
Windbreaks

A sometimes-overlooked crop protection aid is that of crop windbreaks (Fig. 4). 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.

Fertilization

Prior to each cropping season, soil tests should be conducted to determine fertilizer needs. Obtain an IFAS soil sample kit from the local agricultural Extension agent for this purpose. Commercial soil testing laboratories also are available. Routine soil testing will help reduce overfertilization which

reduces farming efficiency and increases the risk of groundwater pollution.

The crop nutrient requirements of nitrogen, phosphorus and potassium (designated in fertilizers as N-P₂O₅-K₂O) in Tables 3 and 4 represent the optimum amounts of these nutrients needed for maximum production. A portion of this required nutrition will be supplied by the native soil and by previous crop residue. The remainder of the nutrient requirements will be supplied by fertilizer, and this amount must be determined by soil testing. Therefore, nutrient amounts in these tables are applied as fertilizers only to soils testing very low in the specific plant nutrients. Automatic use of the amounts of nutrients in the tables without a soil test may result in wasted fertilizer, crop damage from salt injury, reduced yields and quality, and a risk to the environment if fertilizer leaches to the watertable.



Figure 4. Rye windbreaks in a tomato field in Manatee county.



Figure 3. Tomato production using white mulch.