



## Tomato Production Guide for Florida: Cultural Practices<sup>1</sup>

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### Soil Preparation

The field should be plowed and disked to bury old crop refuse. Plowing reduces disease organism carry-over between crops. A soil test should be used to determine lime and fertilizer requirements. Lime, if required, is broadcast and incorporated followed by bedding, fumigating, and fertilizing. Bedding can be accomplished by various means including a bed press, bedding disk, or a double-disk hiller followed by a board to level the bed tops. The bed press should be used where plastic mulch will be laid.



**Figure 1.** Mulched beds for tomato production in Homestead on rockland soil.

### Mulches

Various types of mulches are available for use, depending on the season. Generally, black polyethylene mulch (Figure 1) is used except for plantings made in the fall when temperatures are high. The use of white (Figure 2), white-on-black, gray, or black mulch with a white band painted over the middle is recommended for early fall plantings to reduce high bed surface temperatures which might desiccate young seedlings. Advantages of using plastic mulches include increased early and total yield, improved weed control, improved moisture conservation, better fertilizer conservation, and better fruit quality.



**Figure 2.** Tomatoes on white-on-black polyethylene mulch.

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## Windbreaks

A sometimes-overlooked crop protection aid is that of crop windbreaks (Figure 3). Several windbreak crops are available to Florida tomato growers including sugar cane, rye, and sometimes oats. Care should be taken to choose a windbreak crop that is adapted to a specific growing region. Tomato cropping patterns often dictate how close the windbreaks will be placed to each other. In general, however, close windbreaks (even between every row), give the best wind protection and might even provide some moderation of the plant's micro-environment promoting faster crop development during cool weather. Establishment of a windbreak crop in the previous fall will ensure enough growth to become effective as a windbreak by spring tomato planting time. Tomato beds can be established in the windbreak crop by rototilling the bed area.

On seep-irrigated land, windbreaks are usually planted on field-ditch banks, but can also be planted in crop-harvesting roadways. When the windbreak is removed, ensure that this plant material does not clog irrigation ditches. Cereal crop windbreaks between beds can be removed by rototilling.



**Figure 3.** Application of polyethylene mulch for drip-irrigated tomato in northern Florida where rye windbreaks are beneficial.