Guide for the Home Garden

Seed Production in the Home Garden

APPREHENSION concerning a probable shortage of vegetable seed or increased prices for seeds which may be available, may induce many home gardeners to attempt to produce, and save seed from plants grown by them in their own garden. While efforts in this direction can at all times be commended, the results obtained may not always come up to expectations—may, indeed, have serious and undesirable repercussions with regard to the quantity, and quality of the crops grown from the seed so produced.

From the numerous inquiries received and acknowledged concerning the production, and saving of vegetable seeds, it seems evident that some hints, and recommendations in these notes on this important phase of home gardening may be timely.

Seed production, whether for private use or commercially, at all times carries with it definite responsibilities, not only to the producer of the seed, but to those who may consume the vegetables produced from the seed saved.

Annual Production

The opinion is generally held that it is necessary to produce every year fresh seed of each variety of vegetable which may be grown in the garden. This, however, is not so, as the profitable life of vegetable seeds varies from one to ten years, and even longer, according to the variety. Tests recently carried out by Edgar W. Pritchard, Dip. Econ., Agricultural Botanist, South Australia, showed that, in the eighth year after harvesting, peas (Greenfeast) gave 67 per cent. germination, and tomato seed from the tenth to the thirteenth year inclusive gave 60 per cent., 65 per cent., 43 per cent. and 58 per cent. germination respectively. All varieties of beans were good up to the sixth and seventh year, varying from 85 and 90 per cent. in the former, and 36 per cent. to 70 per cent. in the latter year. Profitable cabbage germination varied from two to four years, rock melons up to twelve years, turnips and lettuce to three years, and radish to seven years.

It will be realised from the foregoing results, that annual production of the vegetable seeds required in the garden is not only unnecessary, but inadvisable, because of the ever present possibility of cross-fertilisation. Briefly, it may be stated that tomatoes, peas, beans, and lettuce, although self-pollinated, may cross, but not to any appreciable extent. Cucurbits (marrows, pumpkins, etc.), carrots, parsnips and celery are self-fertile, but often cross-pollinate. Naturally cross-pollinated varieties are asparagus, beet, onions, radish, spinach, and all members of the cabbage family.

Unless precautionary measures are adopted in any attempt to produce vegetable seed, only those varieties which do not naturally cross-pollinate should be selected. During the flowering period varieties which cross-pollinate should be protected by having the entire plant completely enclosed by some light covering material such as scrim.

Plant Selection

Plants selected for seed production should conform in the highest degree to the desirable characteristics of the variety to which they belong. Trueness to type, early maturity, healthy vigorous growth, productive capacity, and freedom from disease are necessary in plant selection.

Seeds to Produce

Tomato, sweet corn, pepper, lettuce, and parsnip seed may be produced, also peas and beans, but plants of these varieties should be selected with particular care in order to prevent the subsequent spread of diseases. Beets, carrots, and onions are stored during winter, and planted early the following spring. Cabbage, cauliflower, borecole, etc., require such special knowledge, and particular skill that production of seeds of these varieties by the home gardener cannot be recommended. The risk of cross-fertilisation is too great.

Mass Selection

To obtain best results, and to maintain distinct and desirable characteristics in any vegetable variety, it is not advisable to choose tomatoes, peppers, etc., from those which may have been picked because they were becoming ripe, and looked well. Special plants should be selected, and marked so that only the best specimens of fruit from the best plants may be secured for seed production.

Maturity and Harvesting

Climatic conditions will, in many instances, be a deciding factor in vegetable seed production. Excessive wet conditions with high humidity during autumn will tend to prevent ripening. Good rainfall during spring, reasonably moist conditions in summer, and a dry autumn are ideal conditions for vegetable seed production. Unless weather such as that indicated can be depended on, efforts to produce one's own seed may end in failure.

Storage

Seed, when harvested, must be properly stored. Containers which are reasonably air-tight should be used. Kept otherwise, rats, mice or other destructive agents may render the bulk of the seed useless. Seed well grown, and properly cured will retain its vitality within the limits of ordinary temperature variations.

Commercial seed production is, today, a vast and highly specialised industry. Engaged in it are plant breeders, expert seed growers, and specialists in several branches of agricultural science, and it is not too much to assume that, apart from seed production, the scientist and the grower are recognising how much they have in common, and to what extent the world's food supply depends on their joint collaboration and combined efforts.

Tomatoes

February is the month which usually calls for special attention to autumn