

*College of Agriculture & Life Sciences*  
 Department of Horticultural Science

**HOME GARDEN PEPPER PRODUCTION  
 (BELL, SMALL FRUIT AND PIMENTO)<sup>1</sup>**

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By following the steps listed below you will be able to produce earlier peppers with higher yields and better quality.

**Plants and Plant Beds**

(See AG-337, *Production of Commercial Vegetable Transplants*, for more detailed information.)

1. The following varieties have performed well in North Carolina:

**Bell** — Keystone Resistant Giant Strain 3 (71 days), Yolo Wonder L (80 days), King Arthur (67 days).

**Small fruit** — Banana Supreme (70 days), Hy-Fry (60 days), Biscayne (70 days), Key Largo (62 days) Cubanelle (65 days), Gypsy (60 days), Hungarian Sweet Wax (68 days).

**Hot** — Red Cherry (78 days), Red Cherry (Small) (75 days), Red Cherry (Large) (75 days) (may be too large), Anaheim Chili TMR 23 (75 days), AnchoVilla (80 days), Early Jalopeno (63 days), Mitla (62 days jalopeno), Hungarian Yellow Wax (68 days), Habanero (100 days) [very hot].

**Pimento** — Pimento Select (73 days), True Heart Perfection (80 days).

2. Obtain certified seed produced under disease conditions of the arid, western part of the United States.

3. Transplant as shown in Table 1.

**Table 1. When to transplant peppers in field.**

Region	Sow Seedbed	Transplant in Field (after frost)
Coastal Plain	Jan. 15 to Feb. 15	April
Piedmont	Feb. 1 to Mar. 1	April to May
Mountains	Feb. 15 to Mar. 15	May

<sup>1</sup> See *Commercial Pepper Production in North Carolina* (AG 387) for more detailed and complete information.

4. Overcrowding in the plant bed is one of the biggest problems with the development of stocky plants. Sow seed 8 to 10 weeks before plants are to be set in the field. Water bed thoroughly and uniformly after seeding.

5. If “damping-off” appears, *drench plant bed* with a fungicide\* (according to manufacturer’s directions). Spray or dust with fungicide if blue mold appears in plant bed. Damping-off and mold should not be problems if the bed was fumigated, is well-drained, and well-ventilated.

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6. Water plant beds thoroughly when needed. Watering in the mornings will allow foliage to dry more rapidly and thus reduce the spread of diseases.
7. Prior to pulling, spray the plant bed with an antibiotic\* and fungicide\* as directed on the label. If bacterial spot appears, avoid using plants from the bed, but if they must be used, spray weekly with a mixture of copper and streptomycin sulfate.
8. To control mosaic virus, avoid use of tobacco or wash hands with soap and water before handling plants. Control insects in plant bed and field to prevent virus spread. (See *Plant Pathology Information Note 186*.)

### **In The Garden**

1. About 7 to 10 days before transplanting, begin hardening the plants by limiting water and exposing them to wind and sun. Water the plant bed thoroughly a few hours before the plants are to be pulled.
2. Select a well-drained, easily worked loamy or sandy loam soil. Do not select a soil that had cotton, tobacco, eggplant, peppers or Irish potatoes the previous year. Practice crop rotation to control rootknot, bacterial spot, and other diseases. Soil samples should be taken in the fall to determine fertilizer needs and if fumigation for nematodes is necessary. Take a small amount of soil to a depth of 8 inches, from 8 to 10 locations in the garden and mix this soil thoroughly. Then put a cup of this soil in a plastic bag for nematode analysis and another cup in a fertility sample box for determination of fertilizer and lime needs. Soil pH for pepper should be 6.0 to 6.5, lime will allow your peppers to use fertilizer more readily.
3. Be sure that the land is plowed early and deep to ensure that trash and other organic matter are well rotted. Plowing under green manure cover crops early will result in increased yields.
4. Use a row width convenient for cultivation (3.0 to 3.5 ft). Transplant plants 12 inches in the row. Cultivation may not be necessary with a good herbicide program.

Recently, use of black plastic and 2 rows (12 inches apart) on beds with 5-ft centers has doubled yields. (Drip irrigation is necessary for plastic mulch.)

Pimento pepper requires spacings of 18 to 24 inches in rows spaced 42 inches apart, because of their greater vigor.

5. Apply recommended chemicals for weed control.\* Follow the directions on the label. For best results, use both pre-planting and post-planting herbicides.
6. Apply the recommended fertilizer in 2 bands, each located 3 inches to the side and 2 to 3 inches below the plant roots. On average soils, 3 lb of 10-10-10 per 100 ft<sup>2</sup> should be used (if soil was not tested). Where banding is impossible, mix the fertilizer thoroughly with the soil before ridging, because peppers are very susceptible to fertilizer injury. Apply ½ oz. of actual N per ft of row as a sidedress. Sidedress 2 to 3 times, starting 2 weeks after planting. Pimentos will require a third sidedressing.
7. Transplant in late afternoon or on cloudy days to prevent wilting. If soil is low in phosphorus, use a soluble starter fertilizer in transplant water.
8. Cultivation should be done only when necessary to control weeds, usually every 10 days. The cultivations should be shallow. Don't permit machinery to touch the plants since this will injure the plant and spread diseases. If herbicides were used, cultivate only if necessary.
9. Foliar applications of insecticides\* may be necessary on a weekly basis after mid-June. Corn earworms, maggots, armyworms, as well as corn borers, are especially troublesome later in the season.
10. If *Cercospora* leaf spot appears in the field, spray or dust with a fungicide\*.
11. Harvested peppers should be kept cool to retard spoilage and removed from the field soon after harvest.

\* Consult the current *North Carolina Commercial Vegetable Recommendations* (AG-586) or your county Extension agent for pesticide recommendations.

### **10 Steps to Profitable Pepper Production**

1. Use well-drained soils.
2. Soil test for fertilizer and nematodes.
3. Lime to pH 6.5.
4. Apply fertilizer carefully.
5. Use only disease-free and insect-free plants that have not been crowded.
6. Use good weed management practices.
7. Plant carefully to get good stands.
8. Sidedress 2 to 3 times.
9. Control corn borer and other insects.
10. Cool fruit soon after harvest.