Cooperative Extension University of California Riverside County

DESERT AG-NOTES

82-675 Highway 111, Rm. 118 Indio, CA 92201 January 2003

In this issue: 2002 Squash Variety Trial, 3rd Soil Health Symposium, Exotic Newcastle Disease…..Cucurbit Workshop

2002 Squash Variety Trial

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Yellow crookneck and Zucchini squash is commercially grown in the Coachella Valley. Both of these types are reported under the heading of Summer Squash. Acreage has been as high as 650 acres in 1998 to as low as 203 acres in 1999. Yields can vary from 470 boxes per acre to as high as 1,089 boxes per acre. Much of the squash acreage grown in the Coachella Valley is by the areas limited scale producers. There are two main planting seasons, a spring and fall planting. Fall plantings are characterized by higher incidence of virus infections. This report evaluates several Zucchini and Yellow crook/straight necked varieties to determine crop yields and incidence of virus infections.

Materials and Methods

This variety trial was performed at the Coachella Valley Agricultural Research Station in Thermal. Varieties were planted into 25-foot plots and replicated. Yellow crookneck/straight neck squash seeds were hand planted at a 12 inch spacing. Zucchini seeds were planted with a push planter. Plots were pre-irrigated. All plots were drip irrigated and received the same fertilizer treatments. No herbicide was used and plots were weeded three times over the growing season.

Planting Date:2-28-02

Fertilizer, Irrigation, Herbicide, Insecticide: Handled by Research Station.

Harvests: 04-24-02, 05-01-02, 05-08-02

Fruit was hand harvested from 4 plants per plot, sorted, counted and weighed.

Results and Discussion

Table 1. Squash Variety Entries

Variety	Type of Fruit
1. Supersett F1	Yellow semicrook to crookneck, precocious gene
2. Multipick F1	Yellow straightneck
3. Fortune	Yellow straightneck, precocious gene
4. Gentry	Yellow semicrookneck
5. Sunglo	Yellow crookneck
6. RSQ-7041-VP	Zucchini
7. RSQ-7048-VP	Zucchini
8. RSQ-6066-VP	Zucchini
9. RSQ-0190-VP	Zucchini
10. RSQ-0289-VP	Zucchini
11. RSQ-0181-VP	Zucchini

Table 1 describes the type of squash evaluated. There were 5 yellow crookneck types and 6 zucchini types in this trial.

Table 2. Crookneck fruit weight and number of fruit over three harvests

Variety	In Grams	Mean Number of Fruit
1. Supersett F1	4461.3*a	13*a
2. Multipick F1	5302.0*a	1*a
3. Fortune	5091.3*a	12*a
4. Gentry	5880.3*a	12*a
5. Sunglo	4617.3*a	8*a

*no significant difference in yields. There were significant differences between the three harvests dates, that is to be expected.

Table 3. Zucchini fruit weight over three harvests

Variety	In Grams	Mean Number of Fruit
6. RSQ-7041-VP	9442.7*a	6.5*a
7. RSQ-7048-VP	7270.0*a	6.2*a
8. RSQ-6066-VP	8598.0*a	6.8*a
9. RSQ-0190-VP	9500.7*a	5.7*a
10. RSQ-0289-VP	5743.3*a	7.1*a
11. RSQ-0181-VP	9913.3*a	6.6*a

*no significant difference in yields. There were significant differences between the three harvests, that is to be expected.

Table 4. Incidence of Virus in all plots*

Variety	% Virus Incidence
1. Supersett F1	0
2. Multipick F1	Less than 3%
3. Fortune	Less than 3%
4. Gentry	Less than 3%
5. Sunglo	0
6. RSQ-7041-VP	0
7. RSQ-7048-VP	0
8. RSQ-6066-VP	0
9. RSQ-0190-VP	0
10. RSQ-0289-VP	0
11. RSQ-0181-VP	0

*based on visual leaf symptoms. This trial was conducted in early spring and it was not appropriate to rate the plants for virus infections. A fall planting would be more indicative of the plants susceptibility to viruses. The two main viruses that have been affecting squash in the Coachella Valley are Squash Leaf Curl Virus and Cucurbit Leaf Crumple Virus.

The variety of crookneck selected depends on the buyers. There is great variation in yellow color and in fruit shape. The Zucchini types were advanced lines breeder lines that may be released in the near future.

3rd SOIL HEALTH SYMPOSIUM

March 5, 2003
USDA Service Center
82-901 Bliss Street
Indio, California 92201

Conservation Tillage comes to the Coachella Valley

10:00 a.m. – 2:00 p.m.

10:00 a.m.	"Conservation Tillage Initiatives in California's Central Valley" Dr. Jeff Mitchell-Vegetable Specialists, UCD
10:45 a.m.	"Impacts of High-Residue No-Till Production Systems on Soil Quality" Dr. Ronald D. Morse, Vegetable Crops Research, Department of Horticulture, Virginia Tech
11:30 a.m.	Lunch will be served
11:45 a.m.	"Specific Function of Certain Cover Crops in Horticulture" Dr. Aref Abdul Baki, Plant Physiologist USDA-ARS-PSI Vegetable Laboratory
12:15 p.m.	"Microbial Connection in Mulching Cover Crop and Crop Rotation Effects" Dr. Robert Linderman, Plant Pathologist, USDA-ARS Corvalis, Oregon
1:00 p.m.	"Measuring the Nitrogen Contribution of Cowpeas" Jose Aguiar, Farm Advisor UCCE Riverside County
1:15 p.m.	"Environmental Quality Incentive Program" Raul Alvarado, Soil Conservationist, USDA-NRCS
1:30 p.m.	Coachella Valley Mosquito Abatement District

Sponsored by: Coachella Valley Resource Conservation District, University of California Cooperative Extension Riverside County, Natural Resource Conservation Service United States Department of Agriculture and Coachella Valley Mosquito Abatement District

Program may change. Please call 760-863-7949 (Jose Aguiar) or 760-347-7658 ext 116 (Sam Aslan). Continuing education credit will be applied for some programs.

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