

SUMMER SQUASH

VARIETIES ¹	AL	GA	KY	LA	MS	NC	SC	TN
SUMMER SQUASH								
Yellow Crook Neck								
Destiny III ^{3, 4, 5, 6}	A	G	K	L		N	S	T
Dixie	A			L		N	S	T
Gentry	A	G	K		M	N	S	T
Gold Star ^{6, 8}	A	G				N		
Medallion	A		K		M	N	S	T
Prelude II ^{3, 4, 5}	A	G	K	L		N	S	T
Supersett ^{2, 4, 5}	A	G		L	M	N	S	T
Yellow Straight Neck								
Cheetah ^{2, 4, 8}	A	G				N	S	T
Conqueror III ^{3, 4, 5, 6, 7}	A	G	K					T
Cougar ^{4, 5, 7}	A	G	K			N	S	T
Daisey	A	G						
Enterprise	A	G				N	S	T
Fortune ²			K			N		T
Goldbar	A	G			M	N	S	T
Lioness ^{4, 5, 6, 7}		G	K			N		T
Multipik ^{2, 4, 5}	A	G	K	L		N	S	T
Solstice ^{4, 5}	A	G				N	S	T
Superpik ^{2, 4, 5}	A	G		L		N	S	
Zucchini								
Cash Flow						N		T
Elite	A					N	S	T
Esteem ^{4, 5, 7, 8}	A							
Judgement III ^{3, 4, 5, 6}	A	G	K			N		T
Justice III ^{3, 4, 5, 6}	A	G	K			N		
Leopard ^{4, 7}						N	S	T
Lynx ^{4, 5, 7}								T
Paycheck ^{4, 5, 6, 8}	A	G	K			N		T
Payroll ^{4, 5, 6, 7}	A	G	K		M	N	S	T
Payload ^{4, 5, 6, 8}	A					N	S	T
President							S	
Respect	A	G				N	S	T
Senator	A			L	M		S	T
Spineless Beauty	A	G	K		M	N	S	T
Spineless Perfection ^{4, 5, 8}	A					N	S	
SV6009YG ^{4, 5, 6, 8}	A					N	S	
Tigress ^{4, 5, 7}	A	G	K		M	N	S	T
Total Eclipse								T
Zephyr ² (bi-color)	A	t	K			N		T
Grey Zucchini								
Ishtar	A							T
Scalloped								
Patty Green Tint	A					N	S	
Peter Pan	A		K			N	S	T
Scallopini	A	G		L		N		
Sunburst	A	G	K	L		N	S	T

¹ Abbreviations for state where recommended.

² Py - Precocious yellow gene; has a prominent yellow stem.

³ Transgenic.

⁴ Zucchini Yellows Mosaic virus tolerance/resistance.

⁵ Watermelon Mosaic virus tolerance/resistance.

⁶ Cucumber Mosaic Virus tolerance/resistance.

⁷ Papaya Ringspot Virus tolerance/resistance.

⁸ Powdery mildew tolerance/resistance.

Seed Treatment. Check with seed supplier to determine if seed has been treated with an insecticide and/or fungicide. Information on seed treatments can be found in SEED TREATMENT section starting on page 234.

Seeding, Transplanting, and Spacing. Use 4 to 6 pounds of seed per acre. Seed or container-grown transplants are planted when daily mean temperatures have reached 60°F. Seed as indicated in following table. Early plantings should be protected from winds with row covers, rye strips, or wind breaks. Space rows 3 to 6 feet apart with plants 1.5 to 2.5 feet apart in the row.

SUMMER SQUASH PLANTING DATES (cont'd)

	Spring	Fall
AL North	4/15–8/15	8/1–8/30
AL South	3/1–4/30	7/15–9/15
GA North	5/1–8/15	NR
GA South	3/1–4/30	7/15–9/15
KY East	5/15–7/15	NR
KY Central	5/10–8/1	NR
KY West	4/20–8/15	NR
LA North	3/15–5/15	7/15–8/31
LA South	3/1–5/15	8/1–9/15
MS North	4/15–6/15	7/25–8/14
MS South	2/15–5/1	8/14–9/14
NC East	4/1–5/30	7/15–8/15
NC West	5/15–7/31	NR
SC East	3/15–7/30	8/1–8/30
SC West	4/15–7/30	7/30–8/15
TN East	5/10–8/1	NR
TN West	4/15–7/15	NR

Mulching. Plastic mulch laid before field planting conserves moisture, increases soil temperature, reduces mechanical damage to fruit, and increases early and total yield. Plastic should be applied on well-prepared planting beds. The soil must be moist when laying the plastic. Black plastic mulch can be used without a herbicide. In most situations, 50 percent of the nitrogen(N) should be in the nitrate (NO₃) form.

Reflective, plastic mulches can be used to repel aphids that transmit viruses in fall-planted (after July 1) squash. Direct seeding through the mulch is recommended for maximum virus protection.

Growers should consider drip irrigation. See the section on “Irrigation” in this handbook.

SUGGESTED FERTIGATION SCHEDULE FOR SUMMER SQUASH* (N:K;1:2)

Days after planting	Daily nitrogen	Daily potash	Cumulative	
			Nitrogen	Potash
	(lb / A)			
Preplant			24.0	24.0
0–14	0.9	1.8	36.6	49.2
8–28	1.3	2.6	54.8	85.6
29–63	1.5	3.0	107.3	190.6

* Adjust based on tissue analysis.

ALTERNATIVE FERTIGATION SCHEDULE FOR SUMMER SQUASH* (N:K;1:1)

Days after planting	Daily nitrogen	Daily potash	Cumulative	
			Nitrogen	Potash
	(lb / A)			
Preplant			24.0	24.0
0–7	1.0	1.0	31.0	31.0
8–21	1.5	1.5	52.0	52.5
22–63	2.0	2.0	136.0	136.5

*Adjust based on tissue analysis.

SPECIAL NOTES FOR PEST MANAGEMENT

INSECT MANAGEMENT

Cucumber Beetle: Cucumber beetles cause direct feeding damage to the foliage. Young plants need to be protected with insecticide as soon as they emerge or are transplanted.

Squash Vine Borer: Pheromone baited sticky traps can be used soon after planting to monitor the activity of the adult moths. Start inspecting plants closely for squash vine borer eggs (1mm [1/25 inch] diameter oval, flattened, dull-red to brownish) as soon as moths are caught in the traps. The first application of insecticide should occur when eggs begin to hatch or just prior to hatching. Applications should be made in afternoons or evenings after flow-ers close to reduce the spraying of valuable pollinators, especially bees. If pheromone traps are not used, a preventive treatment should be applied when vines begin to run. Re-apply insecticide every seven days for four weeks. Continue monitoring the phero-mone traps into August to detect the emergence of the new moths. When moths are caught, inspect plants for second-generation eggs, and begin the insecticide applications when eggs first begin to hatch or just prior to hatching.

Aphids: Aphid feeding can delay plant maturity. Thorough spray coverage, especially on the underside of the leaves is impor-tant. Treat seedlings every five to seven days, or as needed. The transmission of plant viruses by aphids has the potential to be the most damaging to the crop. Unfortunately, insecticide use for aphids does not reduce the spread of virus. A better approach is the application of Stylet Oil to fill tiny grooves between the leaf cells. When the aphid probes the leaf surface, its stylet must pass through a layer of oil. This reduces the infectivity of the virus resulting in less disease in the squash plant. The application of Stylet Oil can delay virus infection, but requires application every other day, thorough coverage and high-pressure sprays. Also, refer to the preceding “Mulches” section for information on metallized reflective mulch used to repel or disorient aphids that can spread viruses.

Squash Bug: Begin scouting shortly after plant emergence. Treat every 7 to 10 days when adults or nymphs appear. The control of squash bugs is particularly important where yellow vine disease occurs since squash bugs vector the pathogen responsible for this disease.

Spider Mites: Mite infestations generally begin around field mar-gins and grassy areas. CAUTION: DO NOT mow these areas after midsummer because this forces mites into the crop. Localized in-

festations can be spot-treated. **Note:** Continuous use of Sevin or pyrethroid sprays may result in mite outbreaks.

DISEASE MANGEMENT

Cucurbit Downy Mildew Forecasting System: Cucurbit downy mildew (CDM) is a devastating foliar Cucurbit disease. While difficult, if not impossible to control, CDM can be prevented by using effective IPM practices. A useful tool for prevention of CDM is the CDM forecasting system. This program depends on the accurate reporting of CDM in the field as well as the monitoring of over 50 strategically placed sentinel plots. These plots are monitored by Plant Pathologists at multiple Land Grant Universities throughout the United States and Canada. Forecasts of the epidemic movement of the disease are generated 3 times a week. Risk maps are produced from these forecasts. For forecasts, maps, local contacts and other helpful information please visit our website, <http://cdm.ipmpipe.org>. If you think you have CDM, please contact your local Extension office.

Viruses (CMV, WMV, PRSV and ZYMV): Plant infection by viruses often causes squash fruit to be distorted or off-color rendering them unmarketable. Certain yellow-fruited varieties contain the precocious (*Py*) gene. The varieties are distinguished by their yellow stem. Varieties with the *Py* gene should be used for late spring or summer plantings since viruses are more prevalent in the summer than spring plantings. The *Py* varieties can normally mask virus fruit symptoms of certain viruses for several harvests. Use resistant varieties where possible, but even these may not escape virus.

WEED MANAGEMENT

See the previous “Mulching” section for further information on weed control under clear plastic mulch.

For Seeding into Soil without Plastic Mulch. Stale bed technique: Prepare beds 3 to 5 weeks before seeding. Allow weed seedlings to emerge and spray with paraquat a week prior to seeding. Then seed beds without further tillage.

For Soil Strips between Rows of Plastic Mulch. Use the following land preparation, treatment, planting sequences, and herbicides labeled for squash, or crop injury may result.

1. Complete soil preparation and lay plastic and drip irrigation before herbicide application.
2. Spray preemergence herbicides on the soil and the shoulders of the plastic strips in bands before weeds germinate. **DO NOT APPLY HERBICIDE TO THE BED SURFACE OF THE PLASTIC.** Herbicides may wash from a large area of plastic into the plant hole and result in crop injury.
3. Incorporate herbicide into the soil with 1/2 to 1 inch of rainfall or overhead irrigation within 48 hours of application and **BEFORE PLANTING OR TRANSPLANTING.**
4. Apply selective postemergence herbicides broadcast or in bands to the soil strips between mulch to control susceptible weeds.

POLLINATION

Honey bees are important for producing high yields and quality fruit. Populations of pollinating insects may be adversely affected by insecticides applied to flowers or weeds in bloom. Apply insecticides only in the evening hours or wait until bloom is completed before application. See section on “Pollination” in the General Production Recommendations.

HARVESTING AND STORAGE

See Table 14 for postharvest information.