

2004-2005 Strawberry Plasticulture T-22 Study
Brad R. Bergefurd, Thomas Harker, Dr. Shawn Wright
The Ohio State University South Centers
1864 Shyville Road, Piketon, Ohio 45661-9749
Phone: (740) 289-3727

METHODS:

All strawberry tips were obtained from Strawberry Hill Inc., Bunn NC. All strawberry tips were planted in 50 cell trays containing Metro Mix 360 soilless media and placed in the greenhouse at Southern State Community College during the second week of August. Tips were grown for four weeks with an average day temperature of 75° F and an average night temperature of 65° F. Planting media was kept continually moist with a mist system to promote root development. The resulting plugs were transplanted to the field using a three-point hitch water wheel planter and watered in with Peters 20-20-20 starter fertilizer. Field preparation included pre-plant application of 60 units each of nitrogen, phosphorus, and potassium, plowing, disking. A raised bed was formed with a Redick Fumigation bed shaper and covered with black plastic mulch. Trickle irrigation tape was installed under the mulch. Strawberry plants were planted in double rows with 12 inches between plants and rows and planted on September 14, 2004.

1.5 oz. floating row cover was put in place on November 5th over all treatments. The plant growth was monitored throughout the winter. To control weed growth between rows, annual rye grass was seeded prior to berry planting. The rye grass was then killed off in the spring with an application of Poast EC (sethoxydim) at 2.5 pints/ac + 2 pint of a crop oil concentrate. A standard commercial fungicide program was followed to control disease.

Petiole nitrate levels were monitored and calcium nitrate injected through the trickle tape in the spring as necessary and through harvest to maintain optimum plant growth and berry production.

RESULTS:

| <u>Treatment</u> | <u>Marketable lbs. per plant</u> | <u>Marketable lbs. per acre</u> | <u>Marketable Fruit per acre</u> | <u>Average Fruit Wt. (oz.)</u> |
|------------------|--------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|
| ABM | 0.17 | 2918 | 118928 | 0.45 |
| T-22 | 0.15 | 2608 | 68928 | 0.43 |
| Control | 0.14 | 2530 | 110000 | 0.43 |

DISCUSSION

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