

Evaluation of Specialty Melons for Direct Market Sales in Southeastern Indiana

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There is little actual diversity in the size, color etc of melons in the mass market today. Farmers seeking to establish a niche direct market may wish to consider producing and marketing melons of differing size, shape, color, flavor and/or texture to capture the imagination and market dollars of the consumer. While some of these melons may not have the qualities necessary to meet the stringent requirements of the mass market place (tolerance to shipping, long shelf life etc...) and may offer production challenges (not slipping at maturity, reduced size and overall yield, reduced disease tolerance etc) these shortcomings may in some cases be overcome by an increase in consumer interest and potential price at the market place.

The purpose of this trial is to assess the qualities of a number of melon varieties-cantaloupe and watermelon- which are thought to have qualities which will make them attractive to today's direct farm to market consumer. Melon production in the Ohio River Valley is often considered challenging at best...heavy soils, unpredictable rainfall and general lack of access to irrigation, high summertime humidity and related pest pressure are often cited as limiting factors to their culture. On the other hand the potential consumer base for a high quality melon with strong consumer appeal (farm market, roadside market, community farmers' market or for chef/restaurateur trade) in the region is potentially significant. Some of the varieties included in this trial are heirlooms of the past while others are new hybrids developed to meet the unique demands of this market niche. While melon qualities of consumer importance including average melon size, interior/exterior appearance and color, flesh color, texture and flavor are important indicators of melon desirability, observations were also recorded which indicated characteristics of the melon which have an impact on the ease/difficulty of production/marketing of the melon by the farmer.

It is important to understand that this trial and any data collected and presented are observational in nature and **do not** reflect standard replicated research protocol. It is the purpose of this trial to offer farmer and consumer alike a "snapshot" of the qualities of a number of melon varieties grown in one production season under one set of growing conditions and allow them the opportunity to assess for themselves whether or not these varieties may be desirable for their farm market or dinner table.

MATERIALS and METHODS

Melon Varieties- Seed provided by various seed companies

Soil and Soil Preparation- Bedford Silt Loam, 2-6% slope. Existing sod ripped, plowed and rotovated preplant. 4'IRT plastic mulch applied on 8' centers

Planting- Seed planted in plug trays in greenhouse at the Purdue Southwest Purdue Ag Center. Transplants held 3 weeks due to wet soil conditions prior to planting in field. Transplants hand planted through plastic mulch, 3 foot spacing in row, 8 foot spacing between rows, plants watered in with 15-16-17 water soluble fertilizer transplant solution approx 300ppm N, 10 plants per variety, June 9, 2003.

Fertilizer/Nutrition Management- Pre-plant application of 9-23-30 @ 500 # per acre. Agricultural lime applied equivalent to 5 tons per acre

Irrigation- None applied...adequate and timely summer rains

Weed Control- Sandea herbicide applied as over the top spray...nozzles over plastic removed and plugged, Cultivation of row middles 6/30.

Other Pest Control- Carbaryl / Chlorothalonil treatment at planting and again one week later. Thiodan/Bravo treatment thereafter at labeled rates.

Harvest and Data Collection-Data was collected on three scheduled harvest dates. No overall yield or average melon weights were recorded.

THANKS

We wish to express our sincere thanks to the Joe Huber Family, to William Kirshgessner and to the staff of the Southwest Purdue Ag Program for their assistance in the design and execution of this trial. On farm trials are an important means of assessing "real world" performance of plant varieties and consumer acceptance of them. Such trials require a lot of time and commitment of the host farm...we recognize and appreciate this assistance without which this trial would not have been possible.

It is also important to recognize the continued volunteer commitment of the many members of the Sunnyside Master Gardeners Association who are dedicated to the principle of Helping Others Grow!

PRODUCTION RESULTS and OBSERVATIONS

Variety	Co.	Plant Vigor*	Melon Size	Melon Shape**	Melon Exterior	Flesh Color	Over-all ***	Other Observations
Muskmelons								
French Orange	HR	4	5"	R	Med. Sutures green stripes	Deep orange	1	Excellent. Musky flavor. Very attractive, fine flesh quality
Gallicum	HR	1-2	6.5"-7"	0-R	Tan net over green-yellow	Light green	3	Fine flesh texture
Angel	HR	1	6.5" – 7"	R	Yellow, fine net	Off white/light green	3	Thin rind, firm/crisp flesh Very vigorous
HSR 4022	HL	2	6.5"	R	Mottled green yellow	Light green	2	Tan net. Interesting.
HSR 4036	HL	4	5.5"	R	Green, tan net	Light green	2	Edge burn of foliage
IHSR 4121	HL	5	5"	R	Tan/net	Bright. orange	1+	Juicy. Outstanding flavor. Thin rind. "Melt in your mouth" quality.
Spanish Golden Beauty	JS	3	9"	O	Bright yellow, ribbed/wrinkled	Cream-light green	2	High yield. Beautiful exterior. "Melt in your mouth," Honey dew texture. Sweet. Excellent shelf life
ISavor French Charentaise	JS	2	4-4.5"	R	Grey with green lobe separations	Dark orange	1	Crisp and firm. Sweet. Thin rind. Very attractive, small melon. High yield.
Tropical/Galla Passport	JS	Crop Failure						
IHoney Orange	JS	1	8"	R	Smooth Ivory	Pale orange-Salmon	1	Excellent. Honey flavor. Smooth exterior w/some cracking. Crisp, honeydew type.
Rayyan	JS	4	8.5"	O	Dark green/tan net. Matures yellow	Green-white with orange Seed cavity	3	Crisp flesh. Attractive exterior.
ISpanish Sugar Nut	JS	1	8"	O	Smooth Bright yellow	Light green-cream	1	Late. Crisp, honeydew type. Very sweet/flavorful.
Serenade	JS	1-2	4.5"-5"	R	White/yellow/net	Peach- orange	1-2	Slight musky flavor. White thin rind. Attractive; novel.
ISun Jewel	JS	3	6"	O	Gold/cream stripe	White	3-4	Crisp, cucumber-like. Very early/high yield. Thin flesh.
Scoop II	PA/PK	3	7.5"	RO	Tan-orange/tan net/some lobes	Salmon-Orange	2	Very thin rind. Not overly sweet; aromatic. Flavor falls a little short.
Gallicum	PA/PK	2	6-6.5"	R	Green-yellow/tan net	Light green	2	Good flesh flavor/texture.
Angel	PA/PK	1	6"	RO	Yellow with sutures	Light green		Fine crisp flesh. Good, sweet flavor. High yield.
Ambrosia	PA/PK	4	7"	RO	Green/fine tan net	Salmon	1	Thin rind. Fine texture. Sweet. Small seed cavity.

Variety	Co.	Plant Vigor**	Melon Size	Melon Shape***	Melon Exterior	Flesh Color	Ovall ****	Other Observations
Luscious Plus	PA/PK	2	6"	R	Green/Much fine netting	Orange	1	Very high quality. Sweet. Small seed cavity.
I/Aphrodite	FG	2	7-7.5"	R	Tan/net.	Orange	1-2	Attractive, firm flesh. Thick rind. Joe's favorite
I/Gallio	FG	2	6.5"	R	Tan net over green-yel	Light green	2	Juicy/sweet. Another of Joe's favorites
Minerva	FG	2	10"+	O	Tan net/pale green	Orange	3	Crisp and chewy. Sweet. Poor stand.
I/Sancho	FG	1	8-9"	O	Dark green/light green mottled	Light green	1	Sweet, crisp honeydew. Novel appearance. Good shelf life
Vicar	FG	1	6"	R	Green/finely netted	Light green	2	Sweet: slightly crisp. Juicy.
Jenny Lind Moses	SSE	4	4"	F	Tan net over yellow/green Slight rib	Green with orange blush	4	Novelty: sweet. Uniform production, lobes. Button on blossom end.
Caroe Creek Cobossal	SSE	2	8"	F	Green/tan net. Heavily lobed.	Light orange	3	High yield. Heavily lobed. Not highly flavorful. Novelty/squash like appearance.
Oka	SSE	3	4"	F	Green- orange Lobed	Orange.	4	Novelty; small, lobed. Aromatic
Orange Fleshed Honeydew	SSE	4	5-6"	R	Smooth Green-cream color	Orange	3	Attractive exterior. Solid, orange flesh.
Prescott Fond Blanc	SSE	1	5"	F	Tan mottled with green	Orange/green rind	5	"Warty" exterior. Heavy, thick rind. Lobed. Novel, squash like.
SVR 1461-1013	SM	4	8"	O	Tan/tan net. Lobed	Bright orange	2	Uniform exterior. Thin rind. Excellent flesh color. Flavor not as good as it looks.
ISVR 1461-1016	SM	2	8"	O	Tan net. Faint lobes.	Dark orange	1	Firm, sweet and crisp. Excellent flesh, taste, texture.
SVR 1461-1022	SM	3-4	9.5"	O	Tan net over cream? Lobes	Orange	2	Flavor does not match looks. Fine texture. Not sweet. Thin rind; large size.
ISVR 1460-4099	SM	4	6.5"	R	Tan net/tan.	Orange	1	Musky flavor. Thin rind. Good "meaty" texture.
Passport	ST	3	6.5-7"	R	Tan net. Yellow	Bright green	3-4	Good texture; flavor not as good.
Angel	ST	1	6-7"	R	Tan/net	Light green	3	Sweet
Odyssey	SU/SS	5						Poor stand.
Sundew	SU/SS	2	8-9"	R	Yellow. Smooth minor scarring	Light green	2-3	Crunchy, smooth and sweet to chew and fibrous.
Mistic	UG	2	8"	OR	Tan net over tan. Lobed.	Bright Orange	2	Good flavor, watery but sweet. Fibrous
IVL 3502	UG	3	9-10"	O	Tan net. Faint lobe.	Light orange	1-2	Thin rind. Musky flavor. Sweet and juicy.

Variety	Co.	Plant Vigor**	Melon Size	Melon Shape***	Melon Exterior	Flesh Color	Overall ****	Other Observations
Watermelons								
Moon & Stars	PA/PK	1	13-15"	R	Dark green/yellow spots	Red with white flecks	2	Very vigorous. Large number of seeds. Sweet Variable size
IPark's Lemon Ice	PA/PK	1	8.5-9"	R	Green/dark stripe	Clear bright yellow	1	Very attractive. Bright, attractive, sweet flesh. A favorite!
Everglade	PA/PK	1	8-9"	R	Solid dark green	Bright red	2	Sweet and seedless. Fine quality.
ISweetheart	PA/PK	1	9-10"	R	Smooth medium green	Red	2	Crunchy. Sweet. Excellent yield and quality. Seedless. Joe's favorite.
Imagination	FG	1	8-9"	R	Dark green	Light red	2	Smooth texture.
ISeedless Sangria	FG	1	13-14"	E	Dark green, light green stripe	Red	1	Sweet, crunchy. Seedless White immature seeds. A fine melon.
ISW6008	FU	1	9"	RO	Dark green, light stripes	Dark red	1	Excellent Quality, Sweet. Crisp, high yield. Seedless
Moon and Stars	SSE	1	11-12"	RE	Dark green, w/ lg & small yellow flecks	Pink/white	2-3	Fibrous. Sweet. Big, novel. Some hollow core. A bit grainy.
Blacktail Mountain	SSE	1	8"	R	Dark green	Dark red	1-2	Crisp/sweet/juicy.
Melitopolski	SSE	2	12-13"	R	Dark green w/alternating light green bands	Dark red	1	Sweet, excellent watermelon flavor. Distinctive Reddish/brown seeds.
Golden Midget	SSE	2	9"	E	Bright golden/yellow. Smooth.	Salmon/orange	4	Attractive color contrast. Poor flavor. Thin rind.
IOrangejlo	SSE	2	15"+	E	Light green with jagged dark stripes	Orange	2	Sweet; crunchy. Hollow heart. Yellow foliage. Novel, attractive.
IValdoria	SU/SS	1	7-8"	R	Dark green	Dark red	1	Heavy yield. Sweet; crunchy.
Vanessa	SU/SS	3	9"	R	Dark green	Dark red	1	Heavy yield. Sweet; crisp

*(As of 8/20/03)1-very vigorous, 5 - not vigorous

**O-Oval, R-Round, F-Flattened, E-Elongated

***1=Excellent, 2-Very Good, 3-Good, 4-Fair, 5-Poor

1—a preferred variety