

# First Certified Lettuce Seed!

## Arizona Develops Sound Program After Years of Study and Planning

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Figure 1. Foundation Arizona 44 lettuce is grown under close supervision on the University of Arizona Experiment Station.



Figure 2. Growers' fields of Arizona 44 and Arizona 615 lettuce grown for production of Registered seed. (Note isolating strip between fields.)

Figure 3. A small crew of trained workers rogue a lettuce field for Registered seed production.



Certified lettuce seed is being harvested in the Yuma area this season for the first time in the history of world-wide lettuce production. Arizona growers may soon take advantage of results of the lettuce seed production research conducted by the University of Arizona Horticulture Department since 1935.

### Improved Strains

In the earlier years, the University carried on all phases of seed production, making available to growers improved strains of the Imperial types of lettuce as Arizona 44, Arizona 615, and Arizona 152. With expansion of research on other phases of lettuce production, land and personnel limitations forced the cessation of much of the program and for a number of years only maintenance of the strains was attempted. In 1950, activity was resumed with the work planned to more completely follow the directives of the Arizona Crop Improvement Association.

### New Program Started

Since 1950, the Arizona strains have been taken through the steps of producing "Breeder's", "Foundation", (Fig. 1) and "Registered" seed. These steps included single plant selections within the stocks planted in growers' fields, growing seed under muslin bags and severe roguing in subsequent plantings. From the University seed program, "Foundation" stocks of A 44, A 615, and A 152 have been turned over to the Arizona Crop Improvement Association (A.C.I.A.). Recently, Great Lakes has been added to the program.

The lettuce seed program in effect at the present time is in accord with the plan set up under A.C.I.A. and closely conforms to the procedure used in certifying other crop seeds. The University maintains the "Breeder's" and "Foundation" stocks of each

variety. The Crop Improvement Association distributes Foundation seed to interested growers who produce Registered seed. These selected growers then sell Registered seed to those who wish to produce Certified seed.

If more Registered seed is produced than is needed, it may be reclassified to "Certified" and sold for commercial lettuce production. All operations in the later stages of Certified seed production are under the auspices of the A.C.I.A. and are subject to their regulations in order to insure the production of high-quality seed.

### Grower Must Follow 9 Steps

Anyone capable of growing a good crop of lettuce may be eligible to produce this valuable seed crop. Briefly, to produce a "tagged" lot of seed, the grower will go through the following steps:

- (1). Make application with the County Agricultural Agent. **September 1 is the deadline for such application.** The county agent and the A.C.I.A. will be happy to help fill out forms and give advice.
- (2). Obtain seed through the Crop Improvement Association.
- (3). Grow a good lettuce crop to maturity in a field isolated from other seed fields. (Figure 2)
- (4). At head maturity rogue the field. It is best to use a relatively small crew (Figure 3) so that there can be close supervision. The University inspector is always glad to assist in starting the roguing.
- (5). After roguing and after inspection by University personnel, lettuce heads may be cut for "dry-pack" or "vacuum-pack" providing adequate stumps of the plants remain in the field for flower-stock and seed formation.
- (6). Continue to grow the crop to seed production keeping the field free of weeds. Inspections will be made from time to time up to seed maturity.
- (7). Clean any harvesting and cleaning machinery to pass inspection and then harvest seed. Attach field tag to bags.
- (8). Reclean seeds and arrange for samples to be analyzed.
- (9). Attach final tags and sell seed.