



Horticultural Research, 1985--Overton

Research Center

TECHNICAL
REPORT

NO.
85-1

SPRING COLE CROP VARIETY TRIALS - 1984

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INTRODUCTION

Variety trials were conducted in the spring of 1984 on 5 broccoli, 10 cauliflower, and 15 cabbage varieties. The plots were bedded on 40-in. centers. Fertilizer was placed underneath the row at the rate of 900 lbs of 12-12-12 per acre. The plots were seeded on 21 February using a Planet Jr. push type seeder. The plant stand was thinned on 29 March to 18 in. between plants. Irrigation water was applied by sprinkler as needed.

Broccoli:

Of the 5 broccoli varieties Green Comet appeared to be the highest producer, but was not significantly higher than Southern Comet, AVX 7631, or AVX 7901 (Table 1). Green Comet and Southern Comet were the earliest producers, followed by AVX 7631 and AVX 7901. Morse's #4638 produced too late in the season which caused loose heads and floret opening. All varieties showed very low yields which was probably due to plant population. Further studies on plant population should be carried out.

TABLE 1. SPRING BROCCOLI VARIETY TRIALS 1984

Variety	Seed source ¹	Head size oz	Yield lbs/acre	First harvest date
Morse's #4638	1	5.6	1029	6-7
AVX 7901	2	9.1	3185	5-22
AVX 7631	2	8.2	3642	5-22
Southern Comet	3	4.6	3756	5-14
Green Comet	3	6.2	3985	5-17
L.S.D. .05		2.3	1790	

¹Seed compliments: Ferry Morse Seed Co. (1), Sun Seed Co. (2), Abbott and Cobb Seed Co. (3).

Cabbage:

Of the 15 cabbage varieties planted, 6 appeared to show potential for production in the East Texas area (Table 2). F.M. 249 and F.M. 247 were the top producers followed by Gourmet Y.R., Solid Blue, Prime Time Y.R. and Blue Boy. They all showed early production. F.M. 251 did not produce any heads. All heads produced were of very good quality. Low yields were due mainly to plant spacing.

Cauliflower:

Snowball Y IMP and Snowcrown produced the highest yield of the 10 cauliflower varieties grown (Table 3). Snowball "A" and AVX 6353 also showed promise. Snowball "E" and AVX 6353 did not produce at all.

TABLE 2. SPRING CABBAGE TRIALS 1984

Variety	Seed source ¹	Head size oz	Yield lbs/acre	First harvest date
FM 248	1	20.5	3898	6-1
Super Red	1	17.5	1285	6-7
FM 247	1	31.5	8581	6-1
FM 251	1	00.0	0	
Gourmet Y.R.	1	23.7	6381	6-1
Prime Time Y.R.	1	22.0	6185	6-1
FM 249	1	26.4	8689	6-1
Ocala	2	22.2	4377	6-1
AVX 1694	2	24.0	1960	6-7
AVX 4006	2	22.2	3594	6-1
Blue Boy	3	24.0	5923	6-1
Solid Red	3	19.0	2439	6-7
Solid Blue	3	22.0	6272	6-1
A&C #5 Plus	3	28.0	2831	6-1
A&C #5	3	22.0	3310	6-7
L.S.D.	.05	5.9	4397	

¹Seed compliments: Ferry Morse Seed Co. (1), Sun Seed Co. (2), Abbott and Cobb Seed Co. (3).

TABLE 3. SPRING CAULIFLOWER TRIALS 1984

Variety	Seed source ¹	Head size oz	Yield lbs/acre	First harvest date
Snowball "A"	1	10.2	1698	5-29
Snowball "E"	1	0.0	0	
Snowball 76	1	6.4	261	6-1
Snowball 42	1	7.0	287	5-29
AVX 6381	2	11.2	914	5-29
AVX 5002	2	13.0	1393	5-29
AVX 6353	2	0.0	0	
AVX 5001	2	9.0	370	5-29
Snowball Y IMP	3	12.8	2090	6-1
Snowcrown	3	12.9	2918	5-29
L.S.D.	.05	7.1	821	

¹Seed compliments: Ferry Morse Seed Co. (1), Sun Seed Co. (2), Abbott and Cobb Seed Co. (3).

It appears from the trial plantings in the spring, 1984, that broccoli would be more suited for seeding in the East Texas area than cabbage or cauliflower due to the shorter time it takes to mature the crop. Transplanted cabbage and cauliflower would have time to mature before the monthly average temperature increased above 65°F.

A fall planting of broccoli, cabbage and cauliflower was made on 15 August 1984, which was the recommendation for this area. Due to very hot conditions during this period germination was very poor, consequently, the plant stand was not adequate for a fair test.

In this area, tests are needed on varieties, planting dates, plant populations, and fertility, which should help produce yields and quality equal to other areas of the state.