# WALKER BROTHERS, INC .

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## -COMMERCIAL-
## STRAWBERRY PLASTICULTURE SYSTEM
## PLUG PLANTING GUIDE

*The strawberry plasticulture system is an integrated system that relies on all of the specifics of planting being followed in order to maximize production. This high-density production system can have increased profitability over conventional matted-row plantings. Raised beds allow for higher soil temperatures, for more rapid root development, improved water drainage, decreased root disease problems and improved air movement for disease prevention. Walker Brothers, Inc. continues to work hard to provide their growers with the best quality strawberry plugs for the strawberry plasticulture system.*

*The following information is to be used as a guide. Over the years many different techniques have been developed in order to adopt the plasticulture system to fit the various climates and growing conditions.*

**LOCATION, SOIL, FERTILIZATION** - Select fields protected from westerly winds and with a southern exposure. A long growing season (190 frost-free days) helps increase yields since restricted periods hinder growth in the fall.

Prepare the soil by plowing or disking. Fumigation is an option that is used for weed and disease control. If using a fumigant it should be applied to the soil by broadcasting or injecting through the drip system, 2 to 3 weeks prior to planting.

Test the soil to determine specific nutritional needs. Adjust your soil pH to 6.3. Depending on the soil type, apply 60 -100 lb. actual nitrogen/acre as a 10-10-10 fertilizer, if the soil tests are low to medium in P and K. If the P and K are high or very high, use a 2-1-1 or 3-1-1 ratio fertilizer. An additional 30 to 50 lbs. of nitrogen/mulched acre is then added through the drip in the early spring, as soon as growth begins. This can be applied as a split application, depending on the soil type. Boron is an important micronutrient for strawberries and should be monitored in soil tests. If the levels are low, apply 1-2 lbs/acre.

**TIPS VS. PLUGS** - Tips are available to produce transplant plugs in-house; however purchasing the transplant plugs is the easiest and best way to plant. Plugs can be planted mechanically (water wheel) at spacings of 12-16”on a staggered double row.

**GROWING** - Raised beds (24-30” width, wider if less in height) are prepared on 5-6’ row centers. Lay black plastic tightly on center crowned, firm beds. The black plastic mulch keeps the soil warm longer in the fall for improved growth and flower bud initiation, keeps fruit clean and disease free, controls weeds, and allows the soil to warm faster in the spring for an earlier harvest. Drip irrigation should be installed while laying the plastic.

Cut the plastic and dig the hole with a mechanical transplanter (water wheel). Overhead irrigation at planting is suggested to cool plants and plastic in warm weather. Irrigate through drip and be careful not to over irrigate. Adequate moisture is critical and therefore the plugs should be irrigated in the spring whenever the soil is dry to help maintain a large berry size. Maintenance in between the rows can be accomplished through roto-tilling, herbicides, or mulch.

The use of floating row covers is considered a necessity in the plasticulture system. Hold down sides with soil, irrigation pipe, bricks, sand bags, etc. Temporary holds should be placed at specific locations around the row cover so that the field can be uncovered and re-covered in the spring. These temporary holds should be placed so as not to allow wind to get up underneath the cover and possibly damage it. Remove the floating row covers at the first signs of bloom to allow for bee pollination. Leaving on the cover for too long may reduce fruit size. The floating row covers can be reused if not damaged by wind, deer, etc.

**NOTE:** *Keep a close monitor on your fields in order to maintain the maximum potential for this crop in yields, berry size, and overall quality of the plants themselves.*