

2005-2006 Strawberry Plasticulture Date of Planting 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 on weed mat under mini wobblers and misters during the month 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 9/6, 9/13, 9/20 and 9/27. 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. A standard commercial fungicide program was followed to control disease.

RESULTS:

The dates of planting results were consistent for all variable measured except for average fruit weight. There was a statistically significant effect of planting date. Fruit number per plant, pounds per plant, and fruit per acre were all greatest for the second planting date followed by the first, third and fourth planting date (Table 1). The fourth planting date gave the highest average weight per berry (.70 oz) and the first planting date gave the lowest average weight per berry (0.53 oz).

Planting date	Fruit #/plant	Pounds/plant	Pounds/acre
2 (9/8/2006)	A 33.4	A 1.19	A 20742
1 (9/14/2006)	A 30.0	B 0.99	B 17331
3 (9/21/2006)	B 22.8	B 0.88	B 15302
4 (9/28/2006)	C 8.7	C.038	C 6584
LSD	4.0	0.20	3182.7

Treatments with the same letter are not statistically different from each other.

Discussion

The 2nd planting date is the best date for Southern Ohio and it is preferable to plant earlier rather than later. By the 4th planting date, yield per acre is less than a third of the maximum yield. The reason the 4th planting date produced the largest average weight is because there are fewer berries produced.

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