RECOMMENDED ISOLATION DISTANCES

Solanaceae- Capsicum- Sweet, Chili and Hot Peppers- 500 feet.

Lycopersicon- Tomatoes- Debatable; Most are self-pollinated, but cross pollination can result from insect visitation.

Lycopersicon Pimpinellifolium- Currant tomato- Same as above.

Physalis Ixocarpa- Tomatilla- Same as above.

Solanum Melongena- Eggplant- Self-pollinated- recommend 50 feet.

Solanum tuberosum- Potato- Usually grown from tubers, seed pods are sometimes formed and can be collected.

<u>Umbelliferae</u>- Apium graveolens- Celery/Celeriac- Biennial-All will cross with each other- isolate, bag or cage.

Anethum graveolens- Dill- Time plantings of different varieties so that only one is blooming at a time.

Coriandrum sativium- Coriander/Cilantro- If different strains are grown, $\frac{1}{2}$ mile isolation, or timed plantings.

Daucus Carota- Carrot- ¹/₂ mile is recommended; will cross with wild carrot (Queen Anne's Lace). Biennial, will require winter storage and replanting to produce seed. Can be hand-pollinated, or caged for purity.

Foeniculum vulgare- Fennel- ¹/₂ mile isolation, hand-pollination, or caging. Petroselinum crispum- Parsley- 1 mile isolation, hand-pollination or

caging.

Zea Mays-Corn- 2 miles, or hand pollination

Ocimum Basilicum- Basil- 150 feet from other varieties, or caging.

Abelmoschus esculentus-Okra- Self-pollinated, 1 mile isolation recommended.

Allium Family-Onions, multiplying onions- i mile.

<u>Brassicas</u>-Oleracea- Kale, Cabbage, Broccoli, Cauliflower, Collards, Brussels Sprouts, Kohlrabi-1 mile, most will cross-pollinate and are biennial. Caging is recommended.

Rapa- Chinese Cabbage, Mustards, Broccoli Raab, Turnips- 1 mile, caging recommended.

Sativus- Radish- ¹/₂ mile between varieties, or caging.

<u>Beets</u>-5 miles, <u>Swiss Chard</u>- 2-5 miles, <u>Lamb's Quarters</u>-5 miles, <u>Spinach</u>- 5-10 miles. <u>Sunflower</u>- 1/2 -3 miles

Lettuce-12 to 25 feet minimum (will cross with wild lettuce).

<u>Cucurbitacae</u>-Cucumis melo- Muskmelon, cantaloupe, honeydew, plum granny- ¹/₂ mile. Citrullus vulgaris- Watermelon- ¹/₂ mile.

Cucumis sativus- Cucumber (except Armenian, burr and African horned) ¹/₂ mile. Curcurbita maxima, mixta, moschata, and pepo- ¹/₂ mile by variety. * Some sources state that species will not cross, others state that some will on occasion. Hand-pollination, or isolation is highly recommended when growing different species. Leguminosae- Peanut-1 mile

Garden Pea- (includes shell, Snow and Sugar) normally self-pollinting, European standards require 100 meter isolation.

Soybean, Lentil, Runner Beans, Cowpea/Crowder/Field Pea, and Common Bean (Wax, Green, Pole, ½ Runner, bush, etc.) are all considered to be selfpollinating. Opinions vary as to isolation distances; some plant them in the same rows, some isolate by a paths width, some more. I usually give them as much distance as I can in my garden, planting them in different beds throughout the garden. Bumblebees sometime chew through the blossoms, causing cross-pollination. Distance helps to prevent this somewhat.

Lima/Butterbean-While these are also considered to be self-pollinating, they produce sweet smelling flowers in abundance, drawing insects which can cause cross-pollination. John Coykendall, a specialist who grows many limas in association with Clemson University, recommended to me a few years back that limas/butterbeans be isolated by at least 5 miles. For this reason (since my garden is not <u>that</u> big) I only grow one variety per year.

The distances recommended here are from the book, <u>SEED TO SEED</u>, by Suzanne Ashworth, and reflect isolation distances for commercial growers. Hand pollination, caging, timed plantings and selected plantings can all be used to reduce these distances.