COLLEGE OF THE VIRGIN ISLANDS
Cooperative Extension Service

GARDENERS FACTSHEET NO. 2
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SEEDING VEGETABLE CROPS

Dr. John M. Gerber
Vegetable Specialist

GETTING STARTED

The rains have begun, the days are getting cooler and the sun less intense, it's time to plant your Virgin Islands vegetable garden. Before you begin planting, stop and be sure you are ready. Do you have your seed? Is it viable? Where are you going to plant? Is the seed bed prepared? If you know the answers to these questions, go ahead and plant. If not, read on.

One of the most important prerequisites for a successful garden is living seed. Old or new seed that is stored improperly may not germinate. The best way to insure seed viability is to purchase new seeds each year from a reputable seed company (several are listed below).

If you purchase seed locally, check the date stamped on the package and ask the store owner how is was stored after it arrived in the islands. Seed stored in cool, dry conditions will remain viable for several years.

BED PREPARATION

Seed germination is promoted by a warm, moist environment, conditions exactly opposite those for best seed storage. A seed bed should be prepared to provide the optimum environment for germination and growth.

All weeds and debris from previous crops should be removed and the soil should be roto-tilled. Fertilizer should be added prior to tilling so it may be mixed evenly in the top 6 inches of soil. If the soil is heavy and poorly drained, the plot should be banked and the seeds planted on top of the ridges. Additions of organic matter such as manure or compost will help improve drainage as well as supply valuable nutrients.

The seed bed should be moist prior to planting but not waterlogged. Although moisture is necessary for germination, too much water will not allow the seed any oxygen and will promote seed and seedling decay.

DEPTH OF SEEDING

The back of the seed packet should tell you how deep to plant. If not, check the Vegetable Planting and Harvest Guide put out by the C.V.I. Cooperative Extension Service. Remember, small seeds like lettuce and carrots are planted close to the surface, usually 1/8 - 1/2 inch deep. Larger seeds such as beans and corn are planted deeper, usually 1-2 inches. Large seeds contain more food reserve. This allows them to grow from deeper in the soil before they reach the sunlight and begin producing their own food. A small seed doesn't have as far to travel but usually takes longer. A limited food supply combined with rapid drying of the soil surface may delay or prevent emergence of small seeds.

HOW FAR APART

Check the seed packet or the Vegetable Planting and Harvest Guide for figures on spacing.. Remember, you seed more than you expect to harvest because they all won't grow. However, if you seed too many more than you expect to grow, you will be wasting a lot of time with the tedious process of thinning. If you seed too far apart, you're wasting space. There is always some thinning to be done to achieve the desired spacing. Vegetables such as lettuce, spinach, onions and carrots should be thinned several times. One to two weeks after emergence remove just enough seedlings to allow the strongest growing room. Do not thin at this time to the final desired spacing. Several weeks later you can go back and thin to the final spacing. This will provide extra insurance that you have a solid row of vegetables at the final harvest. Also, the plants from the second thinning are often large enough for that first garden-fresh salad.

WEEDS

Unwanted plants interfere with the growing of the desired crop by using valuable water and nutrients as well as shading

young seedlings. Prevent the growth of weeds by removing them prior to planting and pulling them from the row during the growing season. A hoe or a roto-tiller can be used between rows. Remember, they are easier to kill when they are small.

TROUBLE SHOOTING

What happens if it didn't work? The seed didn't come up and you don't know why. First check the following list of possibilities. Then, should you not find any solution to your problem, call the Cooperative Extension Service of the College of the Virgin Islands.

1. **Non-viable seed**. Was the seed viable when you planted it? Find out by rolling up 10 left over seeds in a moist paper towel. Keep the towel moist but not waterlogged. After several days check for germination. Some seeds will take slightly longer but almost all should germinate before 10 days in the wet towel.

2. **Damping-off**. Seeds may rot in the ground if the soil is too wet. This is caused by a fungus that is always around but only grows under wet conditions. Prevention is difficult if rains occur on several successive days immediately prior to and during seedling emergence. Reseed the crop on banks and drench the soil with a fungicide solution such as Captan (directions on label).

3. **Soil insects**. Several soil maggots and grubs are known to damage seed. These can be prevented by drenching the seed with a Diazinon solution (directions on label) immediately after planting.

4. **Concentrated fertilizer**. Most fertilizers are salts which dissolve in water and are absorbed by plant roots. If the fertilizer is concentrated too close to the seed, injury may occur. Proper incorporation of fertilizer will prevent this problem.

VEGETABLES THAT SHOULD BE SEEDED DIRECTLY INTO THE GARDEN:

beans	corn	okra
melons	cucumbers	squash
pumpkin	beets	turnips
radish	spinach	carrots

VEGETABLES THAT CAN BE DIRECTLY SEEDED OR TRANSPLANTED:

lettuce	cabbage	broccoli
collards	onion	tomato
eggplant	leek	

SEED COMPANIES:

Reuter Seed Co., Inc.
320 N. Carrollton Ave.
New Orleans, La. 70119

Otis S. Twilley Seed Co.
P.0. Box 65
Trevose, Pa. 19047

W. Atlee Burpee Co.
Warminster, Pa. 18974

G. W. Park Seed Co.
Greenwood, S.C. 29647

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