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Growing Your Own

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The Abundant Life Seed Foundation is a non-profit, tax—exempt corporation which aims to preserve plants native and naturalized to the North Pacific Rim. Some of the seeds they offer for sale are grown in their own gardens, some are grown by gardeners and small farmers on a contract basis, and some are purchased from seed wholesalers to be re—packaged and sold. In late August I attended an inspiring workshop on seed growing and collecting led by Forest Roth-Shomer and the Abundant Life staff. In this article I would like to share some of the basics I learned, and encourage readers who aren't already saving their own seed to consider the idea.

For a relatively inexperienced gardener like myself, the main value of this workshop was the demystification of the seed-saving process. I learned that collecting your own seed is easy. Cross-pollination is probably the main problem you will encounter, and it is easily avoided by exercising a bit of self-control, and sometimes also by cooperating with nearby neighbors.

On the west (wet) side of the Cascades, the weather can also seem to work against the seed-saver; getting the seeds in before the rains ruin them can be a tricky task. I've learned to get the seeds in as soon as they are fully mature, or mature enough so that they will ripen while hanging. Also, take advantage of every dry spell. Some seeds can get wet a couple of tines without rotting, and will dry enough in 2-3 sunny days to eliminate the need for special drying techniques after harvesting.

POLLINATION
Every plant you want to save seed from must be classified as to how it is pollinated—self wind or bee-pollinated. You want to be sure that the seeds you are saving will "breed true," or grow into the plants you want to reproduce. To do this, you must avoid having the desired variety "cross" with another variety in your garden.

Self-pollinating plants include tomatoes, eggplant, peppers, peas and beans, and lettuce. This means that the pollen rarely travels from plant to plant; each plant pollinates itself without the aid of wind or insects. Thus more than one variety of each of these vegetables may easily be grown for seed in the sane year. As long as there is some other crop growing between different varieties of the same vegetable, cross-pollination is highly unlikely.

Wind-pollinated plants include corn, beets and spinach. More than one variety of corn can be grown for seed if the plots are separated by at least 300 feet, preferable with some windbreaks between them. Also, try to grow varieties that will not tassel and silk (which means that pollination is occurring) at the same tine. Beet pollen can travel up to ¼ mile and will cross with chard, mangel beets and sugar beets.

Bee-pollinated plants include brassicas (cabbage, broccoli, cauliflower), cukes and zukes, carrots (cross readily with wild carrot or Queen Anne's Lace) and onions. Bee-pollinated varieties within the same family will readily cross. As a general rule, it is not safe to have more than one bee-pollinated variety within a family going to seed at the same tine within ¼ mile of each other.

Gardeners for whom such separations are impossible may choose to hand-pollinate some plants. This involves caging and isolating the plants you want to propagate. We did not discuss hand-

pollination techniques at the workshop, but it is covered in Vegetable and Herb Seed Growing (see list at end of this article.)

Seed cleaning on a home scale won't require equipment like this. Here Forest Roth-Shomer of Abundant Life pours cabbage seed and chaff into a Gravity Spiral Separator. The round seeds pick up speed as they roll down. Centrifugal force carries them out toward the edges of the separator, and they fall into the paper bag on the bottom left. The chaff tumbles closer to the center, is channeled into a separate spiral, and falls into the bag on the right.

LIFE-CYCLE

Another classification must also be made—annual (flower, set seed and die in the same year), biennial (overwinter one year, flower and set seed the next year), and perennial (flower and set seed every year). Most vegetables are annual or biennial, while flowers are found in all three categories.

Because of its temperate climate, the west side of the Cascades is especially suited to growing seeds of perennial and biennial plants. Most of the nation's brassica seeds are grown in Washington's Skagit Valley. (Brassicas are biennials.) The east side, with its hotter growing season, is best suited for annuals.

There are ways of producing seeds of biennials where winters are severe. Carrots, for example, can be stored for the winter and replanted the following spring. Only the crown (portion where the green and the root meet) need be planted; the rest of the carrot may be eaten. The same holds true for onions, and if you want to produce seed for growing onions which will store well, this method is excellent. Replant only those onions which have stored especially well.

SELECTION

This brings us to the topic of selection. "Roguing out" undesirable characteristics, and saving seeds from only your best plants is a way of improving your crops year after year. Besides lessening your economic and psychological dependence on seed companies, you are in a sense breeding varieties best suited to your own situation.

You can select winter vegetables for hardiness, tomatoes for early-ness*, peas for sweetness, beets and lettuce for slowness-to-bolt, flowers for long-lasting-ness or exceptionally beautiful colors, and any crop for disease or pest-resistance.

* Seed saved from tomatoes carries the genes of the whole vine, not just of that particular fruit. Thus you could save seed from the last tomato on your earliest-bearing vine and still be selecting for early-bearing tomato plants.

OPEN-POLLINATION

One factor in saving your own seed has been taken for granted throughout this discussion—the use of open-pollinated rather than hybrid varieties. Open-pollinated means the seeds of one generation will produce essentially the sane plant the next generation: the parent plants were genetically identical. Fl hybrids are crosses between two genetically different parent plants. Seeds of these hybrids (if seeds are even produced) are usually either sterile or will not breed true.

Of course, all varieties are hybrids in a sense, as plant breeding has been going on since agriculture's beginnings. However, Fl hybrid seed must be specifically inbred each year from its two original parent plants, a project most gardeners or small farmers would not either care to or be able to undertake on their own.

References

Growing Garden Seeds: A manual for Gardeners and Small Farmers, by Rob Johnston, Jr. $2.30 postpaid, $1.95 with seed orders from Johnny's Selected Seeds, Albion, ME 04910.

Vegetable and Herb Seed Growing for the Gardener and Small Farmer, by Douglas C. Miller. $3.75 postapid (Wash. residents add $.17 tax) from Abundant Life.

Both these booklets are excellent, and they complement each other nicely. Growing Garden Seeds covers cleaning of all types of seeds, and Vegetable and Herb Seed Growing has an extensive section on hand pollination. The latter also contains a seed viability table. Both discuss the best time and way to harvest the seeds, and both are highly recommended.

Save Your Own Seeds, by Lawrence D. Hills. $1.50 (Wash. residents add $.08 tax) from Abundant Life. An excellent booklet by the founder of the Henry Doubleday Research Association (see page 8).

The Seed-Starters Handbook, by Nancy Bubel. Rodale Press, 1978. This book contains a long section on saving seed from garden vegetables, with beautiful illustrations.