

Evaluation of Organically Grown Melons

Location: Golden Earthworm Farm – Jamesport, New York

Six melon entries were organically grown at Golden Earthworm Farm and evaluated for yield, disease susceptibility, and other characteristics. Varieties grown were Golden Gopher (Fedco), Delicious 51 PM (High Mowing), Athena Hybrid (Fedco), Delicious 51 (Fedco), Hannahs choice (CU) and 335 Series (CU). The experimental design was a randomized complete block with two replications. Data collected included weight, quality, and disease susceptibility. Transplants were planted June 23, 2004. Each plot was 20' long with 10 plants. The spacing was six feet between rows with an in row spacing of two feet. Fertilizer was applied prior to planting. The fertilizer included the following: Fish 4-1-1 @ 2 gal. per acre, Humic Acid @ 1 gal. per acre, Black Strap Molasses @ 2 gal. per acre, Peanut Meal (8-0-0) @ 1,000 lbs. per acre, and Compost Tea @ 2 gal. per acre. There was no compost applied. Drip irrigation was used as needed. No organically approved fungicide was used on this trial. The melons were harvested, weighed, and evaluated for quality between 8/23/04 and 9/9/04. Soil samples for Pre Side Dress Nitrogen test (PSNT) were taken on 7/22/04.

The diseases observed on practically all varieties grown were Gummy Stem blight (GSB), Downey mildew (DM), and Powdery mildew (PM). Golden Gopher and Delicious 51 (Fedco) were the varieties most susceptible to disease especially powdery mildew. Athena produced the highest yield (Lbs. & # Marketable) with 335 series following as a close second. . The PSNT result of 22.6 PPM of NO3-N indicated sufficient nitrogen was available to the plants.

Variety & Source	MARKETABLE FRUIT		UNMARKETABLE FRUIT		DISEASE SUSCEPTABILITY¹		
	(No./A)	(CWT/A)	(No./A)	(CWT/A)	PM	DM	GSB
Golden Gopher (Fedco)	1452	35	1271	15	S		L
Delicious 51PM(HighMowing)	3267	88	1634	26	L		S
Athena Hybrid (Fedco)	4538	174	726	17	L		S
Delicious 51 (Fedco)	2904	66	2904	32	S	S	S
Hannah's Choice (CU)	3267	102	2723	39	L		S
335 Series (CU)	3812	139	545	6	L		L

¹Severe-S,Moderate-M,Low-L

*Powdery Mildew = PM

*Downey Mildew = DM

*Gummy Stem Blight = GSB