

# 2005 Zucchini and Yellow Squash Variety Trial

Chuck Bornt and Ted Blomgren, CCE Capital District Vegetable Program

Green and yellow squash continue to be very important crops for growers in the Capital District. In general, growers here like a medium green, straight zucchini and a light to medium yellow, straight yellow or summer squash. The most popular zucchini varieties grown here are Zucchini Elite and Spineless Beauty and the most popular yellow is MultiPick, with Fortune a close second and Sunray increasing in popularity due to its disease resistance over the last several years. As with most vegetable crops, we see more and more varieties to choose from in the seed catalogs especially with the development of disease tolerant lines. Very few variety trials have been done with these crops so in 2004 our program decided to evaluate 14 zucchini's. In 2005 we continued our zucchini evaluation first by eliminating entries that we felt were not commercially acceptable and adding a few new ones for a total of 13. In 2005 we added 13 yellow squash varieties to the trial. Information provided in this article is a summary for two years of zucchini trials and first year observations of yellow squash.

The zucchini and yellow squash were trialed together at the Wertman Farm in Melrose, NY, Rensselaer County. The Wertman's also hosted the 2004 Zucchini trial and are wholesale vegetable and greenhouse growers and direct seed 20 – 30 acres of zucchini and yellow squash each year on bare ground. In order for us to establish acceptable stands, these trials (both 2004 and 2005) were seeded in the greenhouse and transplanted into bare ground that had been plowed, disked and perfected, with a 300 pound per acre rate of 10-10-10 broadcasted. A water-wheel transplanter was used to plant the trials into bare ground. Weed control was accomplished through the use of recommend herbicides and cultivation. An additional 40 lb/acre rate of nitrogen was sidedressed both years just prior to the first blossom emergence. Cucumber beetle and other insect pests were controlled with conventional insecticides and weekly applications of fungicides were applied with the onset of powdery mildew. There was no irrigation used at all in both years. 2004 was more of a normal year for us in Eastern NY, and plants did not appear to suffer any drought stress. 2005 was the opposite, with one of the hottest and driest summers on record with less than a half-inch of rain recorded for August.

## Methods and Results:

**2004:** In 2004 only zucchini were trialed. Seeds were planted in the greenhouse on May 27, 2004 and transplanted into the field on June 28, 2004. Plots consisted of 15 plants replicated twice, spaced 24" in row on 60" centers. Harvest commenced on July 30 with harvests happening every other day and ended on September 1.

**2005:** Seeds of both zucchini and yellow squash were planted in the greenhouse on May 31, 2005 and transplanted into the field on June 20, 2005. Plots consisted of 12 plants replicated twice, spaced 24" in row on 60" centers. Harvest began on July 27 and continued every other day and until August 22, 2005.

## Zucchini:

The data is broken out into early marketable yields and total marketable yields. Early marketable yields represent the first 4 harvests of the season for both years and can be found in Table 1 for 2004 and Table 2 for 2005. In 2005, yields from the earliest harvest dates of July 20 and 22 were combined. Total marketable yield for 2004 and 2005 zucchini trials, in terms of fruit number and weight and average size for both can be found in Table 3. Unmarketable fruit (misshaped, scarred etc.) and oversized fruit (fruit weighing over 1 pound) can also be found in Table 3. Color was ranked on a scale of 1 to 5 with 1 being very light green to 5 being very dark green to black. Average length (not including stem) and diameter (from center of fruit) were taken from marketable fruit only and can be found in Table 3. Table 4 includes more information about the overall appearance of the fruit and in some cases the plant. In 2005 a "Disease-Rating" category

was added to include powdery mildew (PM) tolerance and virus resistance. Because of a severe early season outbreak of Downy Mildew (DM) in 2005, this disease was also added as part of our disease rating. Disease rating was done once on August 22, and is an average of both replicates in the trial. It is based on a scale of 1 to 5 where 1 is very low disease severity and 5 is heavily infested.

### **Yellow Squash:**

The yield results for the 2005 yellow squash results can be found in Table 5 and 6. As with the zucchini information, yields from the first 4 harvests can be found in Table 5. In 2005, yields from the earliest harvest dates of July 20 and 22 were combined. Information reported in Table 6 includes total marketable fruit number and weight, unmarketable fruit and oversized fruit. This table also includes a color range category, which is based on a scale of 1 to 5 where 1 is very light yellow to almost white and 5 is very dark yellow. Average length and two average diameters are also reported in Table 6. We decided that with yellow squash, two diameters needed to be taken: the first one reported is the average diameter through the neck region (stem end) while the next column reports the diameter at the widest part of the squash (blossom end). We feel this information can be used in the following way: diameters that are closer to one another indicate that the fruit is more cylindrical or similar in diameter through its whole length. Diameters that are very different from one another indicates that the fruit tends to thicken or become more bulbous, effecting the overall appearance of the fruit. More information on overall appearance and other comments about fruit type can be found in Table 7. A disease rating was done once on August 22, and is an average of both replicates in the trial. It is based on a scale of 1 to 5 where 1 is very low disease severity and 5 is heavily infested.

**Conclusions:** There are certainly lots of choices out there when it comes to zucchini and yellow squash varieties. These trials we hope let you see a few of your favorites and a few new ones and how they compare. Everyone's market for squash is different and as you read through our results, we hope that may be you can distinguish which ones fit your needs. If you want our experiences or recommendations, here they are: We still feel that Zucchini Elite and Spineless Beauty are top performers in fruit type and yields for zucchini. However, some new entries caught our attention including Cashflow (our top choice for newcomers in 2004, but variable in 2005), Payroll (excellent in 2004, variable in 2005), Wildcat, Lynx and Radiant. Unfortunately, Cashflow and Payroll that looked excellent in 2004 trials, had both replicates placed on the end of the fields in 2005, where it most the droutiest as did Zucchini Elite. Wildcat and Lynx are very attractive long slender fruit that when put together, are hard to tell apart. Overall though, I think Wildcat has the more consistent shape and better uniformity then Lynx. If you're looking for a darker variety, Agriset 843 had a very attractive fruit shape in my opinion, but was one of the first to show powdery mildew.

In 2005 we dropped many of the darker types because many of them were too dark for what the market is looking for, and many of them had very unattractive fruit shapes. Independence II and Declaration II although lighter green in color, were very unattractive and unproductive. Zucchini 718 in my opinion, was the least attractive during both years of trial and was one that developed powdery mildew very early in the season.

Although we have only evaluated yellow squash for one year, there were several fruit that caught our attention. Cougar in particular was very attractive. Sunray was also very attractive and would be another one we would recommend trying. MultiPick continues to deliver reliable results. Viruses came in early and had a negative impact on yields and fruit quality. Varieties such as Amber Pic, Enterprise, Daisy and Sunray were no longer worth picking after August 15, due to nearly 100% virus infection on the fruit. Several varieties such as Cougar, Conqueror III and Lioness showed excellent virus resistance and some fungal resistance.

One overall comment about the yellow squash that can be made is that many of these new lines produce very large plants compared to standards like MultiPick. They also tend to have more spines on the leaves and leaf stems, which tend to scar some of the fruit as you are picking. Another trend we noticed is that breeders are breeding for much longer fruit. These longer fruit can be attractive, but I think they are not typical of what most consumers have in mind when they think of yellow squash.

We hope you find this information useful and if you have any questions, feel free to give me a call at 518-859-6213 or drop me an email at cdb13@cornell.edu. As always we encourage growers to try a couple of new varieties each year to see how they perform on your soil types and management. However, we do not recommend that you switch entirely or plant a majority of your crop to a variety you have not seen on your farm before. Good luck and we wish you much success in the 2006 growing season.

**Table 1: 2004 Early Zucchini marketable fruit number, yield and average fruit size through the first four harvests.**

Variety	Days to Harvest	Company	Harvest Date												Total		
			30-Jul-04			4-Aug-04			6-Aug-04			9-Aug-04			Marketable Fruit		
			No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)
Cashflow	45	Rupp	19	10.3	8.7	6	4.0	10.5	7	3.8	8.6	18	8.8	7.8	50	26.8	8.6
Declaration II	40	Rupp	3	2.0	10.4	4	2.7	10.8	5	2.9	9.1	4	2.0	8.0	16	9.5	9.5
Green Eclipse	44	Seedway	6	3.9	10.3	4	2.5	10.0	5	2.4	7.5	3	1.3	6.9	18	10.0	8.9
Independence II	41	Rupp	0	0.0	0.0	0	0.0	0.0	1	0.6	8.8	0	0.0	0.0	1	0.6	8.8
Jaguar	52		0	0.0	0.0	2	1.6	12.8	3	1.4	7.5	6	2.5	6.7	11	5.5	8.0
Justice III	40	Rupp	10	5.1	8.1	3	0.7	3.7	13	6.1	7.4	23	11.3	7.9	49	23.1	7.5
Lynx	46-51	Seedway	5	2.4	7.7	2	1.3	10.4	8	3.1	6.2	17	9.5	8.9	32	16.3	8.2
Payroll	44	Siegers	2	1.0	8.0	2	1.1	8.8	8	3.6	7.1	3	1.7	9.1	15	7.4	7.8
Raven	43	Rupp	1	0.2	3.2	3	5.7	30.4	0	0.0	0.0	4	1.5	6.0	8	7.4	14.8
Revenue	44	Rupp	4	1.6	6.4	6	3.7	9.9	19	9.2	7.7	23	12.3	8.5	52	26.8	8.2
Spineless Beauty	50	Rupp	11	4.8	7.0	9	5.2	9.2	8	3.1	6.1	9	4.2	7.4	37	17.2	7.4
Tigress	49	Harris Seeds	1	0.6	9.6	7	5.7	12.9	10	6.1	9.7	11	6.1	8.8	29	18.4	10.1
Zucchini 718	45	Seedway	0	0.0	0.0	0	0.0	0.0	2	1.1	8.4	6	3.4	8.9	8	4.4	8.8
Zucchini Elite	48	Harris Seeds	7	3.2	7.3	5	3.4	10.7	11	7.7	11.1	11	6.9	10.0	34	21.1	9.9

**Table 2: 2005 Early Zucchini marketable fruit number, yield and average fruit size through the first four harvests.**

Variety	Days to Harvest	Company	Harvest Date												Total		
			20 & 22 Jul-05*			25-Jul-05			27-Jul-05			29-Jul-05			Marketable Fruit		
			No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)
Agriset 843	44	Seedway	0	0.0	0.0	0	0.0	0.0	8	5.6	11.2	12	7.6	10.1	20	13.2	10.6
Bobcat	51	Stokes	6	3.8	10.1	6	4.8	12.8	6	2.6	6.9	7	6.3	14.4	25	17.5	11.2
Cashflow	45	Rupp	0	0.0	0.0	0	0.0	0.0	5	3.0	9.6	8	7.4	14.8	13	10.4	12.8
Emperor's Jade	48	Meyer Seed	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	3	1.4	7.5	3	1.4	7.5
Justice III	40	Rupp	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Lynx	46-51	Seedway	11	8.8	12.8	6	4.8	12.8	15	8.8	9.4	12	8.6	11.5	44	31.0	11.3
Magnum	45	Seedway	0	0.0	0.0	3	2.0	10.7	0	0.0	0.0	3	4.2	22.4	6	6.2	16.5
Payroll	44	Seigers	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Radiant	47	Stokes	14	10.4	11.9	4	2.6	10.4	3	1.4	7.5	15	10.2	10.9	36	24.6	10.9
Spineless Beauty	50	Rupp	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	5	3.8	12.2	5	3.8	12.2
Tigress	49	Harris Seeds	2	1.0	8.0	0	0.0	0.0	4	2.6	10.4	6	4.0	10.7	12	7.6	10.1
Wildcat	46	Seedway	2	1.0	8.0	3	2.8	14.9	7	4.8	11.0	13	10.2	12.6	25	18.8	12.0
Zucchini 718	45	Seedway	0	0.0	0.0	0	0.0	0.0	1	0.4	6.4	1	0.4	6.4	2	0.8	6.4
Zucchini Elite	48	Harris Seeds	0	0.0	0.0	0	0.0	0.0	1	0.4	6.4	2	0.8	6.4	3	1.2	6.4

**Table 3: Total fruit yields, color descriptions, lengths, and diameters in 2004 and 2005 zucchini variety trials.**

Variety	Days to Harvest	Company	Disease Resistance	Trial Year	Marketable Fruit			Unmarketable Fruit			Oversized Fruit			Color range	Av length (in)	Av diameter (in)
					No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)			
<b>Agriset 843</b>	44	Seedway		2005	132	104.2	12.6	3	1.6	8.5	19	28.5	24.0	4.0-5.0	7.4	2.0
<b>Bobcat</b>	51	Stokes	ZYMV, WMV II, PRSV	2005	159	119.6	12.0	16	12.8	12.8	22	35.0	25.5	3.0-5.0	9.9	2.1
<b>Cashflow</b>	45	Rupp	ZYMV	2004	240	157.1	10.5	38	23.3	9.8	13	26.9	33.1	2.5-3.5	8.1	1.8
				2005	57	40.4	11.3	23	13.6	9.5	3	4.2	22.4	3.5-4.5	8.2	1.8
<b>Declaration II</b>	40	Rupp MeyerSeed	WMV, ZYMV	2004	90	61.1	10.9	23	13.5	9.4	8	17.4	34.8	3.0-4.0	8.1	1.2
<b>Emperor's Jade</b>	48	International		2005	81	62.6	12.4	9	6.6	11.7	28	49.4	28.2	3.0-5.0	7.4	1.6
<b>Green Eclipse</b>	44	Seedway		2004	113	73.4	10.4	25	20.2	12.9	9	16.0	28.4	3.0-5.0	7.5	2.0
<b>Independence II</b>	41	Rupp	WMV, ZYMV	2004	90	61.4	10.9	43	28.9	10.8	8	16.7	33.3	2.75-4.0	8.0	2.0
<b>Jaguar</b>	52		WMV II, ZYMV	2004	85	52.7	9.9	27	17.4	10.3	9	19.4	34.5	3.5-5.0	8.0	1.7
<b>Justice III</b>	40	Rupp	WMV, ZYMV, PM tol., CMV	2004	153	94.5	9.9	52	34.6	10.7	18	42.4	37.7	3.0-4.1	7.9	1.8
				2005	6	5.0	13.3	12	11.2	14.9	8	12.0	24.0	4.0-4.4	no data	no data
<b>Lynx</b>	46-51	Seedway	ZYMV, WMV II, PM, PRSV	2004	193	130.0	10.8	33	24.7	12.0	27	64.5	38.2	2.0-3.4	8.6	1.8
				2005	188	158.4	13.5	17	10.6	10.0	35	62.2	28.4	3.0-5.1	7.8	1.8
<b>Magnum</b>	45	Seedway	ZYMV, WMV II	2005	85	55.6	10.5	10	6.6	10.6	20	33.6	26.9	4.5-5.1	7.4	1.9
<b>Payroll</b>	44	Seigers	ZYMV, WMV II, PM	2004	89	63.7	11.5	18	12.8	11.3	15	34.5	36.8	2.25-4.1	8.5	1.9
				2005	46	34.0	11.8	14	9.4	10.5	8	13.2	26.4	3.0-4.4	7.8	1.9
<b>Radiant</b>	47	Stokes	intermediate resistance to PM, CMV, ZYMV	2005	157	127.6	13.0	10	7.8	12.5	18	34.4	30.6	3.5-5.0	8.6	2.0
<b>Raven</b>	43	Rupp		2004	114	79.3	11.2	34	17.7	8.3	8	15.0	30.0	4.0-5.1	7.7	1.8
<b>Revenue</b>	44	Rupp	ZYMV, CMV, WMV	2004	227	135.7	9.6	45	30.2	10.7	10	20.6	32.9	2.5-3.4	7.7	1.7
<b>Spineless Beauty</b>	50	Rupp		2004	152	104.3	11.0	27	20.6	12.2	13	27.4	33.7	2.0-4.1	7.9	1.9
				2005	151	138.0	14.6	5	4.6	14.7	39	62.2	25.5	2.5-3.4	6.8	1.8
<b>Tigress</b>	49	Harris Seeds	ZYMV, WMV II	2004	165	110.0	10.7	29	20.5	11.3	25	52.5	33.6	2.5-3.5	7.7	1.8
				2005	127	100.6	12.7	20	11.0	8.8	24	39.8	26.5	3.0-4.5	8.1	1.8
<b>Wildcat</b>	46	Seedway	ZYMV, WMV II, PM, PRSV	2005	168	140.2	13.4	14	9.8	11.2	39	89.4	36.7	3.0-5.0	7.9	1.8
<b>Zucchini 718</b>	45	Seedway	ZYMV, CMV	2004	61	39.3	10.3	77	42.1	8.8	12	24.0	32.0	2.75-4.0	8.4	1.8
				2005	141	115.2	13.1	29	21.6	11.9	33	58.8	28.5	3.0-4.0	8.1	2.0
<b>Zucchini Elite</b>	48	Harris Seeds		2004	172	112.9	10.5	28	19.1	10.9	18	36.0	32.0	2.0-4.5	7.9	1.9
				2005	81	62.8	12.4	2	1.8	14.4	15	34.6	36.9	2.5-4.0	8.3	2.1

**DISEASE KEY:** ZYMV = Zucchini Yellow Mosaic Virus      WMV = Watermelon Mosaic Virus  
 PRSV = Papaya Ringspot Virus      CMV = Cucurbit Mosaic Virus      WMV II = Watermelon Mosaic Virus race 2  
 PM = Powdery Mildew

**Table 4: Overall variety descriptions, disease ratings and comments.**

Variety	Shape, Color, Attractiveness, and Other Comments	Avg Disease Rating		
		PM	Virus	DM
<b>Agriset 843</b>				
2005	Fruit tend to be dark, cylindrical, short, and blocky. When young, the fruit are attractive, being thinner and lighter in color. However, as the fruit matures, they thicken and become a dark, solid green. Although the fruit are fairly cylindrical, there is occasionally a slight taper from stem to blossom end. Overall, the fruit are attractive.	3.0	1.5	0.0
<b>Bobcat</b>				
2005	The fruit are typically long and cylindrical with a thin, slightly crooked neck and a bulbous blossom end. The blossom end becomes more bulbous as the fruit ages. Some fruit have a wavy shape, making them ugly. Nevertheless, the slight bend characteristic of all fruit is not bad and sometimes attractive.	1.0	0.0	1.5
<b>Cashflow</b>				
2004	Most fruit are long, cylindrical, and fairly straight with a slight taper at the ends as well as a slight curve. Fruit are medium green and have a medium fleck. The color is uneven, being significantly lighter on the blossom end compared to the stem end. Culls are misshapen or have a nub. Overall, the fruit are attractive.	no data	no data	no data
2005	Early fruit tend to be thick, cylindrical, and somewhat unattractive. However, later fruit improve, being longer and cylindrical in shape. As in 2004, there is a slight curve to all fruit. Again, most fruit look fairly nice.	1.0	0.0	0.0
<b>Declaration II</b>				
2004	Most fruit have a thin neck, thick middle, and either a slightly tapered or slightly bulbous blossom end. In addition, the fruit are fairly long, having a very slight curve and a medium to large fleck. Culls are ugly and misshapen. Overall, the fruit are unattractive.	no data	no data	no data
<b>Emperor's Jade</b>				
2005	Fruit are typically small and thick with a short, slightly crooked neck. Fruit may also have an angular appearance, a fat middle, and/or a slightly tapered blossom end. Like shape, fruit color is variable. Some are a nice light color that is somewhat mottled, whereas others are fairly dark. Culls are usually due to size (i.e., too small). Overall, the fruit are unattractive.	2.5	2.5	0.5
<b>Green Eclipse</b>				
2004	Fruit are variable in shape. Early fruit are short, stocky and straight, while later fruit are medium long. Most fruit are cylindrical and have a very slight curve. Additionally, most fruit are a very dark, solid green and have no flecking. Culls tend to be misshapen. The fruit are somewhat attractive.	no data	no data	no data
<b>Independence II</b>				
2004	Most fruit have a short, thin, slightly hooked neck, a bulging middle, and a tapered end, creating a fish shape. The fruit are light to medium in color and have medium flecking. However, the distinctive shape make most fruit extremely unattractive.	no data	no data	no data
<b>Jaguar</b>				
2004	The fruit tend to be long, slender, cylindrical, and fairly straight to slightly curved. Most fruit also have a slight hook and taper at the stem end and a flat or square-like blossom end. Most fruit are a very dark green or almost black. This dark color makes the fruit relatively unattractive.	no data	no data	no data
<b>Justice III</b>				
2004	Most fruit are long, slender, and cylindrical and have a slight curve and bulbous stem end. Some fruit have a medium curve, a constricted middle, hooked ends, and/or a slight to strong taper on an end. Most fruit are medium green in color. Overall, the fruit have a potential to be attractive.	no data	no data	no data
2005	The plots were in a poorly irrigated area, resulting in stunted plants and very few fruit.	0.0	0.0	0.0
<b>Lynx</b>				
2004	The fruit tend to be long, slender, cylindrical, and fairly straight to slightly curved. Larger fruit typically have a stronger curve. Some fruit have a crook at the stem end and/or mild tapering at the blossom end. Most fruit have nice, even coloration and a fair amount of flecking. Culls are misshapen and/or have nubs. Overall, the fruit are attractive.	no data	no data	no data
2005	Again, the fruit tend to be long, slender, cylindrical, slightly curved, and slightly pointed at the blossom end. The fruit remain long and thin, even with age, and are medium to dark green with flecking. As in 2004, the fruit are attractive.	1.0	0.5	0.5
<b>Magnum</b>				
2005	Most fruit have a very broad, flat stem and blossom end or a curved hourglass shape. Most fruit also have cucumber beetle damage. The fruit are an extremely dark solid green or almost black. Overall, the fruit are unattractive in both color and shape.	1.5	0.0	0.5

**Table 4 continued: Overall variety descriptions, disease ratings and comments.**

Variety	Shape, Color, Attractiveness, and Other Comments	Avg Disease Rating		
		PM	Virus	DM
<b>Payroll</b>				
2004	Most fruit are long, slender, cylindrical, uniform, and straight to slightly curved. Some fruit have a slight taper at the ends and/or a slight stem hook. The fruit are light green and have small to medium flecking. Culls are due to shape. Overall, the fruit are fairly attractive.	no data	no data	no data
2005	Early fruit have a swollen stem end, tapering from the middle. Otherwise, the fruit are not noteworthy this year.	0.5	0.0	0.0
<b>Radiant</b>				
2005	Early fruit have an unusual and variable shape, marked by a slender stem end, a slight hook at the stem end, a bulbous blossom end, a wavy appearance, and/or a The fruit tend to be fairly cylindrical, slightly curved, and a very dark, solid green. Some fruit have either a slightly bulbous or pointed end. The fruit must also be harvested small, before they twist into an s-shape. Culls are due to shape. Overall, the fruit is not especially attractive.	1.5	0.5	2.0
<b>Raven</b>				
2004		no data	no data	no data
<b>Revenue</b>				
2004	Most fruit are medium long, fairly cylindrical, straight to slightly curved, and slightly bulbous and/or pointed at the ends. The fruit are also light to medium green with mild to moderate flecking. Overall, the fruit are attractive.	no data	no data	no data
<b>Spineless Beauty</b>				
2004	Most fruit are straight to slightly curved and characterized by a thick stem end that tapers to a thin middle before thickening again and remaining fairly uniform to the blossom end. Some fruit have a slightly hooked stem end. In addition, most fruit are medium to long in length, very shiny, medium green, and moderately flecked. Overall, the fruit are attractive.	no data	no data	no data
2005	As in 2004, most fruit are fairly cylindrical and straight and have moderate flecking. The fruit also have square ribs, creating an angular appearance. Once again, the fruit are attractive.	1.0	1.0	1.0
<b>Tigress</b>				
2004	Most fruit are cylindrical, slightly curved, hooked at the stem end, and tapered at the ends. Many fruit are fish-shaped or s-shaped. Fruit length is highly variable. Generally, the fruit have moderate to heavy flecking, but a uniform color. Overall, fruit are unattractive due to shape and heavy flecking.	no data	no data	no data
2005	Again, fruit are slightly curved, hooked at the stem end, tapered to a point at the blossom end, and heavily flecked. The fruit are also dark green. Generally, the fruit are unattractive.	1.5	0.5	1.0
<b>Wildcat</b>				
2005	The fruit tend to be long, slender, cylindrical, slightly curved, moderately flecked, and slightly pointed at the blossom end, much like Lynx. Compared to Lynx, the	1.0	1.0	1.0
<b>Zucchini 718</b>				
2004	Most fruit are long, tapered at both ends, bulged in the middle, slightly curved, and moderately flecked. Culls are missshapen. Overall, the fruit are unattractive.	no data	no data	no data
2005	As in 2004, most fruit are long, thick, slightly curved, narrow at the stem end, bulged in the middle, and tapered to a point at the blossom end. The fruit are also dark green and moderately to heavily flecked. Some fruit have cucumber beetle damage. Once again, the fruit are highly unattractive.	2.5	1.0	1.0
<b>Zucchini Elite</b>				
2004	The fruit tend to vary in shape, being slightly to moderately curved, short and stocky or long, and either fish-shaped or slender and cylindrical. Most fruit are moderately flecked and have a heavy, inch-long rib on the stem end. Many fruit have a bulging middle, tapered blossom end, and tapered or hooked stem end. Culls are due to shape. Some plants have been affected by a virus. Overall, the fruit vary in attractiveness.	no data	no data	no data
2005	Most fruit are angular, moderately flecked, swelled in the middle, and fairly cylindrical.	2.0	4.0	0.5

\* A disease rating was completed on August 22, 2005 and is based on a scale of 0 to 5 where 0 = no disease and 5 = 100% infected.

Disease Key: PM = Powdery Mildew Virus = plants and/or fruit exhibiting symptoms, but individual viruses not identified DM = Downy Mildew

**Table 5: 2005 Early Yellow Squash marketable fruit number, yield and average fruit size through the first four harvests.**

Variety	Days to Harvest	Company	Harvest Date												Total		
			20 & 22 Jul-05*			25-Jul-05			27-Jul-05			29-Jul-05			Marketable Fruit		
			No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)
Amber Pic	50	Meyer	0	0.0	0.0	5	2.8	9.0	4	1.8	7.2	2	0.8	6.4	11	5.4	7.9
Conqueror III	44	Seedway	10	4.6	7.4	5	2.8	9.0	5	1.8	5.8	7	3.8	8.7	27	13.0	7.7
Cougar	50	Harris Seeds	0	0.0	0.0	3	1.0	5.3	0	0.0	0.0	3	1.2	6.4	6	2.2	5.9
Daisy	na	Rupp	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Early Prolific	42	Seedway	4	1.6	6.4	0	0.0	0.0	3	1.6	8.5	1	0.6	9.6	8	3.8	7.6
Enterprise	44	Siegers	6	2.6	6.9	10	4.6	7.4	16	7.6	7.6	15	9.2	9.8	47	24.0	8.2
Fortune	39	Siegers	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Liberator III	41	Seedway	0	0.0	0.0	0	0.0	0.0	2	1.0	8.0	1	0.4	6.4	3	1.4	7.5
Lioness	52	Harris Seeds	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	1	0.4	6.4	1	0.4	6.4
Multi Pick	50	Harris Seeds	0	0.0	0.0	4	1.2	4.8	7	3.2	7.3	0	0.0	0.0	11	4.4	6.4
Patriot II	45	Rupp	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Precious II	53	Holmes	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sunray	45	Harris Seeds	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0

\* Not all varieties started fruiting on the same day so the first two earliest harvests shown in this table are combined for the harvests completed on July 20 and 22, 2005.

**Table 6: Total fruit yields, color descriptions, lengths, and diameters of 2005 yellow squash variety trials.**

Variety	Days to Harvest	Company	Disease Resistance	Marketable Fruit			Unmarketable Fruit			Oversized Fruit			Color range	Av diameter		
				No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)	No.	Wt. (lb)	Av Wt. (oz)		length (in)	diameter long (in)	diameter wide (in)
Amber Pic	50	Meyer		96	55.2	9.2	31	16.4	8.5	10	10.6	17.0	2.5-4.5	7.8	1.5	2.4
Conqueror III	44	Seedway	WMV, CMV, ZYMV, moderate resistance to PRSV	166	117.0	11.3	9	3.0	5.3	34	42.0	19.8	3.0-4.0	9.5	1.4	2.1
Cougar	50	Harris Seeds	ZYMV, PRSV	138	91.6	10.6	5	4.2	13.4	15	18.0	19.2	2.5-5.0	7.9	1.3	2.3
Daisy	na	Rupp	na	34	23.6	11.1	64	51.0	12.8	1	1.2	19.2	2.5-5.0	9.5	1.5	2.5
Early Prolific	42	Seedway		49	29.0	9.5	61	44.6	11.7	5	5.0	16.0	3.0-4.5	7.9	1.4	2.4
Enterprise	44	Siegers		85	49.0	9.2	63	39.6	10.1	3	4.4	23.5	2.0-4.5	8.4	1.6	2.6
Fortune	39	Siegers		104	62.2	9.6	13	6.2	7.6	11	13.2	19.2	3.0-4.5	8.2	1.3	2.2
Liberator III	41	Seedway	WMV, CMV, ZYMV moderate resistance to WMV, CMV,	76	55.6	11.7	2	0.8	6.4	18	22.4	19.9	2.5-4.5	9.4	1.6	2.5
Lioness	52	Harris Seeds	ZYMV and PRSV	61	41.6	10.9	8	5.0	10.0	11	13.8	20.1	2.0-3.5	8.4	1.3	2.1
Multi Pick	50	Harris Seeds	CMV and WMV-2 tolerance	150	90.6	9.7	11	3.0	4.4	9	10.8	19.2	3.0-4.5	8.3	1.5	2.4
Patriot II	45	Rupp	WMV, ZYMV, PM	113	79.2	11.2	5	4.2	13.4	13	16.4	20.2	2.0-4.0	8.7	1.5	2.0
Precious II	53	Holmes	na	6	2.2	5.9	28	13.6	7.8	1	1.0	16.0	3.0	no data	no data	no data
Sunray	45	Harris Seeds	PM	66	35.8	8.7	5	4.8	15.4	2	3.0	24.0	2.5-4.0	9.3	1.5	2.8

**DISEASE KEY:** ZYMV = Zucchini Yellow Mosaic Virus WMV II = Watermelon Mosaic Virus race 2 PM = Powdery Mildew WMV = Watermelon Mosaic Virus

PRSV = Papaya Ringspot Virus CMV = Cucumber Mosaic Virus

**Table 7: Overall yellow squash variety descriptions, disease ratings and comments.**

Variety	Shape, Color, Attractiveness, and Other Comments	Average Disease Rating*	
		PM Virus	DM
Amber Pic	The fruit tend to be long and slender. Most also have a bumpy skin texture, a dark yellow color, and a knobby blossom end, making them unattractive. Later fruit show evidence of viral infection.	2.0	3.3
Conqueror III	The fruit are typically very long and slender and have a thin, hooked neck and blossom end that tapers to a point. Most fruit are light-medium yellow with darker yellow striations at the ribs. Overall, the fruit shape and color are very distinctive. Younger fruit tend to be more attractive.	2.0	0.5
Cougar	Early fruit tend to be short, medium to dark yellow, and have a bumpy skin texture and hooked neck. Later fruit are much more attractive, being long, slender, and having a very narrow neck and bottom. These fruit also do not get overly wide.	3.0	1.0
Daisy	Early fruit look promising with their long and slender shape and very smooth skin. However, the plants and fruit became infected by a virus, resulting in very few marketable fruit during most of the trial.	1.0	5.0
Early Prolific	The fruit tend to be short, smooth, thickened toward the middle and blossom end, and dark yellow. Most fruit have a fairly thin, semi-hooked neck. Overall, the fruit are unattractive. Due to shape and viral infection, there were few marketable fruit.	1.5	4.5
Enterprise	Most fruit are short, fat, and a bright, light yellow. The fruit tend to have a very short thin neck tapering to a fat middle and blossom end. Some fruit are teardrop-shaped or resemble a typical yellow squash. Due to a virus, fruit quality deteriorated after the first two weeks, resulting in fewer marketable fruit during the remainder of the trial.	1.5	4.0
Fortune	Early fruit are very short, smooth, and not particularly attractive. Later fruit improve, being long and slender and having a teardrop shape. Most fruit are medium yellow in color.	1.5	2.5
Liberator III	The fruit vary in shape, length, and color. Some fruit are short and fat, while others are long, straight, and have the typical teardrop shape. Most fruit have a thickening at the middle, tapered blossom end, and a slightly bumpy skin. Fruit color ranges from light to dark yellow. Overall, the fruit vary in attractiveness, with later fruit tending to be more attractive.	1.5	0.0
Lioness	The fruit are fairly long, bulged in the middle, smooth, glossy and light in color. Most fruit are attractive.	0.0	0.0
Multi Pick	Most fruit are medium long, medium to dark yellow, and have bumpy skin, many ribs, and a decent uniform shape (i.e., a swelled middle and tapered blossom end). Overall, the fruit are attractive.	1.0	2.5
Patriot II	The fruit are very variable in shape and length. Some fruit are short and fat, whereas others are long, slender, and somewhat cylindrical. Most fruit have a teardrop shape and a bright, light yellow color. Overall, the longer fruit tend to be more attractive.	2.0	0.0
Precious II	The fruit are unattractive, having a torpedo shape and a hooked neck. The fruit and plant were also negatively affected by a virus.	0.0	3.0
Sunray	Most fruit have a long teardrop shape and somewhat textured skin. One plot was stunted due to poor irrigation. Overall, the fruit are attractive.	1.0	4.0

\* A disease rating was completed on August 22, 2005 and is based on a scale of 0 to 5 where 0 = no disease and 5 = 100% infected.

Disease Key: PM = Powdery Mildew Virus = plants and/or fruit exhibiting symptoms, but individual viruses not identified DM = Downy Mildew