

HORTICULTURE FIELD DAY REPORT - 1998

**TEXAS A&M UNIVERSITY AGRICULTURAL
RESEARCH and EXTENSION CENTER
at OVERTON**

**Texas Agricultural Experiment Station
Texas Agricultural Extension Service
Texas A&M University**

June 18,1998

Research Center Technical Report 98-2

All programs and information of the Texas Agricultural Experiment Station and Texas Agricultural Extension Service are available to everyone without regard to race, color, religion, sex, age, or national origin.

Mention of trademark or a proprietary product does not constitute a guarantee or a warranty of the product by the Texas Agricultural Experiment Station or Texas Agricultural Extension Service and does not imply its approval to the exclusion of other products that also may be suitable.

HONEYDEW VARIETY TRIALS ON PLASTICULTURE AND DRIP IRRIGATION SYSTEMS FOR EAST TEXAS - 1996

M. L. Baker, D. R. Earhart, J. T. Baker, and F. J. Dainello

Background. East Texas plot was established using randomized design with randomized complete block with three replications varieties/lines of honeydew melons for COM Fast Track seed source during the spring of 1996. Peak months for honeydew melons are June, July, and August in East Texas. Historically, East Texas has not been a major honeydew melon producing area. Production has been limited to home gardens or small plots for local sales. Recently, there has been increased interest in production for direct sales through farmer markets and grocery chain sales. To evaluate adaptability of newer honeydew melon varieties to East Texas growing conditions, this study was initiated by the Texas A&M University Agricultural Research and Extension Center at Overton as part of the statewide trials.

Two honeydew melon varieties/lines were evaluated during the spring of 1996 for East Texas growing conditions. The greenhouse grown transplants were planted in a randomized complete block design with three replications on eight feet centered black plastic mulched covered raised beds with two feet in row spacing on 9 May 1996. Drip irrigation was supplied under the plastic as needed. Fertilization was 600 lbs 13-13-13/ac banded 24 April 1996. Multiple harvest occurred on 3, 5, and 8 July 1996. Additional N was applied at a rate of 60 lbs/ac as calcium nitrate (CaNO_3) in split applications of 30 lbs each through the drip system. The first application was at first bloom and the second at the fruit enlargement stage. Data were obtained on total yield per acre and percent soluble solids for the two varieties/lines in the trial.

Research Findings. The two honeydew melon varieties/lines tested showed yields of 20,136 lbs/ac with the top producer 'Diosa' and 9,778 lbs/ac for the test line 'F-1403'. Soluble solids for these two honeydew melons were 14.4% for 'Diosa' and 6.7% for 'F-1403' (1996 Texas A&M University Statewide Honeydew Trials Table). Plasticulture technology and drip irrigation eliminates the risk of inadequate rainfall and raised beds with plastic mulch eliminates problems associated with diseases and lack of quality during too much rainfall.

Applications. Information from these studies can be used to inform growers of the production potential of newer varieties of honeydew melons.

Acknowledgment. The authors would like to thank CDM Fast Track as the source for seed for these two honeydew melons and for their participation in the 1996 spring trials.

1996 TEXAS A&M UNIVERSITY STATE WIDE HONEYDEW TRIALS

(OVERTON)

Entry	Seed Source ^z	Total Yield (lbs/A)	Soluble Solids %
Diosa	1	20,136	14.4
F-1403	1	9,778	6.7
LSD (P = 0.05)		NS	----

^z Seed Source: 1 - CDM Fast Track

Establishment: Transplanted on 8 ft. plastic covered raised beds with 2 ft. in row spacing on 9 May

Design: Randomized complete block with three replications

Harvest: 3, 5, 8 July

Irrigation: Drip as needed

Fertilization: 600 lb 13-13-13/A banded 24 April