of the most famous of all plant explorers, Ernest Henry "Chinese" Wilson. At the combined Eastern and Western Region meeting in St. Paul (1970) an excellent paper was presented by David Paterson (2). Dave reviewed for us the contributions made to all of us by the plant explorer. He also pointed out the role of arboretums in sending forth the plant collector, as well as the USDA and various plant societies. Dave Paterson said it well, with the words, "plant exploration has had an exciting and valuable history, has a viable present, and a promising future."

The pure facts of life are that very, very few of us in this room are going to have the opportunity to visit the four corners of the world and bring back to our nursery that unusual plant that is going to be of economic importance to our nursery. In my opinion, we do not have to journey to Tibet or the U.S.S.R.

to introduce worthwhile ornamental plants to the American landscape. Andy Leiser (3) speaking at the above-mentioned St. Paul meeting mentioned that members of the IPPS are "plantmen in the best sense of the word." I wholeheartedly agree with Andy, and this attribute is what sets the plant propagator apart from his fellow nurseryman.

In discussing this topic with Harold Clarke, he asked that I slant this topic to the newer members of the Society, and try to point out various areas in which the propagator can assist in the findings of the so-called "new plants." In the slides which shall follow these brief remarks, I hope to point out, with specific examples, plant material which has enjoyed good acceptance by the American gardener, and the derivation of the plant. The slides will show the seed bed and, with a stretch of the imagination, from those beds the cultivars that came forth. Table 1 shows the species seedling in the left hand column and the resulting cultivar in the right hand column.

Table 1. Species where one or more cultivars have been developed from seedlings.

SPECIES	CULTIVAR
<i>Berberis thunbergii</i> 'Atropurpurea'	B. thunbergii 'Rose Glow'
<i>Crataegus</i> spp.	C. 'Toba'
	C. punctata 'Ohio Pioneer'
<i>Fraxinus americana</i>	F. americana 'Rose Hill'
	'Autumn Purple'
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	G. 'Majestic' P.P. No. 1534
	'Skyline' P.P. No. 1619
	'Sunburst' P.P. No. 1313
	'Green Cascade'
<i>Malus domestica</i>	M. d. 'Coralburst' P.P. No. 2983
	M. d. 'Red Jewel' P.P. No. 3267
	M. d. 'Royal Ruby' P.P. No. 3056
	M. d. 'Snowdrift'
	M. d. 'White Cascade' P.P. No. 3634
	M. d. #71-53
<i>Pyrus calleryana</i>	P. 'Aristocrat' P.P. No. 3193
	P. 'Bradford'
	P. 'Select'

All of us as plant propagators have a responsibility to ourselves, our company, and our community to be constantly aware of the unusual and different plants in the seedling population. The mutual love of plants which we all have does not make this a chore but rather a very pleasant duty. To the younger propagators in the room this afternoon, I would ask you to return to your nursery and spend just a bit of time walking and observing your seed beds or rows. If you find a particular plant which looks interesting to you, flag it immediately, then at harvest track it carefully and transplant the chosen plant into your R&D test area. It is important, in my belief, that an

area be set apart on each nursery for testing and evaluation of the type of plant material to which I am referring to.

What of the future? Several years ago, at this meeting, Phil Barker (4) gave an excellent paper on *Acer grandidentatum*. The challenge of perhaps locating the unique, different canyon maple is there everytime I walk the seed bed in which they are growing. We have been watching *Myrica pennsylvanica* for many years, annually evaluating seedlings but to date we have not found a seedling worthy of introduction. However, "hope springs eternal in the human breast" and someday — maybe!

Repeating again to the seedling propagator, as you walk your seed beds or rows be attentive and keep your eyes open. Admittedly after your selection there are many years of evaluation and reflection, but it has been done many times prior by others, why not you? Could it have been one of our brother propagator's who motivated the poet, Stanley Foss Bartlett, to write:

"Whoever planted rows of trees
Beside the rows and lanes
God rest his soul in heavenly peace
And bless him for his pains;
For he who gave of time and toil,
Who gave of heart and hand
To nurse the tender shoots that were
To shade of ways of man,
Was quite as great as those who built
Of stone and minted gold —
No need to cast his name in bronze,
His deeds need not be told."

The above words, my friends, say it all. Those words point the nursery propagator's role in society — yesterday, today, tomorrow. Be alert and observant, that "new" plant is right before your eyes.

LITERATURE CITED

1. Egolf, Donald. 1971. The evaluation and propagation of new cultivars developed at the U.S. National Arboretum. *Proc. Int. Plant Prop. Soc.* 21:456-469.
2. Paterson, David. 1970. Plant Exploration. *Proc. Int. Plant Prop. Soc.* 20:251-258.
3. Leiser, Andrew. 1970. Plants for the future. *Proc. Int. Plant Prop. Soc.* 20:249-251.
4. Barker, Phil. 1976. *Acer grandidentatum* and its propagation. *Proc. Int. Plant Prop. Soc.* 25:33-38.