

Round Eggplant Variety Trial, 1999-2000

Final Report

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Summary

A round and specialty eggplant variety trial was conducted at the UH Waimanalo Experiment Station. 31 varieties were grown for about 2 years, and harvested twice weekly for about 17 months, to evaluate their growth, yields, and fruit quality. Results are presented for 3-, 8-, and 17- month-yields to provide an indication of potential short-term and long-term yields for the varieties evaluated. Higher long-term yields may be an indication of the variety's adaptability to grow at low-elevation conditions in Hawaii. Standard varieties grown in Hawaii, and used as reference varieties for this trial included **Black Bell & Classic** (oval types), and **Waimanalo Long** and **Nitta x Waimanalo** (standard Japanese long-types). After looking at the results and variety descriptions, some growers may chose to try growing some of the varieties that didn't yield as well, but that have quality characteristics (color, shape, taste) sought after by specialty niche markets.

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Introduction

Seeds of 31 varieties were sown on 9 March on 72-cell Speedling trays at the Magoon Greenhouse in Manoa. The seedlings were transplanted in the field on 30 April. Plant spacing was 6 ft between rows and 3 feet between plants. Each plot consisted of 7 plants for a total length of 18 feet per plot. Only one replication was used per variety. For this reason, this study is considered only a demonstration of available varieties in the market, and the results are thus far from conclusive. As such, any varieties that may look promising from this trial, should first be grown on a small-scale to evaluate adaptability to the particular environmental conditions found on your farm.

Cultural practices were followed as is standard for commercial eggplant production in Hawaii. The crop was drip irrigated as needed and 3-ft weed mats were placed between the rows to reduce weed competition. Prior to planting 1 bag of chicken manure (80 lbs.) and 20 lbs. of bone meal were applied per 100 ft of row. Because the soils on these plots are very fertile and high in P & K, no additional fertilizer was applied until the early fruiting stages. Only supplemental applications of calcium nitrate were applied thereon once per month. The plants were pruned, and staked with single 4 ft-bars, to maintain a strong plant structure, and to promote new growth flushes.

Climate in Waimanalo Station:

Mean Annual Temperature: 75 F (24.6C), monthly range 70-80F (22-27C)

Mean annual rainfall 55 in (1380 mm). Annual Range= 500-1800 mm

Soil type- Vertic Haplustolls, derived from lava and coral

pH about 6.5, good base status, low organic matter

Soil analysis from these plots show high or very high P & K, and thus only N applications are recommended.

Best yielding varieties

Long-term yields (17 months)- produced over 130 lbs/plant of Grade A fruit.

Round/oval/black: **Sonata, Black Bell, and Bonica Tech.**

Long/oval purple fruit: **Neon 600.**

White: **Tango, Cloud Nine.**

Mid-term yields (8 months)- produced over 63 lbs/plant of Grade A fruit.

Round/oval/black: **Bonica Tech, Black Bell, F-85-468** (Tasca and Glory also did well).

Long/oval/purple: **Charming, Neon 600.**

White: **Tango**

Early Yields (3 months)- produced over 37 lbs/plant of Grade A fruit.

Round/oval/black: **Bonica Tech, Black Bell, F-85-468.**

Long/oval/purple: **Charming, Neon 600**

White: **Tango, (Cloud Nine was also among top)**

Specialty Varieties of Notice (not among top yielders but good quality)

Green Tiger (Laotian or Filipino market), **Little Finger** (Asian and Filipino market), and **Hara Began** (long, slender, green); and **Purple Blush** and **Violetta** (attractive purple/white coloration). **Improved Bonica** also had attractive round black fruits.

Notes on Early Yields

Most varieties were first harvested on 18 June (49 days after transplanting). Purple Rain, Slim Jim, Violetta, Sonata, and Italian were first picked a week later on 25 June (56 days after planting). Some varieties such as Purple Rain and the UH varieties (Waimanalo and Nitta x Waimanalo) were slow starters and didn't come into full production until a couple of weeks later. As a reference, yields obtained in a long eggplant variety trial conducted on Waimanalo in 1993 after about 6 months of harvest with the varieties Nitta x Waimanalo, and Millionaire (both grown in this trial) were 36.0 and 28.5 lbs. per pound of marketable fruit, respectively.

Acknowledgements: Thanks to Roger Corrales and the Waimanalo Staff for field maintenance and help in the harvests. Christine Crosby helped with data collection and analysis. Thanks to Trisha Wong for help in data input and data collection, and to the seed companies for providing seed samples, Gordon Lum (Island commodities, tel. 682-5844) for providing bone-meal samples, Wisdom Ind. for irrigation supplies. This project was funded in part by a vegetable crops commodity grant provided by the Hawaii Department of Agriculture.

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17 months of harvests: GROUPED FROM HIGHEST TO LOWEST GRADE A YIELDS

Table 1. Mean yields of Grade A fruit, Total Fruit weight, and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, picked from 17 months of harvests (138-141 pickings, twice weekly)

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Grade A (Grade A/plant)	Fruit No. (Gr A lbs/ft)
Tango	466,718.7	165.9 A	529,026.1	188.1 A	81.4 EBDACF	455.7 C	0.364
Neon 600	407,697.6	144.9 BA	447,885.4	159.2 BAC	85.2 EBDAC	290.3 HGEF	0.499
Sonata	402,545.8	143.1 BA	430,473.2	153.0 BDC	88.9 BA	187.0 IMJLK	0.765
Black Bell	385,425.1	137.0 BAC	447,556.8	159.1 BAC	82.5 EBDACF	188.0 IMJLK	0.729
Cloud Nine	372,977.2	132.6 BDC	461,931.1	164.2 BA	76.7 EDGF	251.5 IHGJF	0.527
Bonica Tech	372,025.4	132.3 BDC	431,295.8	153.3 BDC	81.4 EBDACF	179.9 NMJLK	0.735
Purple Rain	363,050.8	129.1 BDC	429,395.2	152.7 BDC	91.3 A	236.4 IHGJLK	0.546
F-85-468	346,455.4	123.2 BEDC	376,495.7	133.8 FBEDC	83.4 EBDACF	192.2 IMJLK	0.641
Tasca	345,322.2	122.8 BEDC	384,501.6	136.7 FBEDC	85.0 EBDACF	161.4 NMOLK	0.761
Charming	337,860.3	120.1 BEDC	357,991.1	127.3 FGEDC	87.8 BAC	312.7 DGEF	0.384
Glory	330,642.0	117.5 BEDC	371,730.8	132.2 FBEDC	79.1 EBDACF	163.0 NMOLK	0.721
Neon	323,831.7	115.1 BEDC	399,572.7	142.1 BEDC	82.5 EBDACF	226.0 IHMOLK	0.509
Improved Bonica	306,392.2	108.9 FEDC	349,854.9	124.4 FGEDH	75.9 EGF	143.1 PNMO	0.761
Classic	299,516.0	106.5 FEDC	320,740.8	114.0 FGEIH	82.3 EBDACF	140.1 PNMO	0.760
Violetta DF	297,583.4	105.8 FEDC	339,776.1	120.8 FGEDH	83.6 EBDACF	157.3 NMOLK	0.673
Sierra	292,805.5	104.1 FEDG	322,075.2	114.5 FGEIH	84.6 EBDACF	151.6 PNMO	0.687
Green Tiger	290,431.5	103.3 FEDG	296,001.0	105.2 FGIHJ	82.2 EBDACF	1012.1 A	0.102
Ghostbuster	285,196.2	101.4 FEDG	339,724.4	120.8 FGEDH	82.9 EBDACF	205.9 IHMOLK	0.492
Nitta x Waimanalo	267,739.7	95.2 FEHG	307,871.0	109.5 FGEIHJ	80.7 EBDACF	327.3 DEF	0.291
Snowy	264,255.2	93.9 FEHG	322,324.5	114.6 FGEIH	76.3 EGF	270.7 IHGEF	0.347
Purple Blush	255,852.8	91.0 FEHG	285,700.5	101.6 FGKIHJ	75.0 EGF	207.4 IHMOLK	0.439
Osterei	231,285.7	82.2 IFJHG	256,119.1	91.1 KIHJ	86.9 BDAC	391.9 DC	0.210
Italian DeFrank	217,895.3	77.5 IFJHG	293,053.6	104.2 FGIHJ	68.1 HG	155.1 NMOLK	0.500
Hara Began	212,684.7	75.6 IJHG	269,399.8	95.8 GKIHJ	77.5 EDGCF	352.5 DE	0.215
Slim Jim	192,224.4	68.3 IKJH	229,021.6	81.4 LKIJ	87.4 BAC	763.0 B	0.090
Little Finger	190,699.6	67.8 KJH	230,177.8	81.8 LKIJ	74.9 EGF	277.6 HGEF	0.244
Milonaire	166,723.3	59.3 KJ	223,699.1	79.5 LKJ	60.8 H	234.9 IHGJLK	0.252
Waimanalo Long	166,148.3	59.1 IKJ	225,039.4	80.0 LKIJ	68.8 HG	239.7 IHGJFK	0.246
Fullness	162,219.2	100.9 KJ	194,883.1	121.2 LK	68.6 HG	165.8 PNO	0.609
Madonna	159,216.1	56.6 KJ	197,794.8	70.3 LK	74.5 GF	86.4 PO	0.655
Blue Marble	124,359.7	44.2 K	149,504.8	53.2 L	61.7 H	70.2 P	0.630

17 months of harvests: CULTIVARS GROUPED IN ALPHABETICAL ORDER

Table 2. Mean yields of Grade A fruit, Total Fruit weight, and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, picked from 17 months of harvests (138-141 pickings, twice weekly)

Cultivar	Grade A		Total wt.		Grade A		Total wt.		Grade A		Fruit No.		Fruit size (Gr A lbs/fruit)
	(lb/Acre)	(lb/plant)	(lb/Acre)	(lb/plant)	(Percent)	(lb/plant)	(Percent)	(Grade A/plant)	(Gr A lbs/fruit)	(Grade A/plant)	(Gr A lbs/fruit)		
Black Bell	385,425.1	137.0BAC	447556.8	159.1BAC	82.47	EBDACF	188.0	IMJLK	0.729				
Blue Marble	124,359.7	44.2 K	149504.8	53.2 L	61.73	H	70.2	P	0.630				
Bonica Tech	372,025.4	132.3BDC	431295.8	153.3BDC	81.36	EBDACF	179.9	NMJLK	0.735				
Charming	337,860.3	120.1BEDC	357991.1	127.3FGEDC	87.84	BAC	312.7	DGEF	0.384				
Classic	299,516.0	106.5FEDC	320740.8	114.0FGEIH	82.254	EBDACF	140.1	PNMO	0.760				
Cloud Nine	372,977.2	132.6BDC	461931.1	164.2BA	76.692	EDGF	251.5	IHGJF	0.527				
F-85-468	346,455.4	123.2BEDC	376495.7	133.8FBEDC	83.387	EBDACF	192.2	IMJLK	0.641				
Fullness	162,219.2	100.9KJ	194883.1	121.2LK	68.566	HG	165.8	PNO	0.609				
Ghostbuster	285,196.2	101.4FEDG	339724.4	120.8FGEDH	82.853	EBDACF	205.9	IHMJLK	0.492				
Glory	330,642.0	117.5BEDC	371730.8	132.2FBEDC	79.119	EBDCF	163.0	NMOLK	0.721				
Green Tiger	290,431.5	103.3FEDG	296001.0	105.2FGEDH	82.162	EBDACF	1012.1	A	0.102				
Hara Began	212,684.7	75.6 IJHG	269399.8	95.8 KIHJ	77.496	EDGCF	352.5	DE	0.215				
Improved Bonica	306,392.2	108.9FEDC	349854.9	124.4FGEDH	75.855	EGF	143.1	PNMO	0.761				
Italian DeFrank	217,895.3	77.5 IFJHG	293053.6	104.2FGHJ	68.052	HG	155.1	NMOLK	0.500				
Little Finger	190,699.6	67.8 IKJH	230177.8	81.8 LKJ	74.929	EGF	277.6	HGEF	0.244				
Madonna	159,216.1	56.6 KJ	197794.8	70.3 LK	74.489	GF	86.4	PO	0.655				
Milonaire	166,723.3	59.3 KJ	223699.1	79.5 LKJ	60.838	H	234.9	IHGJLK	0.252				
Neon	323,831.7	115.1BEDC	399572.7	142.1BEDC	82.464	EBDACF	226.0	IHMJLK	0.509				
Neon 600	407,697.6	144.9BA	447885.4	159.2BAC	85.242	EBDAC	290.3	HGEF	0.499				
Nitta x Waimanalo	267,739.7	95.2 FEHG	307871.0	109.5FGEIHJ	80.667	EBDCF	327.3	DEF	0.291				
Osterei	231,285.7	82.2 IFJHG	256119.1	91.1 KIHJ	86.899	BDAC	391.9	DC	0.210				
Purple Blush	255,852.8	91.0 IFEHG	285700.5	101.6FGKIHJ	74.981	EGF	207.4	IHMJLK	0.439				
Purple Rain	363,050.8	129.1BDC	429395.2	152.7BDC	91.3A		236.4	IHGJLK	0.546				
Sierra	292,805.5	104.1FEDG	322075.2	114.5FGEIH	84.594	EBDACF	151.6	PNMOL	0.687				
Slim Jim	192,224.4	68.3 IKJH	229021.6	81.4 LKJ	87.41	BAC	763.0	B	0.090				
Snowy	264,255.2	93.9 FEHG	322324.5	114.6FGEIH	76.341	EGF	270.7	IHGEF	0.347				
Sonata	402,545.8	143.1BA	430473.2	153.0BDC	88.906	BA	187.0	IMJLK	0.765				
Tango	466,718.7	165.9A	529026.1	188.1A	81.388	EBDACF	455.7	C	0.364				
Tasca	345322.2	122.8BEDC	384501.6	136.7FBEDC	85.017	EBDACF	161.4	NMOLK	0.761				
Violetta DF	297,583.4	105.8FEDC	339776.1	120.8FGEDH	83.594	EBDACF	157.3	NMOLK	0.673				
Waimanalo Long	166,148.3	59.1 IKJ	225039.4	80.0 LKJ	68.75	HG	239.7	IHGJFK	0.246				

First 3 months of harvests: CULTIVARS GROUPED FROM HIGHEST TO LOWEST GRADE A YIELDS

Table 3. Mean yields of Grade A fruit, Total Fruit weight, and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, picked from first 3 months of harvests (25-28 pickings, twice weekly)

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Fruit No. (Grade A/plant)	Fruit size (Gr. A lbs/frt)
Tango	123247.1	43.8 A	132214.4	47.0 A	87.1 BA	123.1 CB	0.356
Bonica Tech	119669.2	42.5 BA	132529.5	47.1 A	93.3 A	54.1 HGFKJEI	0.786
Charming	118859.1	42.3 BA	125047.3	44.5 A	95.6 A	84.6 CFDE	0.500
Black Bell	118802.8	42.2 BA	132315.7	47.0 A	86.6 BA	53.4 HGFKJEI	0.791
Neon 600	108631.6	38.6 BAC	113863.5	40.5 BA	93.4 A	67.3 HGFDEI	0.574
F-85-468	106156.3	37.7 BDAC	111782.0	39.7 BA	94.5 A	56.4 HGFKJEI	0.669
Purple Blush	104727.4	37.2 BDAC	118802.8	42.2 BA	90.7 A	66.1 HGFDEI	0.563
Cloud Nine	102319.6	36.4 BDAC	110206.8	39.2 BA	90.0 A	89.9 CDE	0.405
Improved Bonica	101059.5	35.9 BDAC	111669.5	39.7 BA	90.0 A	38.7 HGKJI	0.928
Glory	99585.6	35.4 EBDAC	110634.4	39.3 BA	89.7 A	43.6 HGFKJI	0.813
Snowy	97796.6	34.8 EBDACF	103827.3	36.9 BDAC	92.3 A	103.6 CD	0.336
Neon	96288.9	34.2 EBDACF	98798.0	35.1 EBDAC	94.6 A	59.9 HGFKJEI	0.572
Tasca	96288.9	34.2 EBDACF	114572.3	40.7 BA	87.5 BA	41.6 HGFKJI	0.823
Purple Rain	92409.6	32.9 EBDAC	104111.0	37.0 BA	85.0 BAC	48.9 HGFKJEI	0.672
Sonata	88105.2	31.3 EBDAGCF	99357.3	35.3 BAC	87.7 BA	44.9 HGFKJEI	0.698
Sierra	84857.6	30.2 EBDHAGCF	94331.2	33.5 EBDAC	91.0 A	39.4 HGKJI	0.765
Classic	81000.8	28.8 EBDHAGCF	88063.4	31.3 EBDAC	83.6 BAC	37.3 HGKJI	0.772
Ghostbuster	75237.7	26.7 EBDHAGCF	90494.5	32.2 EBDAC	86.0 BA	56.0 HGFKJEI	0.478
Little Finger	72757.6	25.9 EBDHAGCF	82097.8	29.2 EBDACF	88.5 BA	98.1 CD	0.264
Violetta DF	69142.7	24.6 EBDHAGCF	77375.4	27.5 EBDACF	94.4 A	31.3 HKJI	0.786
Green Tiger	67755.5	24.1 EBDHAGCF	70512.1	25.1 EBDACF	89.1 A	228.0 A	0.106
Italian DeFrank	66603.9	23.7 EBDHAGCF	82191.8	29.2 EBDACF	83.5 BAC	41.7 HGFKJI	0.568
Nitta x Waimanalo	63007.5	22.4 EBDHAGCF	70782.1	25.2 EBDACF	84.8 BAC	72.4 HGFDE	0.309
Blue Marble	57651.8	20.5 EBDHAGCF	66529.1	23.7 EBDACF	87.3 BA	27.9 KJI	0.736
Osterei	51407.3	18.3 EBDHAGCF	57449.3	20.4 EDCF	85.1 BAC	79.4 GFDE	0.230
Milonaire	49888.4	17.7 EBDHAGCF	57876.9	20.6 EDCF	80.5 BAC	65.0 HGFDEI	0.273
Hara Began	47424.4	16.9 EBDHAGCF	57393.1	20.4 EDCF	86.0 BA	73.6 HGFDE	0.229
Waimanalo Long	41479.2	14.7 EBDHAGCF	63801.1	22.7 EBDACF	73.9 BC	60.0 HGFDEI	0.246
Fullness	36848.9	22.9 EBDHAGCF	48027.9	29.9 EDCF	71.3 C	35.2 KJ	0.650
Slim Jim	34665.4	12.3 EBDHAGCF	44235.4	15.7 EDCF	84.0 BAC	139.7 B	0.088
Madonna	33742.7	12.0 EBDHAGCF	38569.6	13.7 F	84.6 BAC	19.1 K	0.627

First 3 months of harvests: GROUPED IN ALPHABETICAL ORDER

Table 4. Mean yields of Grade A fruit, Total Fruit weight, and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, picked from first 3 months of harvests (25-28 pickings, twice weekly)

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Fruit No. (Grade A/plant)	Fruit size (Gr A lbs/fruit)
Black Bell	118802.8	42.2 BA	132315.7	47.0 A	86.6BA	53.4HGFKJEI	0.791
Blue Marble	57651.8	20.5 EJIDHGF	66529.1	23.7 EBDGF	87.3BA	27.9KJ	0.736
Bonica Tech	119669.2	42.5 BA	132529.5	47.1 A	93.3A	54.1HGFKJEI	0.786
Charming	118859.1	42.3 BA	125047.3	44.5 A	95.6A	84.6CFDE	0.500
Classic	81000.8	28.8 EBDHAGCF	88063.4	31.3 EBDAC	83.6BAC	37.3HGKJI	0.772
Cloud Nine	102319.6	36.4 BDAC	110206.8	39.2 BA	90.0A	89.9CDE	0.405
F-85-468	106156.3	37.7 BDAC	111782.0	39.7 BA	94.5A	56.4HGFKJEI	0.669
Fullness	36848.9	22.9 JIH	48027.9	29.9 EDF	71.3C	35.2KJ	0.650
Ghostbuster	75237.7	26.7 EJBIDHAGCF	90494.5	32.2 EBDAC	86.0BA	56.0HGFKJEI	0.478
Glory	99585.6	35.4 EBDAC	110634.4	39.3 BA	89.7A	43.6HGFKJI	0.813
Green Tiger	67755.5	24.1 EJIDHGF	70512.1	25.1 EBDGF	89.1A	228.0A	0.106
Hara Began	47424.4	16.9 JIHG	57393.1	20.4 EDCF	86.0BA	73.6HGFE	0.229
Improved Bonica	101059.5	35.9 BDAC	111669.5	39.7 BA	90.0A	38.7HGKJI	0.928
Italian DeFrank	66603.9	23.7 EJBIDHAGCF	82191.8	29.2 EBDACF	83.5BAC	41.7HGFKJI	0.568
Little Finger	72757.6	25.9 EJBIDHAGCF	82097.8	29.2 EBDACF	88.5BA	98.1 CD	0.264
Madonna	33742.7	12.0 J	38569.6	13.7 F	84.6BAC	19.1 K	0.627
Milonaire	49888.4	17.7 JIHGF	57876.9	20.6 EDCF	80.5BAC	65.0HGFDJEI	0.273
Neon	96288.9	34.2 EBDACF	98798.0	35.1 EBDAC	94.6A	59.9HGFKJEI	0.572
Neon 600	108631.6	38.6 BAC	113863.5	40.5 BA	93.4A	67.3HGFEI	0.574
Nitta x Waimanalo	63007.5	22.4 EJIDHGF	70782.1	25.2 EBDGF	84.8BAC	72.4HGFE	0.309
Osterei	51407.3	18.3 EJHGF	57449.3	20.4 EDCF	85.1BAC	79.4GFDE	0.230
Purple Blush	104727.4	37.2 BDAC	118802.8	42.2 BA	90.7A	66.1HGFEI	0.563
Purple Rain	92409.6	32.9 EBDAC	104111.0	37.0 BA	85.0BAC	48.9HGFKJEI	0.672
Sierra	84857.6	30.2 EJBIDHAGCF	94331.2	33.5 EBDAC	91.0A	39.4HGKJI	0.765
Slim Jim	34665.4	12.3 JI	44235.4	15.7 EF	84.0BAC	139.7B	0.088
Snowy	97796.6	34.8 EBDACF	103827.3	36.9 BDAC	92.3A	103.6CD	0.336
Sonata	88105.2	31.3 EBDAGCF	99357.3	35.3 BAC	87.7BA	44.9HGFKJEI	0.698
Tango	123247.1	43.8 A	132214.4	47.0 A	87.1BA	123.1CB	0.356
Tasca	96288.9	34.2 EBDACF	114572.3	40.7 BA	87.5BA	41.6HGFKJI	0.823
Violetta DF	69142.7	24.6 EJBIDHAGCF	77375.4	27.5 EBDACF	94.4A	31.3HKJI	0.786
Waimanalo Long	41479.2	14.7 JIH	63801.1	22.7 EBDGF	73.9BC	60.0HGFEI	0.246

First 8 months of harvests: GROUPED FROM HIGHEST TO LOWEST GRADE A YIELDS

Table 5. Mean yields of Grade A fruit, Total Fruit weight, and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, picked from first 8 months of harvests (68-71 pickings, twice weekly)

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Fruit No. (Grade A/plant)	Fruit size (Gr A lbs/fruit)
Bonica Tech	216,817.9	77.1 A	185,200.7	65.8 EBDAC	88.7 BA	100.9 IGLFKHJ	0.764
Black Bell	213,034.8	75.7 BA	230,267.0	81.9 BA	89.0 BA	102.0 IGLFKHJ	0.743
Tango	211,351.5	75.1 BA	197,648.4	70.3 BAC	81.8 BAC	219.6 B	0.342
Neon 600	185,988.2	66.1 BAC	130,862.2	46.5 EHDGIF	85.4 BAC	124.1 IGEFFH	0.533
Purple Blush	182,113.8	64.7 BAC	183,520.3	65.2 EBDAC	89.1 BA	136.7 IGEFFH	0.474
F-85-468	177,785.7	63.2 BAC	180,517.8	28.6 I	83.7 BAC	96.1 IGLMFKHJ	0.658
Tasca	176,148.1	62.6 BDAC	176,479.1	62.7 EBDACF	87.1 BAC	80.7 ILMKJ	0.776
Glory	175,531.9	62.4 BDAC	115,113.5	40.9 HGIF	88.5 BA	83.7 ILMKHJ	0.745
Charming	172,707.4	61.4 BDAC	153,152.8	54.4 EHDGCF	87.1 BAC	147.4 GEFD	0.416
Cloud Nine	171,959.9	61.1 BDAC	189,137.9	67.2 EBDAC	87.6 BAC	142.7 GEFFH	0.428
Improved Bonica	171,477.7	61.0 BDAC	166,339.4	59.1 EBDGCF	81.2 BAC	74.3 ILMKJ	0.821
Sonata	169,883.0	60.4 BDAC	220,847.1	78.5 BA	85.7 BAC	82.3 ILMKHJ	0.734
Neon	165,506.3	58.8 EBDAC	201,357.4	71.6 BAC	87.6 BAC	110.3 IGEFKHJ	0.534
Purple Rain	165,144.6	58.7 EBDAC	163,042.9	58.0 EBDGCF	90.6 A	98.1 IGLFKHJ	0.598
Violetta DF	157,040.1	55.8 EBDAC	106,289.5	37.8 HGI	91.3 A	79.6 ILMKHJ	0.702
Sierra	155,880.3	55.4 EBDAC	99,624.5	35.4 HI	88.9 BA	78.4 ILMKJ	0.707
Snowy	144,311.3	51.3 EDFC	194,447.4	69.1 BDAC	84.3 BAC	154.9 CEFD	0.331
Ghostbuster	140,839.2	50.1 EDFC	190,801.2	67.8 EBDAC	89.1 BA	111.1 IGEFKHJ	0.450
Classic	138,560.4	49.3 EDFC	178,292.5	63.4 EBDAC	81.8 BAC	70.4 ILMKJ	0.699
Little Finger	133,034.5	47.3 EDFC	76,727.5	27.3 I	84.2 BAC	194.9 CBD	0.243
Italian DefFrank	129,793.3	46.1 EGDFC	153,025.3	54.4 EHDGCF	78.3 BDAC	92.3 IGLMFKHJ	0.500
Osterei	116,902.4	41.6 EGDHF	205,331.6	73.0 BAC	87.8 BAC	204.4 CB	0.203
Nitta x Waimanalo	111,727.0	39.7 EGFH	126,368.7	44.9 EHGIF	77.1 BDC	137.9 IGEFFH	0.288
Green Tiger	111,555.8	39.7 EGFH	108,283.4	38.5 HGI	80.2 BAC	416.3 A	0.095
Hara Began	95,045.6	33.8 GFH	182,493.8	64.9 EBDAC	81.2 BAC	164.9 CEBD	0.205
Blue Marble	92,112.5	32.7 GFH	235,804.7	83.8 A	78.0 BDAC	52.6 LMK	0.623
Slim Jim	84,934.6	30.2 GFH	149,520.7	53.2 EHDGCF	86.2 BAC	360.1 A	0.084
Waimanalo Long	73,227.4	26.0 GH	173,539.0	61.7 EBDGCF	67.0 DE	113.4 IGEFFH	0.230
Madonna	73,122.8	26.0 H	88,982.7	31.6 I	75.1 DC	41.7 LM	0.623
Millionaire	64,760.6	23.0 H	181,078.1	64.4 EBDAC	54.8 F	92.6 IGLMFKHJ	0.249
Fullness	59,953.0	37.3 H	155,986.5	97.0 EHDGCF	59.1 FE	66.3 M	0.563

First 8 months of harvests: GROUPED IN ALPHABETICAL ORDER

Table 6. Mean yields of Grade A fruit, Total Fruit weight, and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, picked from first 8 months of harvests (68-71 pickings, twice weekly)

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Fruit No. (Grade A/plant)	Gr A Fruit size (lbs)
Black Bell	213034.8	75.7 BA	230267.0	81.9 BA	89.0 BA	102.0 IGLFKHJ	0.743
Blue Marble	92112.5	32.7 GFH	235804.7	83.8 A	78.0 BDAC	52.6 LMK	0.623
Bonica Tech	216817.9	77.1 A	185200.7	65.8 EBDAC	88.7 BA	100.9 IGLFKHJ	0.764
Charming	172707.4	61.4 BDAC	153152.8	54.4 EHDGCF	87.1 BAC	147.4 GEFD	0.416
Classic	138560.4	49.3 EDFC	178292.5	63.4 EBDAC	81.8 BAC	70.4 LMKJ	0.699
Cloud Nine	171959.9	61.1 BDAC	189137.9	67.2 EBDAC	87.6 BAC	142.7 GEFH	0.428
F-85-468	177785.7	63.2 BAC	80517.8	28.6 I	83.7 BAC	96.1 IGLMFKHJ	0.658
Fullness	59953.0	37.3 H	155986.5	97.0 EHDGCF	59.1 FE	66.3 M	0.563
Ghostbuster	140839.2	50.1 EDFC	190801.2	67.8 EBDAC	89.1 BA	111.1 IGEFKHJ	0.450
Glory	175531.9	62.4 BDAC	115113.5	40.9 HGIF	88.5 BA	83.7 ILMKHJ	0.745
Green Tiger	111555.8	39.7 EGFH	108283.4	38.5 HGI	80.2 BAC	416.3 A	0.095
Hara Began	95045.6	33.8 GFH	182493.8	64.9 EBDAC	81.2 BAC	164.9 CEBD	0.205
Improved Bonica	171477.7	61.0 BDAC	166339.4	59.1 EBDGCF	81.2 BAC	74.3 LMKJ	0.821
Italian DeFrank	129793.3	46.1 EDFC	153025.3	54.4 EHDGCF	78.3 BDAC	92.3 IGLMFKHJ	0.500
Little Finger	133034.5	47.3 EDFC	76727.5	27.3 I	84.2 BAC	194.9 CBD	0.243
Madonna	73122.8	26.0 H	88982.7	31.6 I	75.1 DC	41.7 LM	0.623
Millionaire	64760.6	23.0 H	181078.1	64.4 EBDAC	54.8 F	92.6 IGLMKHJ	0.249
Neon	165506.3	58.8 EBDAC	201357.4	71.6 BAC	87.6 BAC	110.3 IGEFKHJ	0.534
Neon 600	185988.2	66.1 BAC	130862.2	46.5 EHDGIF	85.4 BAC	124.1 IGEFHJ	0.533
Nitta x Waimanalo	111727.0	39.7 EGFH	126368.7	44.9 EHGIF	77.1 BDC	137.9 IGEFH	0.288
Osterei	116902.4	41.6 EGDHF	205331.6	73.0 BAC	87.8 BAC	204.4 CB	0.203
Purple Blush	182113.8	64.7 BAC	183520.3	65.2 EBDAC	89.1 BA	136.7 IGEFH	0.474
Purple Rain	165144.6	58.7 EBDAC	163042.9	58.0 EBDGCF	90.6 A	98.1 IGLFKHJ	0.598
Sierra	155880.3	55.4 EBDAC	99624.5	35.4 HI	88.9 BA	78.4 ILMKJ	0.707
Slim Jim	84934.6	30.2 GFH	149520.7	53.2 EHDGCF	86.2 BAC	360.1 A	0.084
Snowy	144311.3	51.3 EDFC	194447.4	69.1 BDAC	84.3 BAC	154.9 GEFD	0.331
Sonata	169883.0	60.4 BDAC	220847.1	78.5 BA	85.7 BAC	82.3 ILMKHJ	0.734
Tango	211351.5	75.1 BA	197648.4	70.3 BAC	81.8 BAC	219.6 B	0.342
Tasca	176148.1	62.6 BDAC	176479.1	62.7 EBDACF	87.1 BAC	80.7 ILMKJ	0.776
Violetta DF	157040.1	55.8 EBDAC	106289.5	37.8 HGI	91.3 A	79.6 ILMKHJ	0.702
Waimanalo Long	73227.4	26.0 GH	173539.0	61.7 EBDACF	67.0 DE	113.4 IGEFHJ	0.230

CULTIVARS GROUPED BY FRUIT TYPE (8 months of harvests)

Table 7. Mean yields of Grade A fruit, Total Fruit weight (marketable plus culls), and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station picked from June 1999 to Feb. 2000 (8 months of harvest, harvested 73 times).

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Fruit No. (Grade A/plant)	Gr. A fruit size (lbs)
Round/Oval deep Purple Fruit							
Bonica Tech	218023.7	77.5A	237310.7	84.4A	87.0BDAC	101.6FEG	0.76BA
Black Bell	215448.2	76.6A	237096.6	84.3A	87.4BDAC	103.3FEG	0.76BA
Glory	176739.3	62.8BAC	194720.9	69.2EBDAC	87.6BDAC	84.4FEG	0.74BAC
Tasca	176650.1	62.8BAC	198352.0	70.5BDAC	87.8BDAC	80.6FEG	0.79BA
F-85-468	175576.7	62.4BAC	187734.0	66.7EBDAC	82.4EBDAC	95.4FEG	0.72BDC
Sonata	172094.0	61.2BAC	193289.0	68.7BDAC	84.7EBDAC	83.1FEG	0.82BA
Improved Bonica	171477.1	61.0BAC	185905.5	66.1EBDAC	80.9EBDAC	74.4FEG	0.89A
Sierra	158289.9	56.3BDAC	170380.5	60.6A-F	89.9BAC	79.0FEG	0.71BDC
Classic	135727.6	48.3FBEDC	149023.9	53.0EDCF	78.9EBDC	70.1FEG	0.70BDC
Madonna	73522.3	26.1G	80961.4	28.8G	73.6EF	42.0FG	0.66BEDC
Millionaire	63092.0	22.4G	87024.6	30.9G	53.9H	92.9FEG	0.26K
Round lavender/purple or deep pink							
Purple Blush	180104.6	64.0BA	203724.7	72.4BAC	87.9BDAC	135.1FCEBD	0.47FIHG
Violetta DF	160356.8	57.0BDAC	174820.4	62.2EBDAC	92.1BA	81.6FEG	0.70BDC
Italian DeFrank	130394.5	46.4FBEDC	160247.1	57.0EBDCF	78.0EDC	92.7FEG	0.52FEG
Blue Marble	91377.8	32.5FGE	109990.1	39.1GF	75.5EDF	170.4CEBD	0.60FEIDC
Fullness	59953.3	37.3G	80412.3	50.0G	57.4GH	66.2G	0.58FEIDG
Long/Oval Purple/Lavender							
Neon 600	177349.2	63.1BA	195391.7	69.5BDAC	82.0EBDAC	121.7FCEGD	0.52FEG
Charming	173512.6	61.7BAC	189722.4	67.4EBDAC	85.3EBDAC	148.4CEBD	0.37JIHK
Purple Rain	170972.4	60.8BAC	185784.8	66.0EBDAC	93.5A	99.6FEG	0.57FEIDG
Neon	165305.9	58.8BDAC	183891.8	65.4EBDAC	86.4EBDAC	110.0FEGD	0.54FEG

Data analysis: Numbers followed by the same letter within each column are not statistically different according to Duncan's New multiple range test at a 95% confidence level (P<0.05).

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CULTIVARS GROUPED BY FRUIT TYPE, cont.

Table 7, continued. Mean yields of Grade A fruit, Total Fruit weight (marketable plus culls), and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, Summer 1999 (10-12 weeks of harvest, harvested 20-22 times)

Cultivar	Grade A (lb./Acre)	Grade A (lb./plant)	Total wt. (lb./Acre)	Total wt. (lb./plant)	Grade A (Percent)	Fruit No. (Grade A/plant)	Gr A fruit size (lbs)
White Oval/Round							
Tango	213764.4	76.0A	230464.2	81.9BA	81.6EBDAC	222.0B	0.36JIHK
Cloud Nine	174773.9	62.1BAC	193104.6	68.7EBDAC	86.0EBDAC	144.9CEBD	0.49FHG
Snowy	146320.7	52.0BDEC	157068.9	55.8EDCF	84.0EBDAC	157.0CEBD	0.33JIK
Ghostbuster	142646.3	50.7FBEDC	163922.9	58.3EBDCF	88.3BDAC	113.1FCEGD	0.44JIHG
Osterei	116500.5	41.4FGDEC	126971.0	45.1EGF	86.4EBDAC	203.9CB	0.29JK
Green Long & Round							
Green Tiger	109548.1	38.9FGDE	143039.8	50.9C-G	77.5EDC	408.9A	0.27K
Hara Began	95848.3	34.1FGE	114997.4	40.9GF	78.4EDC	166.3CEBD	0.22LK
Long purple and Little Finger							
Little Finger	133638.2	47.5FBEDC	161865.9	57.5EBDCF	82.7EBDAC	195.9CBD	0.27K
Nitta x Waimanalo	112128.6	39.9FGDE	135783.4	48.3EDGF	74.9EDF	138.3FCEBD	0.31JK
Slim Jim	84934.3	30.2FG	108471.7	38.6GF	83.6EBDAC	360.1A	0.09L
Waimanalo Long	73125.9	26.0G	106638.9	37.9GF	65.3GF	113.1FCEGD	0.25K

Data analysis: Numbers followed by the same letter within each column are not statistically different according to Duncan's New multiple range test at a 95% confidence level (P<0.05).

CULTIVARS GROUPED BY FRUIT TYPE- First 3 months of Harvest

Table 8. Mean yields of Grade A fruit, Total Fruit weight (marketable plus culls), and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, Summer 1999 (10-12 weeks of harvest, harvested 20-22 times)

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Fruit No. (No. A/plant)	Gr A fruit size (lbs)
Round/Oval deep Purple Fruit							
Black Bell	103935.8	37.0A	115640.4	41.1A	90.2BAC	46.0CD	0.803
Bonica Tech	94759.5	33.7AB	99586.4	35.4A-D	97.0A	41.9CD	0.805
Glory	88933.8	31.6ABC	94768.4	33.7A-E	95.6BA	37.3CD	0.848
F-85-468	87678.4	31.2ABC	91294.1	32.5A-F	97.2A	44.8CD	0.695
Tasca	79306.6	28.2A-E	93574.9	33.3A-E	88.4BAC	33.7D	0.836
Improved Bonica	77547.4	27.6A-E	80924.4	28.8A-G	97.2A	31.7D	0.869
Sierra	73198.0	26.0A-G	81472.5	29.0A-G	90.0BAC	33.2D	0.785
Sonata	69428.8	24.7A-F	79072.8	28.1A-F	91.0BAC	34.7CD	0.711
Classic	66913.3	23.8A-G	72378.2	25.7A-G	81.7BDC	30.4D	0.782
Millionaire	40789.3	14.5E-H	48392.0	17.2D-G	74.8D	54.8CD	0.264
Madonna	26512.2	9.4H	30729.0	10.9G	87.5A-D	14.6D	0.646
Round lavender/purple or deep pink							
Purple Blush	90259.8	32.1ABC	100311.3	35.7A-D	90.6BAC	54.8CD	0.585
Violetta	59897.3	21.3A-H	65322.0	23.2A-G	95.1BA	25.6D	0.833
Italian DeFrank	52141.9	18.5B-H	62300.2	22.1A-G	85.9A-D	31.9D	0.582
Blue Marble	47675.9	16.9C-H	55543.8	19.7C-G	85.3A-D	139.9B	0.121
Fullness (round blk)	29213.3	18.2HGF	38640.3	24.0EGF	74.9D	28.0D	0.649
Long/Oval Purple/Lavender							
Charming	105403.3	37.5A	111582.7	39.7AB	94.4BA	69.4BCD	0.540
Neon 600 (Cooks)	83920.9	29.8ABC	87541.0	31.1A-E	97.4A	53.1CD	0.562
Neon	78210.4	27.8A-E	80721.1	28.7A-G	97.6A	46.9CD	0.593
Purple Rain	69110.5	24.6A-E	77592.8	27.6A-F	86.3A-D	34.1CD	0.720

Continues...

CULTIVARS GROUPED BY FRUIT TYPE

Table 8, continued. Mean yields of Grade A fruit, Total Fruit weight (marketable plus culls), and Percent Grade A fruit of Eggplant Cultivars Grown at the UH Waimanalo Experiment Station, Summer 1999 (10-12 weeks of harvest, harvested 20-22 times)

Cultivar	Grade A (lb/Acre)	Grade A (lb/plant)	Total wt. (lb/Acre)	Total wt. (lb/plant)	Grade A (Percent)	Fruit No. (No. A/plant)	Gr A fruit size (lbs)
White Oval/Round							
Tango	100947.8	35.9AB	108709.6	38.6ABC	89.9BAC	101.6BCD	0.353
Cloud Nine	86449.6	30.7A-D	91117.3	32.4A-F	93.4BA	73.4BCD	0.419
Snowy	76902.1	27.3A-F	81322.2	28.9A-G	95.8A	82.8BCD	0.330
Ghostbuster	64189.7	22.8A-H	77432.5	27.5A-G	86.7A-D	46.4CD	0.492
Osterei	41558.4	14.8D-H	46809.6	16.6D-G	87.4A-D	63.7BCD	0.232
Green Long & Round							
Green Tiger	56604.7	20.1B-H	88491.7	31.5A-F	91.8BAC	218.3A	0.092
Hara Began	39595.9	14.1E-H	49558.9	17.6D-G	86.8A-D	58.1CD	0.242
Long purple and Little Finger							
Little Finger	61110.8	21.7A-H	68038.4	24.2A-G	92.8BA	84.6BCD	0.257
Nitta x Wam	48135.6	17.1C-H	53705.0	19.1D-G	91.9BAC	52.9CD	0.324
Waimanalo Long	31432.6	11.2E-H	52153.5	18.5B-G	78.3DC	43.1CD	0.259
Slim Jim	27236.3	9.7HG	34292.5	12.2GF	84.6A-D	110.4BC	0.088

Data analysis: Numbers followed by the same letter within each column are not statistically different according to Duncan's New multiple range test at a 95% confidence level (P<0.05).

Table 9. Growth evaluation of eggplant varieties at the UH Waimanalo Experiment Station, July 9, 1999 (70 days after transplanting; and 10-21 days after first harvest, depending on variety), and Cercospora damage index, Jan. 2000.

Cultivar	Plant height (inches)	Canopy width (in)	Vigor (1-10)	Pest Index (1-10)	Cercospora (Index 1-5)	Fruit Description	Fruith length (in)	Fruit width (in)	Comments
Black Bell	27.6	43.3	6	6	3	Round blk/purple	7.1	4.7	Low br, med strong growth
Blue Marble	39.4	27.6	4	8	3	Round purple, deep violet	5.0	5.4	Upright, weak & sparse growth
Bonica Impr	35.4	45.3	7	4	2	Oval black	0.0	0.0	Low br, weak, fallen branches
Bonica Tech	35.4	39.4	8	3	3	Round blk/purple	7.4	4.4	Low br, strong growth, somewhat upright
Charming	23.6	39.4	8	3	1	Long light purple	9.6	2.2	Low br, strong growth
Classic	39.4	43.3	7	6	4	Oval dark purple	5.5	3.3	Low br, weak, 1 plant collapsed
Cloud Nine	43.3	51.2	9	3	4	Oval white	4.7	3.5	Low br, strong growth
F-85-468	43.3	47.2	9	3	2	Round black	4.7	3.5	Low br, strong growth
Fullness	31.5	43.3	6	8	2	Small round black	7.1	3.5	Low br, medium weak growth
Ghostbuster	45.3	55.1	10	4	5	Oval white	5.4	2.3	Low br, weak, fallen branches, needs pruning
Glory	35.4	39.4	8	3	4	Round black	7.7	4.6	Low branch, strong growth
Green Tiger	35.4	39.4	8	3	2	Small green, striped	2.1	2.3	Low branches, strong
Hara Began	47.2	47.2	10	2	2	Long green	0.0	0.0	Low branches, strong, one plant collapsed
Italian	31.5	35.4	6	7	1	Round lavender	4.8	5.1	Low br, med strong growth, needs pruning
Little fingers	39.4	39.4	7	3	3	Purple little fingers	0.0	0.0	Low br, weak growth
Madonna	23.6	31.5	4	8	2	Oval, half-long, purple	0.0	0.0	Low branches, weak growth
Millionaire	27.6	35.4	3	9	2	Oval purple/blk	6.9	1.8	Upright, weak
Neon	51.2	51.2	9	4	4	Deep lavender oval	0.0	0.0	Low br, weak, fallen branches, needs pruning
Neon 600	47.2	49.2	10	3	5	Oval deep pink	7.7	3.1	Low branches, strong growth
Nit x Waim	39.4	55.1	9	3	3	Long purple	0.0	0.0	Upright, strong growth, some low branches
Osterei	35.4	39.4	5	7	4	Round white	2.9	2.3	Upright, weak & sparse growth
Purple blush	31.5	47.2	8	4	3	Round white/purple	4.0	3.7	Upright, strong growth
Purple rain	39.4	52.8	9	2	1	Oval purple, white stripes	7.0	3.9	Low branches, v/strong
Sierra	39.4	43.3	8	5	5	Oval purple	7.7	4.1	Low br, weak, fallen branches
Slim Jim	31.5	27.6	7	6	1	Slim purple	5.9	1.8	Upright
Snowy	35.4	47.2	8	2	5	Oval white, nice	6.5	2.1	Low br, strong growth
Sonata	43.3	47.2	9	4	3	Dark purple oval	7.1	3.1	Low br, fallen branches
Tango	43.3	51.2	8	6	4	Oval white	0.0	0.0	Low br, med strong grwth, needs pruning/staking
Tasca	39.4	66.9	8	5	3	Oval purple	6.4	3.9	Many low branches, needs pruning!
Violetta	43.3	47.2	7	8	2	Round purple, nice	4.8	4.8	Low branches, med weak
Waimanalo	39.4	35.4	7	7	3	Long purple	0.0	0.0	Upright, strong growth

Abbreviations: low br= low branches (in the lower canopy), an upright canopy is more desirable.

Index Values: Plant vigor index (ranges from 1-10) 10= best; Pest pressure damage index (ranges from 1-10), 10= worst damage; Pest damage was primarily from mites, thrips, and to a lesser degree from leafhoppers. Cercospora damage assessment was conducted on January 11, 2000 (ranges from 1-5), 0= no damage, 5= most severe damage (100%).

Table 10. Fruit dimensions of eggplant varieties grown at the UHM Waimanalo Experiment station, 1999. Mean of 4 representative fruits per variety.

Cultivar	Average Fruit Weight (ounces)	Average Fruit Weight (grams)	Fruit Length (inches)	Fruit Diameter (inches)
Green Tiger	2.0	56.5	1.4	1.5
Blue Marble	8.9	251.5	3.3	3.2
Bonica	12.8	362.5	5.0	3.5
F-85-468	10.5	297.0	4.4	3.3
Purple Rain	10.9	310.0	5.3	3.0
Slim Jim	1.9	53.8	3.9	1.3
Purple Blush	8.3	236.5	3.4	3.2
Snowy	6.8	193.5	6.5	2.0
Fullness	13.1	370.5	5.5	3.5
Sierra	10.0	282.5	4.7	3.3
Sonata	12.0	341.5	6.8	3.0
Black Bell	11.6	329.3	5.0	3.4
Millionaire	4.0	113.5	7.1	1.7
Classic	12.7	361.0	6.2	3.0
Ghostbuster	8.0	225.8	4.4	3.0
Italian (DeFrank)	8.5	241.0	3.8	3.5
Glory	10.2	289.8	5.1	3.1
Neon 600	9.5	269.3	6.8	2.7
Little Fingers	6.2	175.0	7.1	1.8
Violetta di Firenze	11.1	314.3	4.6	3.6
Bonica Improved	11.6	329.5	4.7	3.5
Harabegan	3.6	103.3	8.2	1.3
Tango	7.1	202.5	6.3	2.2
Nitta x Waimanalo	4.2	117.8	9.5	1.3
Charming	6.0	170.0	7.9	1.8
Waimanalo Long	3.3	94.5	10.9	1.2
Osterei	3.8	108.5	2.6	2.4
Cloud 9	7.0	198.5	5.4	2.4
Neon	7.9	223.3	5.9	2.5
Madonna	8.8	249.8	5.3	2.7

Table 11. Final growth evaluation of eggplant varieties and Cercospora damage index at the UH Waimanalo Experiment Station, October 19, 2000, about 16 months after first harvest. Index levels, for plant growth 1= weakest, 10= best; For insect and disease, 1= least damage, and 10= most/worst damage. Numbers in **bold**, within each column, indicate those varieties that performed best, for that particular variable.

Cultivar	Number of plant Left per plot	Plant Vigor Index (10= best)	Insect damage Index (10=worst)	Cercospora Index (10=worst)	Overall Growth /Assessment (10= best)	Comments
Blue Marble ¹	1 (14%)	2	7	3	3	high nematodes/verticillium area? ¹
Osterei ¹	2 (28%)	4	6	3	4	
Slim Jim ¹	7 (100%)	4	8	4	6	
Purple Blush ¹	2 (28%)	3	6	6	4	
Purple Rain	7 (100%)	9	6	3	9	good healthy growth
Violetta	7 (100%)	8	3	2	9	Growth looks among best today
Neon 600	7 (100%)	7	4	2	8	Growth looks among best today
Green Tiger	3 (42%)	6	3	1	6	Just pruned back, very vigorous ,tallplants
Glory	5 (71%)	7	4	3	6	
Imp. Bonica	6 (86%)	6	4	3	6	
Sierra	7 (100%)	8	2	3	8	Growth looks among best today
Tasca	4 (57%)	6	4	2	5	
Charming	7 (100%)	5	8	4	5	High insect damage
F-85-468	4 (57%)	7	4	5	6	
Cloud 9	6 (86%)	6	5	3	6	
Fullness	3/4 (75%)	5	7	3	4	
Ghostbuster	6 (86%)	8	2	3	7	
Sonata	7 (100%)	9	3	2	9	Growth looks among best today
Classic	4 (57%)	7	4	3	7	
Little Fingers	4 (57%)	7	3	2	8	two remaining plants look very good
Snowy	4 (57%)	10	4	4	9	Growth looks among best today, vigorous growth
Neon	7 (100%)	9	3	3	9	Growth looks among best today
Madonna	4/6 (67%)	8	6	6	6	The plants look good, disease susceptible?
Tango	7 (100%)	10	3	4	10	v/ vigorous and uniform growth
Millionaire	4 (57%)	8	6	3	8	Looks very good, made a strong recovery from earlier
Black Bell	5 (71%)	10	5	2	9	
Harabegan	4 (57%)	6	7	3	6	Growth declined, but earlier was among most vigorous
Waimanalo	4 (57%)	8	4	3	7	
Nitta x Waim.	6 (86%)	9	3	3	9	
Italian	7 (100%)	9	2	2	10	Looks very good
Bonica	5 (71%)	7	5	3	8	

¹Note: Plants from this plot were located in an area likely infested by high nematode populations. However, we can not make an assessment to tell whether this variety was more susceptible to nematodes than other the other varieties in this trial. To prevent bias we assume that all varieties were equally susceptible to nematodes or soil-borne disease infestations.

Eggplant Variety Description

- Black Bell (Willhite)** Standard oval or globular variety recommended in Hawaii, Florida (1987), and Georgia. Fruit: 68 days, Round oval-shaped, glossy, deep purple black color; growth; tolerant to TMV.
- Blue Marble F1 (Burpee)** fruit: 62 days, originally from Italy. Deep-violet color, the fruit is white near the stem with white flesh very mild and delicious, round about size of a grape-fruit, purplish leaves. growth: resistance:
- Bonica F1 (Technisem)**- Early, 60-75 d, oval, deep purple, 300-400 g (10-14 oz), green calyx, TMV, CMV.
- Bonica Improved (Evergrow)** fruit med. early maturing, fruit glossy, long egg shaped, 400-530 grams (14-19 oz); black purple color with green calyx; good for shipping; uniform; high yield growth: med. tall plant; resistant to TMV.
- Charming (Known You Seed)** fruit: 55 days, purple redish fruit, attractive appearance and luster, 230 gr per fruit (8 oz), tender white flesh; med. Early, 2-3 fwrs per node; growth: very well branched resistance.
- Classic F1 (Harris Moran)** Standard deep oval or teardrop variety recommended in places such as Hawaii, Florida, and N. Carolina. Fruit; early mid-season, elongated oval, glossy black purple; fancy fruit appearance; good luster to fruit color; performance limited in winter production areas; growth: med. tall; upright; resistance:
- Cloud Nine (Petoseed).** NA
- F-85-468 (Known You),** NA.
- Fullness (Known-You)** fruit; sphere shaped eggplant, has a silky smooth and uniform appearance; color almost black, pale green flesh, and violet calyx and blossom; vigorous and average early, growth; vigorous and average earliness;
- Ghostbuster F1 (Harris Moran)** A white variety recommended for production in Wisconsin. Fruit; mid-season, white, round oval; med.-small fruits; sweeter flavor than dark skinned eggplants. growth; medium; Sturdy plants, provide a dense foliage cover.
- Glory (Evergrow)** NA
- Green Tiger (Cook's),** small round golf-sized fruit with attractive white stripes.
- Harabegan (Willhite)** fruit; elongated shape, shinning green fruits are borne in bunches; hard and bear less seeds; fruits when boiled do not form paste.
- Little Fingers (Harris Moran)** 68 days, Recommended for production in N. Carolina and in Ohio. Fruit; glossy black; oriental type but with green calyx; very productive; fruits borne in clusters of 5-10 fruits; growth; medium; a specialty; dense foliage canopy; also used for mini (baby) vegetable market.
- Madonna F1 (De Ruiter)** fruit; half long violet; med.; excellent fruit quality both in shape and colour growth: size med. vigourous; open plant; all crops both indoor and outdoor; easy setting and early yielding.
- Millionaire (American Takii)** Extra early, Long shape, brilliant black, purple calyx, 200 gr in weight, extra early, finest long black, upright, good for greenhouse and open field growing. Upright habit. For cooking and pickling.

- Neon F1 (Shamrock)** fruit; tear drop shaped, light purple; strong calyx attachment; high yielding; very attractive for the specialty market; fruit: growth: resistance: tolerant to vt.
- Neon 600 Hybrid (Cook's)** Pink variety recommended for production in Wisconsin. Beautiful dark pink, almost cylindrical, just over 60 days after transplanting, abundantly borne and strong, bushy plants. Tender and totally bitter free.
- Nitta/Waimanalo F1 (UH)** Standard hybrid UH Japanese long-eggplant.
- Osterei Hybrid (Cook's)** White, especially productive and yields handfuls of small oval white fruits, great for grilling or slicing. Good container variety too, and for small gardens..
- Purple Blush (Burpee)** 62 days, fruit unique color; sweeter than other eggplants, oval 6" long, 4 1/2" across; pearly white skin blushed with lavender.
- Purple Rain (Burpee)** 66 days, fruit wine-purple color streaked with creamy white; the white flesh is almost seedless and mild, never bitter, sweet taste and large.
- Sierra (Evergrow)** fruit med. maturing; black purple fruit with green calyx; growth easy planting tall plant; resistance resist to tmv
- Slim Jim (Cook's)** For market to sell baby vegetables to specialty markets. Lavender to purple fruits borne in clusters close to the main stem, and color up while still the size of a peanut. Great as an ornamental potted plant for patio gardeners.
- Snowy F1 (Harris Moran)** , very uniform, fruit is white with firm flesh and long cylindrical shape, 7-8 in long, 2.5 in diameter. Released by Ferry Morse in 1995.
- Sonata F1 (Harris Moran)** fruit; mid-season, elongated oval, glossy black purple; premium; fancy fruit; sets fruit under cool conditions; growth; tall sturdy upright.
- Tango F1 (De Ruiter)** White variety recommended for production in Wisconsin. premium crop, fruit; long cylindrical, white.
- Tasca F1 (Vilmorin, also see Twilley)** fruit: oval-elongated, highly productive over a long season; excellent fruit appearance; shiny dark purple/black fruit; bright green spineless calyx. Firm flesh with slow seed development; growth; canopy is vigorous with good foliage; highly productive; has good setting under cool conditions.
- Violetta di firenze (Cook's)** Oblong to round fruits, rich lavender, sometimes striped with white. Great for stuffing or a centerpiece.
- Waimanalo Long (UH)** Standard open-pollinated UH Japanese long eggplant. Released in 1972.

DISEASE CODES:

F1 (in front of variety name)= hybrid variety.

A,Al: alternaria stem canker

CMV: cucumber mosaic virus

F1 (under disease section):

 fusarium wilt (race 1)

F2: fusarium wilt (race 2)

V,Vt: verticillium wilt

T,TMV: Tobacco mosaic virus

St: stemphylium (grey leaf spot)

N,RN: root knot nematode

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