



PEANUT VARIETY AND QUALITY EVALUATION RESULTS 2023

Agronomic and Grade Data

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ABBREVIATIONS

LSK, Loose Shelled Kernels, percent of kernels or portions of kernels free from hulls and scattered throughout the pod sample.

FM, Foreign Material, percent of anything other than mature pods found in the sample, including dirt, vines, sticks, stones, insects, broken shells, and raisins (immature pods with shriveled and shrunken shells that cannot be mechanically shelled).

Moisture, percent kernel moisture at grading, as determined by an electronic moisture meter.

Fancy, percent pods that fell through a 38/64-inch opening but rode a 34/64-inch opening on the pre-sizer.

Jumbo, percent pods that rode the 38/64-inch opening on the pre-sizer.

ELK, Extra Large Kernels, percent kernels which ride a 21.5/64 x 1-inch slotted screen.

SS, Sound Splits, percent split or broken kernels which are not damaged. Portions less than 1/4 of a whole kernel are not included but go into other kernels.

DK, Damaged Kernels, percent moldy and decayed kernels, or with skin and flesh discoloration due to insects and weather damage.

OK, Other Kernels, percent kernels passing through a 15/64 x 1-inch slotted screen. Splits and broken pieces, 1/4 kernel or larger which pass through this screen are considered SS or DK depending upon their condition.

SMK, Sound Mature Kernels, percent whole kernels which ride a 15/64 x 1-inch slotted screen. Splits that ride this screen are included as SS or DK, as the case may be.

TM, Total Kernels, percent all kernels in the shelling sample including SMK, SS, OK, and DK.

Support Price (\$/lb.), price based on USDA – FSA formula.

Yield (lb./A), plot weights converted to an acre basis. All yields are adjusted to a standard 7% moisture with FM deducted.

Value (\$/A), crop value computed by the following formula:

$$\text{Value} = (\text{Yield} * \text{Support Price})$$

TABLE OF CONTENTS

Technical Support	ii
List of Cooperators	iii
Abbreviations.....	iv
Table of Contents	v
List of Tables	vi
Introduction.....	1
Plant Material and Test Location.....	2
Weather Conditions	5
Cultural Practices	8
2023 Results by Location.....	13
2023 Results across Locations.....	25
Two-year Averages by Location.....	26
Three-year Averages by Location.....	31

LIST OF TABLES AND FIGURES

1.	Names and pedigrees of the genotypes (advanced breeding lines and commercial varieties) evaluated in 2023	3
2.	Planting, digging, and combining dates for test locations in 2023	4
3.	Temperatures, heat units, and precipitation at Tidewater AREC (Suffolk), VA in 2023.....	5
4.	Temperatures, heat units, and precipitation at Martin County, NC in 2023.....	5
5.	Temperatures, heat units, and precipitation at Rocky Mount, NC in 2023.....	6
Fig. 1	Temperatures, heat units, and precipitation at Blackville, SC in 2021.....	7
6.	Cultural practices used at Tidewater AREC (Suffolk), VA in 2023.....	9
7.	Cultural practices used at Martin County, NC in 2023.....	10
8.	Cultural practices used at Rocky Mount, NC in 2023	11
9.	Cultural practices used at Blackville, SC in 2023	12
10.	Content of jumbo pods based on farmers' stock grades, 2023	14
11.	Content of fancy pods based on farmers' stock grades, 2023.....	15
12.	Pod brightness (Hunter L Score) for jumbo pods in 2023	16
13.	Pod brightness (Hunter L Score) for fancy pods in 2023	17
14.	Grade characteristics, yield, and value of genotypes at Tidewater AREC (Suffolk), VA, Dig I - 2023 .	18
15.	Grade characteristics, yield, and value of genotypes at Tidewater AREC (Suffolk), VA, Dig II - 2023	19
16.	Grade characteristics, yield, and value of genotypes in Martin County, NC, Dig I – 2023	20
17.	Grade characteristics, yield, and value of genotypes in Martin County, NC, Dig II – 2023	21
18.	Grade characteristics, yield, and value of genotypes in Rocky Mount, NC – 2023	22
19.	Grade Characteristics, yield, and value of genotypes in Blackville, SC, Dig 1 – 2023.....	23
20.	Grade Characteristics, yield, and value of genotypes in Blackville, SC, Dig 2 – 2023	24
21.	Grade characteristics, yield, and value of genotypes averaged across all locations – 2023	25
22.	Grade characteristics, yield, and value of genotypes at Tidewater AREC – two-year averages 2022-2023	26
23.	Grade characteristics, yield, and value of genotypes at Martin County, NC – two-year averages 2022-2023.....	27

24.	Grade characteristics, yield, and value of genotypes at Rocky Mount, NC – two-year averages 2022-2023	28
25.	Grade characteristics, yield and value of genotypes at Blackville, SC – two-year averages 2022-2023 .	29
26.	Grade characteristics, yield and value of genotypes at all locations-two-year averages 2022-2023.....	30
27.	Grade characteristics, yield and value of genotypes at Suffolk, VA - three-year averages 2021-2023....	31
28.	Grade characteristics, yield and value of genotypes at Martin County, NC - three-year averages 2021-2023	32
29.	Grade characteristics, yield and value of genotypes at Rocky Mount, NC - three-year averages 2021-2023.	33
30.	Grade characteristics, yield and value of genotypes at Blackville, SC – three-year averages 2021-2023.....	34
31.	Grade characteristics, yield and value of genotypes at all locations - three-year averages 2021-2023....	35

INTRODUCTION

“Virginia-type” peanuts are extra-large, gourmet peanuts that are highly prized by consumers. This type of peanut is most successfully produced in the Southeastern US. Virginia and the Carolinas lead global production with a production value of over a billion each year. Cultivar selection plays an important role in maximizing peanut production. The Peanut Variety and Quality Evaluation (PVQE) program was created in 1968 as a multi-state program for the evaluation of Virginia-type cultivars and breeding lines. The PVQE is the official “pipeline” for Virginia-type peanut cultivar development for the Virginia-Carolina region. The objectives of the PVQE are: 1) to determine yield, grade, quality, and disease response of commercial cultivars and advanced breeding lines at various locations in Virginia and the Carolinas, 2) develop a database for Virginia-type peanut to allow research-based selection of the best genotypes by growers, industry, and the breeding programs, and 3) to identify the most-suited peanut genotypes for various regions that can be developed into varieties. This report contains agronomic and grade data of the PVQE tests in 2023.



2019 TAREC Field Day participants



PVQE Variety trial at TAREC Research Farm

PLANT MATERIAL AND TEST LOCATIONS

In 2023, PVQE included 34 genotypes: 5 commercial varieties, including ‘Bailey II’, ‘Emery’, ‘NC 20’, ‘Sullivan’ and ‘Walton’; and 25 advanced breeding lines developed by the North Carolina State University peanut breeding program and 4 advanced breeding lines developed by the University of Florida (Table 1). All breeding lines have the ‘high oleic acid’ characteristic. Cultivars and lines were planted from May 9 through June 15 at four locations: Tidewater AREC in Suffolk, VA, Slade Farm near Williamston, Martin Co., NC, the Upper Coastal Plain Research Station (UCPRS) near Rocky Mount, NC, and the Edisto Research and Education Center (EREC) in Blackville, SC. At Suffolk, Martin, and Blackville two digging dates and two replications within each digging date were planted in a RCBD design. The first digging date was approximately two weeks earlier than the optimum harvest date; the second digging date in this test represents the optimum digging maturity, or approximately 140 days from planting. This setting allows identification of early maturing varieties. At the UCPRS, only one digging date (optimum) replicated twice at each site was planted. At each location and across locations, cultivars were compared with the breeding lines for yield and grading characteristics, as the ultimate objective is the development of improved Virginia-type peanut cultivars.



Rocky Mount, NC,
Superintendent Clyde Bogle

Martin, NC

Suffolk, VA

PLANT MATERIAL AND TEST LOCATIONS

Table 1. Names and parentage of the genotypes (advanced breeding lines and commercial varieties) evaluated in 2023.

Genotype number	Variety/line	Parentage
1	Bailey II	Bailey /4/ X07016, Bailey // X05027, Bailey / N02060ol, X05249 /3/ Bailey
2	Emery	N03079FT*2 / Brantley
3	NC 20	N01015T / N00098ol, X02083 // Sugg
4	Sullivan	N03079FT*2 / N02059ol
5	Walton	2000x10-1-B2-3-2-2/97x48-HO3-7-B2-2-b3-B
6	N17045	Bailey*2 / Brantley, N10053ol /3/ CRSP 1050-110, Florida MDR 98 / Bayo Grande, 0020-20 // FNC94022-1-2-1-1-b3-B , N91026E / PI 576638
7	N17047	Bailey*2 / Brantley, N10053ol /3/ CRSP 1050-110, Florida MDR 98 / Bayo Grande, 0020-20 // FNC94022-1-2-1-1-b3-B , N91026E / PI 576638
8	N18010	N03079FT*2 / Brantley, N09037ol // Sugg
9	N18012	N03075FT / N00098ol, N09053olCSm // N08070olJC, N03079FT*2 / N02059ol
10	N18026	N03079FT*2 / N02054ol, N09042olF // Bailey II, Bailey*4 / N02060ol
11	N18029	Emery /3/ N11035olSrT, N03079FT*2 / Brantley, X03151 // Sugg
12	N18033	Sullivan /3/ N11045ol, N03079FT*2 / N02054ol, X03153 // N03078FT
13	N18039	Sullivan /3/ N11045ol, N03079FT*2 / N02054ol, X03153 // N03078FT
14	N18044	Emery // N10043olJ, N02006*2 / N02059ol
15	N18049	N07018JCSm // N12009olCLT, Bailey*4 / N02060ol
16	N18055	Emery // N10043olJ, N02006*2 / N02059ol
17	N19003	N09053olCSm /3/ X11043, N09053olCSm // X08054, N08059olFCT / GP-NC WS 16
18	N19006	N09053olCSm /3/ X11050, N09053olCSm // X08055, N08059olFCT / GP-NC WS 17
19	N19009	N03079FT*2 / Brantley, N09037ol // N12010ol, Bailey*4 / N02060ol
20	N19012	N03079FT*2 / N02054ol , N09039olF // Bailey II
21	N19013	Sullivan /4/ N11020olJ, N02059ol // N02006 / N02059ol , X03146 /3/ N03084FT
22	N19019	Sullivan /3/ N11045ol, N03079FT*2 / N02054ol , X03153 // N03078FT
23	N19021	Emery // N10043olJ, N02006*2 / N02059ol
24	N19024	Emery /3/ N11045ol, N03079FT*2 / N02054ol , X03153 // N03078FT
25	N19026	Emery /3/ N11045ol, N03079FT*2 / N02054ol , X03153 // N03078FT
26	N19028	Emery /3/ N11054B, N02005*4 // Wilson*3 / PI 599606
27	N19029	N03079FT*2 / Brantley, X03151 // Sugg, N11038olSrT /3/ Emery
28	N19030	N03079FT*2 / Brantley, X03151 // Sugg, N11038olSrT /3/ Emery
29	N19033	N03079FT*2 / N02059ol , X03155 // N05044FCsM, N13041olJ /3/ X14011, Bailey*4 / N02060ol , N12009olCLT // N11019olJ, N03090T*2 / N02064ol
30	N19034	N03079FT*2 / N02059ol , X03155 // N05044FCsM, N13041olJ /3/ X14011, Bailey*4 / N02060ol , N12009olCLT // N11019olJ, N03090T*2 / N02064ol
31	13x101-2-11-2-1-B	TUFRunner™ '297'/Spain
32	13x101-4-5-2-1-B	TUFRunner™ '297'/Spain
33	13x101-4-9-1-1-B	TUFRunner™ '297'/Spain
34	13x101-5-7-2-1-B	TUFRunner™ '297'/Spain

¹ 'NC 20' was released in 2020, as was tested in the PVQE trials as line N14023ol.

Plant Material and Test Location

Table 2. Planting, digging, and combining dates for each test location in 2023. Dig I was considered an early digging and Dig II an optimum digging time for peanut in V-C area.

Locations	<u>Planting Date</u>		<u>Digging Date</u>		<u>Harvest Date</u>	
	I	II	I	II	I	II
Tidewater AREC, Suffolk, VA	5/9/2023	5/10/2023	10/6/2023	10/16/2023	10/27/2023	10/27/2023
Martin County, NC	6/15/2023	6/15/2023	10/13/2023	10/19/2023	11/8/2023	11/8/2023
Rocky Mount, NC	5/16/2023		10/11/2023		10/24/2023	
Blackville, SC	5/17/2023	5/17/2023	9/28/2023	10/3/2023	10/10/2023	11/10/2023

Weather Conditions

WEATHER CONDITIONS

Weather information is provided in Tables 3 through 7, and Fig 1.

Table 3. Temperature of air and soil at 4 inches depth, peanut heat units (degree days – DD56) calculated based on a 56 °F temperature base (Tb), and precipitation at Tidewater AREC, Suffolk VA, in 2023.

Month	Avg Air Temp	Max Air Temp	Min Air Temp	Avg Soil Temp	Heat units DD56	Rain
		°F			°F d	inch
May	65	83	50	67	215	3.4
June	72	90	49	74	469	3.8
July	80	94	63	82	732	4.9
August	77	96	61	82	665	3.8
September	72	94	53	76	465	4.5
October	62	80	43	69	100	3.4
	71	90	53	75	441	4.5
Mean/Seasonal						

Table 4. Temperature of air and soil at 4 inches depth, peanut heat units (degree days – DD56) calculated based on a 56 °F temperature base (Tb), and precipitation at Martin County, NC, in 2023.

Month	Avg Air Temp	Max Air Temp	Min Air Temp	Avg Soil Temp	Heat units DD56	Rain
		°F			°F d	inch
May	66	84	52	70	289	1.3
June	73	90	50	78	492	3.4
July	81	95	69	86	797	3.2
August	81	100	65	85	770	5.8
September	72	94	53	77	475	3.7
October	62	82	41	66	172	0.5
	73	91	55	77	499	3.0
Mean/Seasonal						

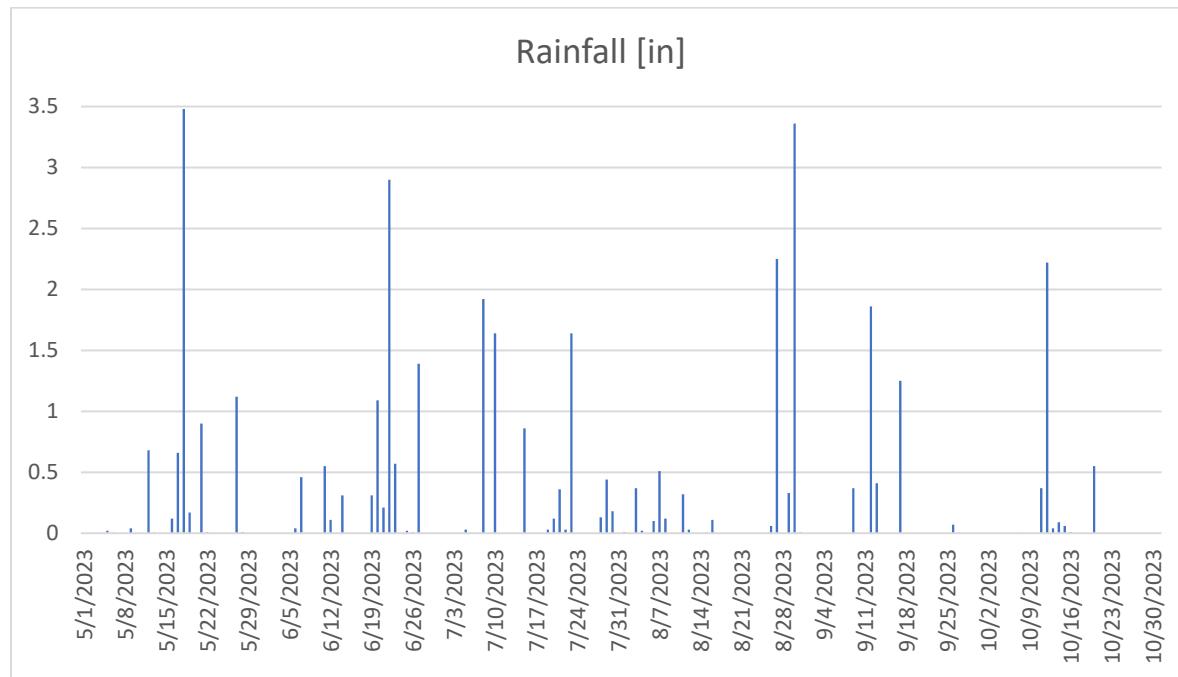
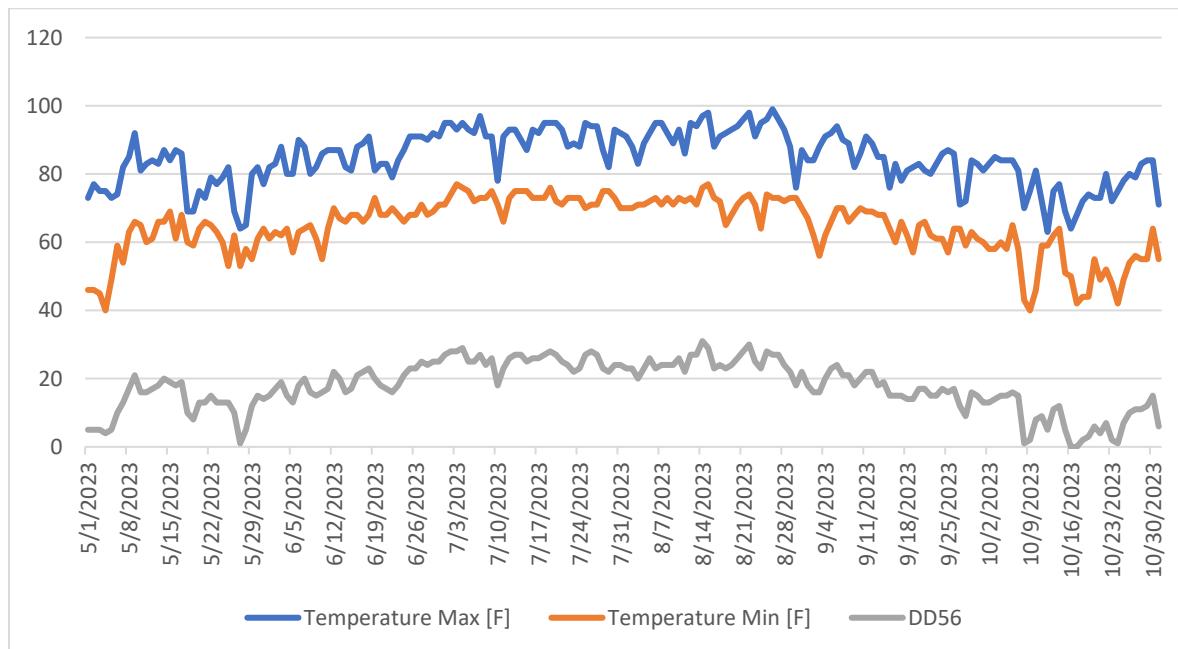
Weather Conditions

Table 5. Temperature of air and soil at 4 inches depth, peanut heat units (degree days – DD56) calculated based on a 56 °F temperature base (T_b), and precipitation at Rocky Mount, NC, in 2023.

Month	Avg Air Temp	Max Air Temp	Min Air Temp	Avg Soil Temp	Heat units DD56	Rain
		°F			°F d	inch
May	66	83	51	68	254	1.8
June	73	91	48	75	469	3.1
July	80	95	62	82	732	4.9
August	79	99	58	83	665	4.2
September	71	94	50	76	465	5.0
October	60	82	35	66	161	1.6
Mean/Seasonal	72	91	51	75	458	3.4

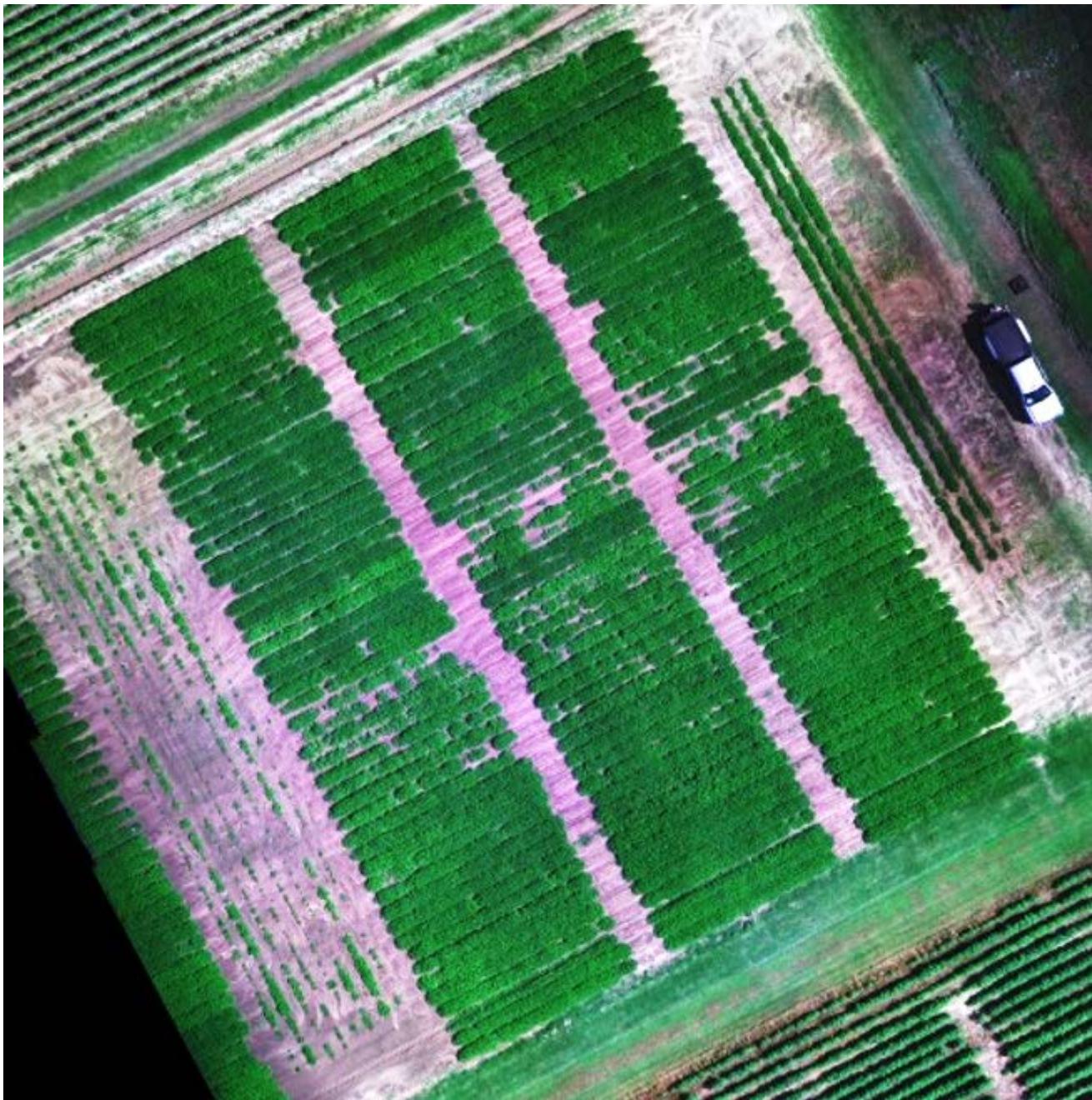
Weather Conditions

Figure 1. Temperature of air, peanut heat units (degree days – DD56) calculated based on a 56 °F temperature base (T_b), and precipitation at Blackville, SC, in 2023.



CULTURAL PRACTICES

Cultural practices were performed according to VA, NC, and SC recommendations. Plots were 35 feet long planted on 36-inch centers (3-6 seed/row ft) with a two-row planter. All plots were dug with a KMC 2-row Planting Digger and combined with a 2-row Hobbs peanut picker, model 325A, equipped with a bagging attachment. Tables 8 through 12 show planting dates, soil type, pH and mineral content, and cultural practices applied to the crops at each location.



Aerial picture of a peanut field at the Virginia Tech Tidewater AREC station in Suffolk VA, taken in July 2019 using a DJI M200 V2 Tetracopter with a MicaSense Altum camera

Cultural Practices

Table 6. Cultural practices at Tidewater AREC (Suffolk), VA, for Digs I and II in 2023.

Planting Date:	Dig 5/9/2023; Dig II- 5/10/2023		
Harvest Date:	Dig 10/6/2023; Dig II- 10/16/2023		
Soil Type:	Eunola loamy fine sand		
Cultivation:	Conventional Till		
Landplaster:	6/15/2023	Gypsum	1200lbs/A
Fertility:	5/09/2023 7/11/2023 7/17/2023 7/17/2023 7/27/2023 7/31/2023 7/31/2023	HiStick (on seed) Tracite ENC Flex Kickstand Tracite ENC Flex Kickstand	32oz/A 32oz/A 32oz/A 32oz/A 32oz/A 32oz/A 32oz/A
Herbicides:	4/25/2023 4/25/2023 5/09/2023 5/09/2023 6/27/2023 7/12/2023 7/12/2023 7/17/2023 8/22/2023	Prowl H20 (incorporated) Dual (incorporated) Dual Valor Clethodim Storm Basagran Medal Clethodim	24oz/A 16oz/A 16oz/A 2oz/A 16oz/A 24oz/A 16oz/A 16oz/A 16oz/A
Insecticides:	5/9/2023 6/5/2023 6/14/2023 7/31/2023	Admire Pro (in-furrow) Orthene Orthene Beseige	9oz/A 10oz/A 12oz/A 8oz/A
Fungicides:	5/09/2023 7/11/2023 7/27/2023 7/27/2023 8/21/2023 8/21/2023 8/21/2023 9/12/2023 10/1/2023	Velum (in-furrow) Bravo Miravis Elatus Miravis Elatus Omega Provost Silver Bravo (Dig 2)	6.5oz/A 24oz/A 3.4oz/A 9.5oz/A 3.4oz/A 9.5oz/A 16oz/A 13oz/A 24oz/A

Cultural Practices

Table 7. Cultural practices at Martin Co., NC, for Digs I and II, in 2023.

Planting Date:	Dig I 5/12/2023; Dig II- 5/12/2023, replanted: 6/15/2023		
Harvest Date:	Dig 10/13/2023; Dig II- 10/19/2023		
Soil Type:	Norfolk Loamy Fine Sand		
Cultivation:	Conventional Till		
Landplaster:	Landplaster		1200lbs/A
Fertility:	5/19/2022 6/22/2022 7/20/2022 7/20/2022 7/20/2022 8/18/2022 8/18/2022	First Up (in furrow) Boron Boron ENC Flex Kickstand ENC Flex Kickstand	15oz/A 32oz/A 32oz/A 32oz/A 32oz/A 32oz/A 32oz/A
Herbicides:	4/25/2023 5/01/2023 6/17/2023 6/27/2023 7/17/2023 7/20/2023 8/18/2023 8/22/2023 9/15/2023	Prowl H20 (incorporated) Dual (incorporate) Dual Clethodim Storm Valor Clethodim Clethodim Basagran	24oz/A 16oz/A 16oz/A 16oz/A 24oz/A 2oz/A 16oz/A 16oz/A 16oz/A
Insecticides:	6/14/2023 6/15/2023 7/02/2023 8/10/2023	Orthene Admire Pro (In-furrow) Orthene Beseige	12oz/A 9oz/A 10oz/A 8oz/A
Fungicides:	6/15/2023 7/11/2023 7/27/2023 7/30/2023 8/19/2023 8/19/2023 8/21/2023 9/06/2023 9/12/2023	Velum (in-furrow) Bravo Elatus Miravis Elatus Omega Miravis Bravo Provost Silver	6.5oz/A 24oz/A 9.5oz/A 3.4oz/A 9.5oz/A 16oz/A 3.4oz/A 24oz/A 13oz/A

Cultural Practices

Table 8. Cultural practices at Rocky Mount, NC in 2023.

Planting Date:	5/16/2023		
Harvest Date:	10/11/2023		
Soil Type:	Aycock, very fine sandy loam		
Cultivation:	Conventional Till		
Landplaster:			
Fertility:	3/16/2023	0-0-60	100lbs/A
	7/5/2023	Manganese	3lb/A
	7/6/2023	Boron	2lb/A
Herbicides:	4/26/2023	Prowl	32oz/A
	5/16/2023	Valor	2oz/A
	5/16/2023	Stalwart C	21oz/A
	6/19/2023	Trizenta/ crop oil	16oz/A
	8/9/2023	Trizenta/ Crop oil	11oz/A/ 32oz/A
Insecticides:	5/31/2023	Orthene	1lb/A
	6/7/2023	Orthene	1lb/A
Fungicides:	7/6/2023	Bravo	24oz/A
	7/19/2023	Miravis	3.4oz/A
	7/19/2023	Elatus	9.5oz/A
	8/9/2023	Chlorothalonil	24oz/A
	8/9/2023	Tebuzol 3.6	7.2oz/A
	8/23/2023	Bravo	24oz/A
	9/7/2023	Bravo	24oz/A

Cultural Practices

Table 9. Cultural practices at Blackville, SC in 2023.

Planting Date:	Dig I 5/17/2023; Dig II- 5/17/2023		
Harvest Date:	Dig 9/28/2023; Dig II- 10/03/2023		
Soil Type:	Barnwell, loamy sand		
Cultivation:	Conventional Till		
Landplaster:	Gypsum		1500 lb/a
Fertility:			
Herbicides:	5/18/23 5/18/23 5/18/23 6/20/23 6/20/23 6/20/23	Prowl Valor Strongarm Cadre Select Dual	32oz/A 3oz/A .225oz/A 4oz/A 24oz/A 1.33pt/A
Insecticides:	5/17/2023	Thimet	4.7lb/A
Fungicides:	6/15/2023 6/30/2023 6/30/2023 7/13/2023 7/13/2023 7/31/2023 7/31/2023 7/31/2023 8/14/2023 8/29/2023 8/29/2023 8/29/2023 8/29/2023 9/13/2023 9/13/2023 9/13/2023	Bravo Bravo Tebuconazole Provost Silver Miravis Elatus Bravo Aproach Prima Revytek Bravo Elatus Aproach Prima Bravo Topsin Topguard	24 oz/A 24 oz/A 7.2 oz/A 13 oz/A 3.4 oz/A 8 oz/A 24 oz/A 5.5 oz/A 12 oz/A 24 oz/A 8 oz/A 5.5 oz/A 24 oz/A 10 oz/A 14 oz/A

RESULTS

After harvest, yield and farmer-stock grade factors including jumbo and fancy pods, foreign material (FM), loose shelled kernels (LSK), extra-large kernels (ELK), sound mature kernels (SMK), sound splits (SS), other kernels (OK), damaged kernels (DK), and pod brightness (Hunter L score) for jumbo and fancy pods were measured. Pod yield was adjusted for 7% kernel moisture and price per pound calculated by the federal formula. Crop value per acre was also computed. At Martin, NC, bulk soil-borne disease was rated after digging on inverted roots. The results are presented in Tables 10 to 21 for individual locations and all locations combined. Two and three-year averages are presented in Tables 22 to 31. This data includes names and pedigrees of the genotypes (advanced breeding lines and commercial varieties) evaluated, content of jumbo and fancy pods and pod brightness (Hunter L Score) on rain shelter stock grades, and grade characteristics, yield, and value.



PVQE Team harvesting selected peanut lines on November 21, 2022.

2023 Results by Location

RESULTS – PODS

Table 10. Average percent of jumbo pods¹ based on farmers' grade at all locations in 2023.

Variety	<u>Suffolk, VA</u>		<u>Martin County, NC</u>		<u>Rocky Mount, NC</u>	<u>Blackville, SC</u>		<u>Average of all locations</u>
	<u>Dig I</u>	<u>Dig II</u>	<u>Dig I</u>	<u>Dig II</u>		<u>Dig 1</u>	<u>Dig 2</u>	
Bailey II	58 k-m	51 mn	56 e-i	68 c-h	69 k-n	52 h-k	43 kl	57 j-l
Emery	46 mn	45 no	59 d-i	68 c-h	70 j-n	52 h-k	50 i-k	55 kl
NC-20	65 f-l	63 i-l	59 c-i	70 a-g	78 c-k	57 g-j	51 i-k	63 g-j
Sullivan	60 j-m	54 l-n	42 j	63 f-j	69 k-n	47 jk	52 g-k	55 kl
Walton	43 n	38 o	40 j	49 j	49 o	43 k	33 l	42 m
N17045	64 g-l	67 h-k	60 c-g	71 a-g	84 a-f	60 e-i	58 e-i	66 e-h
N17047	52 l-n	59 j-m	55 f-i	63 f-j	68 l-n	42 k	45 jk	55 l
N18010	69 e-k	73 d-i	57 d-i	69 b-h	81 a-i	62 d-i	59 e-i	67 d-h
N18012	65 f-l	67 h-k	59 d-i	68 c-i	78 b-j	52 h-k	51 h-k	63 g-j
N18026	76 b-g	79 a-g	67 b-e	73 a-g	86 a-c	66 c-g	64 c-f	73 b-d
N18029	76 c-g	82 a-f	69 b-d	72 a-g	80 a-g	63 d-h	62 d-h	72 b-e
N18033	74 d-i	76 b-h	58 d-i	72 a-g	84 a-e	64 d-h	62 d-h	70 b-f
N18039	80 a-e	81 a-f	67 b-f	69 b-h	73 h-m	74 a-d	68 b-f	73 b-d
N18044	86 a-d	89 a	83 a	84 ab	85 a-d	61 e-i	77 ab	81 a
N18049	76 c-g	77 b-h	62 b-g	71 a-g	80 a-i	67 b-g	68 a-f	72 b-e
N18055	88 a-c	86 ab	73 ab	85 a	87 ab	79 a	70 a-e	81 a
N19003	83 a-e	84 a-c	66 b-f	75 a-f	87 a	63 d-h	70 a-e	75 a-c
N19006	64 g-l	58 k-m	60 c-h	54 h-j	72 i-m	50 i-k	58 e-i	59 i-l
N19009	83 a-e	82 a-f	72 ab	68 c-h	81 a-h	71 a-e	74 a-c	76 ab
N19012	61 h-l	59 j-m	65 b-f	63 f-j	71 j-m	50 i-k	57 f-j	61 h-k
N19013	90 ab	90 a	71 a-c	80 a-e	83 a-g	79 ab	73 a-d	81 a
N19019	73 d-j	72 f-i	62 b-g	71 a-g	73 h-m	70 a-f	64 c-f	69 c-g
N19021	86 a-d	83 a-e	73 ab	82 a-c	86 a-c	74 a-d	73 a-d	79 a
N19024	66 f-k	73 e-i	57 d-i	65 d-i	65 mn	59 e-i	67 b-f	64 f-i
N19026	91 a	84 a-d	74 ab	81 a-d	86 a-c	78 a-c	80 a	82 a
N19028	79 a-f	72 f-i	52 g-j	64 f-j	61 n	64 d-h	60 e-i	64 f-i
N19029	60 i-l	58 k-m	58 d-i	65 e-j	62 n	51 i-k	58 e-j	59 i-l
N19030	74 d-i	72 f-i	59 d-i	71 a-g	72 i-m	64 d-g	57 f-j	67 d-h
N19033	63 g-l	75 c-h	58 d-i	66 d-i	81 a-h	63 d-h	63 c-g	67 d-h
N19034	74 c-g	69 g-j	59 c-i	69 b-h	80 a-j	58 f-j	58 e-i	65 e-i
13x101-2-11-2-1-B	74 d-i	75 c-h	65 b-f	69 b-h	75 g-l	71 a-e	72 a-e	71 b-e
13x101-4-5-2-1-B	60 i-l	78 b-g	48 h-j	57 g-j	75 f-l	71 a-e	60 e-i	64 f-i
13x101-4-9-1-1-B	60 j-m	54 l-n	68 b-e	62 f-j	76 d-l	62 d-i	67 b-f	64 f-i
13x101-5-7-2-1-B	71 e-k	63 i-l	47 ij	52 ij	76 e-l	65 d-g	65 c-f	62 h-j
Mean	68	68	61	69	76	62	61	67
LSD	14	11	12	16	9	12	11	7

¹Pods that rode a 38/64-inch opening on the pre-sizer.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 11. Average percent of fancy pods¹ based on farmers' grade at all locations in 2023.

Variety	<u>Suffolk, VA</u>		<u>Martin County, NC</u>		Rocky Mount, NC	<u>Blackville, SC</u>		<u>Average of all locations</u>
	Dig I	Dig II	Dig I	Dig II		Dig 1	Dig 2	
Bailey II	35 b-d	46 ab	32 b-f	24 c-g	24 c-f	36 a-c	46 a	35 bc
Emery	45 ab	49 a	28 e-j	25 c-f	26 b-f	35 a-d	42 ab	36 b
NC-20	27 d-j	31 cd	29 d-j	23 d-g	19 c-f	32 b-e	36 b-d	28 d-g
Sullivan	34 b-e	38 bc	39 ab	31 a-d	24 c-f	36 a-c	35 b-d	34 bc
Walton	50 a	53 a	43 a	39 a	42 ab	38 ab	37 a-c	43 a
N17045	30 d-h	31 cd	30 b-h	23 d-g	15 d-f	26 d-h	31 b-g	26 e-g
N17047	44 a-c	38 bc	34 b-e	31 a-d	27 b-f	44 a	41 ab	37 b
N18010	24 d-k	21 e-j	30 b-h	22 d-h	15 d-f	29 b-g	28 d-h	24 f-i
N18012	30 d-h	27 de	29 d-j	24 c-f	20 c-f	33 b-e	36 b-d	28 d-f
N18026	20 h-n	17 f-k	22 h-m	20 d-h	11 ef	23 e-j	27 d-j	20 i-l
N18029	21 g-m	16 f-l	23 g-m	21 d-h	17 c-f	22 e-k	23 f-l	20 i-l
N18033	23 e-k	20 e-j	31 b-g	21 d-h	13 ef	25 e-i	28 d-h	23 g-k
N18039	17 i-o	16 f-l	22 h-m	23 d-g	22 c-f	19 h-k	24 e-k	20 i-l
N18044	11 l-o	8 l	12 n	11 h	12 ef	24 e-j	17 kl	13 no
N18049	17 i-o	17 f-k	24 f-m	19 e-h	15 d-f	21 f-k	18 h-l	19 j-n
N18055	10 l-o	10 kl	20 j-n	11 h	46 a	15 jk	19 h-l	19 j-m
N19003	14 k-o	14 i-l	20 j-n	20 d-g	11 ef	24 e-j	22 g-l	18 k-o
N19006	33 c-f	38 bc	29 d-j	38 ab	24 c-f	37 a-c	32 b-f	33 b-d
N19009	15 j-o	12 j-l	19 k-n	24 c-f	16 c-f	20 g-j	17 kl	17 l-o
N19012	35 b-d	37 c	27 e-l	26 c-e	24 c-f	35 b-d	33 b-e	30 c-e
N19013	8 no	8 l	15 mn	15 f-h	14 ef	13 k	18 i-l	13 o
N19019	23 e-k	24 d-f	28 e-k	23 d-g	20 c-f	23 e-j	25 e-k	23 f-j
N19021	10 m-o	13 j-l	17 mn	15 f-h	10 f	18 h-k	18 j-l	14 m-o
N19024	28 d-i	23 d-h	27 e-l	25 c-f	28 a-e	30 b-f	22 g-l	26 e-h
N19026	8 o	15 h-l	18 l-n	13 gh	11 ef	17 h-k	14 l	13 no
N19028	18 i-o	22 d-i	34 b-e	24 c-g	32 a-d	24 e-j	27 d-i	26 e-h
N19029	33 c-f	37 c	30 c-i	27 b-e	33 a-c	34 b-d	31 b-g	32 b-d
N19030	23 e-j	23 d-h	29 d-j	23 d-g	23 c-f	30 b-f	33 b-e	26 e-h
N19033	32 d-g	23 d-h	31 b-g	28 a-e	16 c-f	29 c-g	27 d-i	26 e-g
N19034	22 f-l	26 de	27 e-k	26 c-e	17 c-f	30 b-f	30 c-g	26 e-h
13x101-2-11-2-1-B	21 f-m	21 e-j	24 f-m	22 d-h	20 c-f	19 h-j	20 g-l	21 h-l
13x101-4-5-2-1-B	32 d-g	15 g-l	38 a-c	30 a-d	18 c-f	21 f-k	29 c-h	26 e-h
13x101-4-9-1-1-B	35 b-d	37 c	21 i-m	28 a-e	18 c-f	22 e-k	22 g-l	26 e-h
13x101-5-7-2-1-B	21 g-m	24 d-g	37 a-d	35 a-c	21 c-f	24 e-j	25 e-k	26 e-g
Mean	24	24	27	24	20	27	27	25
LSD	12	9	9	11	18	10	9	5

¹Pods that fell through a 38/64 inch opening but rode a 34/64 inch opening on the pre-sizer.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 12. Average of pod brightness¹ (Hunter L Score) for jumbo pods² in 2023.

Variety	Suffolk, VA		Martin County, NC		Rocky Mount, NC	Blackville, SC		Average of all locations
	Dig I	Dig II	Dig I	Dig II		Dig 1	Dig 2	
Bailey II	54 a-c	58 ab	48 a-e	53 a-c	55 ab	55 ab	54 ab	54 a
Emery	57 a	59 ab	49 a-d	50 b-e	57 ab	52 b-f	52 a-d	54 ab
NC-20	54 a-c	54 b-d	48 a-f	47 d-f	55 ab	52 b-e	53 a-c	52 a-e
Sullivan	54 a-c	56 a-d	43 e-i	49 b-f	55 ab	51 b-f	54 a-c	52 a-e
Walton	51 bc	55 a-d	44 d-i	49 b-e	56 ab	50 c-f	51 b-e	51 a-e
N17045	53 a-c	57 a-d	43 f-i	53 a-c	55 ab	50 c-f	51 a-e	52 a-e
N17047	53 a-c	57 a-d	50 a-c	57 a	40 c	53 a-d	54 ab	52 a-e
N18010	52 a-c	56 a-d	47 a-g	49 b-f	54 ab	51 b-f	56 a	52 a-d
N18012	49 c	56 a-d	45 b-i	52 a-c	55 ab	51 b-f	52 a-c	52 a-e
N18026	52 a-c	58 ab	42 hi	50 b-e	55 ab	51 b-f	49 c-f	51 a-e
N18029	53 a-c	58 a-c	45 c-i	52 a-d	56 ab	53 a-d	55 ab	53 a-d
N18033	53 a-c	58 a-c	49 a-d	53 a-c	53 ab	53 a-d	52 a-d	53 a-d
N18039	51 a-c	55 a-d	41 i	49 b-e	59 a	48 f	44 f	50 de
N18044	51 bc	56 a-d	47 a-g	49 b-f	53 ab	49 c-f	54 ab	51 a-e
N18049	53 a-c	54 b-d	44 d-i	52 a-d	55 ab	52 b-f	51 a-e	51 a-e
N18055	49 c	54 b-d	51 ab	52 a-d	58 ab	50 c-f	51 a-d	52 a-e
N19003	55 a-c	56 a-d	41 i	46 ef	49 bc	48 ef	47 d-f	49 e
N19006	52 a-c	56 a-d	44 e-i	51 b-e	54 ab	51 b-f	52 a-c	51 a-e
N19009	49 bc	54 b-d	45 c-i	49 b-e	52 ab	51 b-f	54 a-c	51 a-e
N19012	54 a-c	58 a-d	47 a-g	51 b-e	54 ab	51 b-f	55 ab	53 a-d
N19013	55 ab	56 a-d	43 e-i	51 b-e	55 ab	50 c-f	52 a-c	52 a-e
N19019	51 a-c	60 a	47 a-h	52 a-d	56 ab	52 b-f	55 ab	53 a-c
N19021	51 bc	52 d	47 a-h	51 b-e	59 a	53 a-d	49 c-f	52 a-e
N19024	53 a-c	55 a-d	45 c-i	51 b-e	55 ab	53 a-c	55 ab	53 a-d
N19026	52 a-c	57 a-d	45 c-i	44 f	55 ab	53 a-c	53 a-c	51 a-e
N19028	54 a-c	58 ab	43 e-i	51 b-e	58 ab	53 a-c	52 a-c	53 a-d
N19029	51 bc	58 a-d	42 f-i	49 b-f	53 ab	50 c-f	48 c-f	50 c-e
N19030	51 a-c	56 a-d	47 a-h	49 b-f	52 ab	57 a	51 b-e	52 a-e
N19033	53 a-c	55 a-d	50 a-c	49 b-f	55 ab	49 c-f	51 a-e	52 a-e
N19034	55 ab	56 a-d	49 a-d	51 b-e	55 ab	50 b-f	52 a-d	52 a-d
13x101-2-11-2-1-B	52 a-c	56 a-d	42 g-i	48 c-f	57 ab	48 d-f	45 ef	50 b-e
13x101-4-5-2-1-B	50 bc	55 a-d	51 a	49 b-f	55 ab	48 ef	53 a-c	52 a-e
13x101-4-9-1-1-B	55 ab	54 b-d	42 hi	51 b-e	55 ab	51 b-f	52 a-d	51 a-e
13x101-5-7-2-1-B	51 bc	52 cd	42 g-i	54 ab	53 ab	49 c-f	51 a-e	50 b-e
Mean	51	54	46	50	55	51	52	52
LSD	6	6	5	6	9	6	5	3

¹The higher the number, the brighter the pod color.

²Pods that rode a 38/64 inch opening on the pre-sizer.

³Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 13. Average of pod brightness¹ (Hunter L Score) for fancy pods² in 2023.

Variety	<u>Suffolk, VA</u>		<u>Martin County, NC</u>		Rocky Mount, NC	<u>Blackville, SC</u>		Average of all locations
	Dig I	Dig II	Dig I	Dig II		Dig I	Dig II	
Bailey II	49 a-i	55 a-d	43 a-c	46 a-d	53 ab	50 a-d	53 ab	50 a
Emery	52 a	54 a-f	40 a-c	47 a-d	56 a	50 a-d	51 a-d	50 a
NC-20	50 a-h	52 c-i	44 ab	46 a-d	51 ab	47 b-e	51 a-e	49 a
Sullivan	48 a-i	57 ab	45 a	50 a-c	51 ab	50 a-e	49 a-f	50 a
Walton	50 a-h	56 a-c	41 a-c	48 a-d	55 ab	49 a-e	45 f	49 a
N17045	48 a-i	54 a-f	43 a-c	46 a-d	51 ab	49 a-e	47 d-f	48 a
N17047	46 e-i	55 a-d	44 ab	50 a-c	56 a	50 a-d	52 a-d	50 a
N18010	49 a-i	54 a-f	45 a	46 a-d	56 a	49 a-e	48 c-f	50 a
N18012	48 a-i	57 a	43 a-c	46 a-d	56 a	52 a-c	49 c-f	50 a
N18026	49 a-i	52 b-i	36 c	52 a	54 ab	47 b-e	50 a-f	49 a
N18029	47 c-i	52 a-h	43 a-c	50 a-c	53 ab	45 de	47 d-f	48 a
N18033	46 f-i	52 b-i	41 a-c	44 b-d	56 a	49 a-e	49 b-f	48 a
N18039	46 g-i	53 a-g	39 a-c	46 a-d	55 ab	46 c-e	49 b-f	48 a
N18044	47 b-i	49 g-i	41 a-c	42 d	53 ab	50 a-d	52 a-c	48 a
N18049	52 a-c	50 e-i	40 a-c	46 a-d	54 ab	48 a-e	50 a-f	48 a
N18055	49 a-i	48 i	41 a-c	47 a-d	53 ab	46 de	49 b-f	47 a
N19003	49 a-i	54 a-f	40 a-c	45 a-d	54 ab	45 de	50 a-e	48 a
N19006	52 ab	52 c-i	40 a-c	46 a-d	55 ab	50 a-e	52 a-d	49 a
N19009	46 d-i	48 hi	40 a-c	46 a-d	51 ab	47 b-e	53 a	48 a
N19012	51 a-c	55 a-e	41 a-c	51 a-c	53 ab	53 a	49 a-f	51 a
N19013	46 d-i	49 f-i	41 a-c	46 a-d	53 ab	52 ab	47 d-f	48 a
N19019	45 i	53 a-h	44 ab	47 a-d	53 ab	50 a-d	48 d-f	49 a
N19021	47 b-i	51 d-i	38 bc	46 a-d	55 ab	46 de	47 ef	47 a
N19024	47 c-i	53 a-h	39 a-c	45 a-d	55 ab	47 b-e	51 a-e	48 a
N19026	48 a-i	52 c-i	41 a-c	44 cd	50 b	47 b-e	50 a-e	47 a
N19028	47 b-i	55 a-e	44 ab	45 a-d	56 a	46 de	48 c-f	49 a
N19029	46 hi	55 a-e	45 a	45 a-d	52 ab	47 b-e	49 a-f	48 a
N19030	49 a-i	53 a-h	42 a-c	45 a-d	51 ab	48 a-e	51 a-e	48 a
N19033	51 a-c	53 a-g	44 ab	49 a-d	53 ab	48 a-e	48 d-f	50 a
N19034	51 a-f	54 a-e	40 a-c	49 a-d	54 ab	48 a-e	50 a-f	49 a
13x101-2-11-2-1-B	50 a-h	52 c-i	40 a-c	46 a-d	53 ab	46 c-e	47 d-f	48 a
13x101-4-5-2-1-B	50 a-g	52 b-i	41 a-c	48 a-d	53 ab	44 e	47 d-f	48 a
13x101-4-9-1-1-B	51 a-d	54 a-e	38 a-c	51 ab	54 ab	48 a-e	50 a-e	50 a
13x101-5-7-2-1-B	51 a-e	52 c-i	39 a-c	48 a-d	54 ab	46 c-e	45 f	48 a
Mean	47	51	41	46	54	48	49	49
LSD	5	5	7	7	6	6	4	4

¹The higher the number, the brighter the pod color.

²Pods that fell through a 38/64 inch opening but rode a 34/64 inch opening on the pre-sizer.

2023 Results by Location

RESULTS – YIELD AND GRADE BY LOCATION

Table 14. Performance of varieties at Tidewater AREC (Suffolk), VA, in 2023. Dig I, averages of two replicated plots planted on 9 May, dug on 6 October, and combined on 27 October.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value
Variety						%						\$/lb	lb/A	\$/A
Bailey II	0.2	1.2	93 d-f	5.8	53 b-i	20 d-h	3.8	1.5	1.5	64 a-h	71 a-e	0.18 a-c	4777 ab	834 a-c
Emery	0.2	0.5	91 f	5.7	59 a-c	10 i-m	1.3	1.5	0.3	69 a	72 a-c	0.18 ab	5293 ab	966 ab
NC-20	0.4	1.0	92 ef	5.6	42 k	7 lm	3.8	2.3	0.5	61 c-h	68 e-i	0.17 cd	4702 ab	789 a-c
Sullivan	0.2	1.8	93 c-f	5.7	46 h-k	15 e-l	2.8	2.5	0.5	63 a-h	69 c-h	0.17 b-d	5630 a	963 ab
Walton	0.1	0.8	93 d-f	5.7	52 b-i	14 f-m	2.0	2.3	0.8	66 a-d	71 a-d	0.18 a-c	5318 ab	942 ab
N17045	0.0	1.3	93 c-f	5.7	50 f-j	17 e-k	2.5	1.8	0.8	63 b-h	68 e-i	0.17 cd	5472 ab	926 a-c
N17047	0.3	0.8	96 a-d	5.8	49 f-k	8 j-m	2.5	2.8	0.5	61 c-h	67 f-i	0.17 b-d	5591 a	928 a-c
N18010	0.1	1.2	93 d-f	5.6	46 i-k	10 i-m	2.0	2.3	3.3	60 f-h	68 e-i	0.16 d	4985 ab	777 a-c
N18012	0.1	1.7	95 a-f	5.6	45 i-k	11 h-m	3.5	2.5	0.8	59 gh	66 hi	0.17 cd	5418 ab	882 a-c
N18026	0.0	1.2	96 a-d	5.7	54 a-h	19 d-i	1.8	2.0	0.8	66 a-e	70 b-f	0.18 a-c	3362 b	608 bc
N18029	0.0	1.1	96 a-d	5.6	53 b-i	13 f-m	1.5	1.8	1.0	64 a-h	68 d-h	0.17 b-d	4971 ab	840 a-c
N18033	0.1	0.7	96 a-d	5.7	50 f-j	17 e-j	4.8	1.3	0.5	63 a-h	70 b-f	0.18 a-c	5360 ab	939 ab
N18039	0.0	1.4	97 a-c	5.7	54 a-g	34 a	3.3	1.8	1.3	65 a-f	72 a-c	0.18 a-c	5456 ab	966 ab
N18044	0.4	1.7	97 a-c	6.1	50 e-i	19 d-h	4.0	2.0	2.0	60 f-h	68 e-i	0.17 cd	4869 ab	797 a-c
N18049	0.2	1.1	93 d-f	5.8	52 b-i	22 c-f	2.5	2.0	0.8	62 b-h	67 f-i	0.17 cd	5592 a	931 a-c
N18055	0.6	1.0	98 ab	5.9	51 d-i	31 a-c	3.5	1.5	0.8	60 e-h	66 hi	0.17 cd	4743 ab	785 a-c
N19003	0.3	0.7	97 a-c	5.7	61 a	33 ab	3.0	1.0	0.5	67 ab	72 a-c	0.18 ab	5795 a	1061 a
N19006	0.1	1.5	96 a-d	5.8	54 a-h	15 e-l	3.3	1.3	0.8	64 a-h	69 c-h	0.18 a-c	5436 ab	947 ab
N19009	0.1	1.9	98 ab	5.6	51 d-i	22 d-g	2.0	1.8	3.0	61 c-h	68 d-h	0.17 cd	5134 ab	827 a-c
N19012	0.0	1.2	95 a-e	5.6	56 a-f	19 d-i	4.0	1.8	0.3	64 a-h	70 b-f	0.18 ab	5909 a	1042 a
N19013	0.4	1.4	98 ab	5.7	50 e-i	13 g-m	1.3	2.3	2.8	60 e-h	67 g-i	0.16 d	5050 ab	784 a-c
N19019	0.1	1.8	95 a-e	5.6	46 i-k	15 e-l	3.3	2.5	0.8	58 h	65 i	0.16 d	5529ab	885 a-c
N19021	0.2	1.8	95 a-e	6.1	51 c-i	28 a-d	2.0	2.0	3.0	61 d-h	68 d-h	0.16 d	5006 ab	779 a-c
N19024	0.1	0.9	94 b-f	5.8	55 a-g	20 d-h	3.3	2.3	0.8	66 a-e	72 a-c	0.18 ab	5275 ab	946 ab
N19026	0.1	0.9	98 a	5.7	59 ab	24 b-e	2.5	1.5	1.0	66 a-e	71 a-e	0.18 ab	4051 ab	721 a-c
N19028	0.0	0.8	96 a-d	5.8	58 a-e	18 e-i	1.5	1.8	0.8	66 a-e	70 b-g	0.18 a-c	5682 a	997 ab
N19029	0.4	1.1	93 d-f	5.6	58 a-d	31 a-c	5.5	1.0	1.0	66 a-d	74 a	0.19 a	5368 ab	993 ab
N19030	0.3	1.4	96 a-d	5.6	56 a-f	36 a	3.5	1.8	2.8	64 a-g	73 ab	0.18 a-c	3360 b	537 c
N19033	0.1	1.0	95 a-e	5.6	42 jk	6 m	4.0	1.5	0.5	63 a-h	70 b-g	0.18 a-c	5459 ab	942 ab
N19034	0.6	0.4	96 a-d	5.7	52 b-i	8 k-m	2.5	1.3	0.5	66 a-e	70 b-g	0.18 a-c	5054 ab	897 a-c
13x101-2-11-2-1-B	0.4	0.8	95 a-f	5.6	48 g-k	13 f-m	1.5	1.5	2.5	63 a-h	69 c-h	0.17 b-d	4271 ab	691 a-c
13x101-4-5-2-1-B	0.2	0.9	92 ef	6.5	55 a-g	18 e-i	3.3	1.8	0.0	66 a-e	71 a-e	0.18 ab	5127 ab	919 a-c
13x101-4-9-1-1-B	0.2	0.5	94 b-f	5.6	55 a-g	21 d-g	1.5	1.8	0.5	67 a-c	71 a-e	0.18 ab	5351 ab	950 ab
13x101-5-7-2-1-B	0.4	1.3	91 f	5.7	50 e-i	24 b-e	2.0	1.5	2.0	64 a-h	70 b-g	0.17 b-d	4276 ab	721 a-c
Mean	0.2	1.1	92	5.6	50	18	2.7	1.8	1.1	62	67	0.17	4934	843
LSD	-	-	4	-	8	10	-	-	-	6	3	0.01	2209	400

¹ All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

² Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 15. Performance of varieties at Tidewater AREC (Suffolk), VA in 2023. Dig II averages of two replicated plots planted on 10 May, dug on 16 October, and combined on 27 October.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety						%							\$/lb	lb/A	\$/A
Bailey II	0.0	0.8	97 a-c	6.3	52 a-e	10 j-m	3.8	1.8	0.5	63 a-f	69 a-e	0.17 a-d	6074 a-e	1049 ab	
Emery	0.0	0.8	94 b-f	6.2	55 a-e	8 k-m	3.5	1.5	0.8	64 a-d	70 a-c	0.18 ab	5518 c-f	972 ab	
NC-20	0.2	1.9	93 d-f	6.5	35 h	7 lm	2.5	3.0	0.5	53 h	59 g	0.15 e	4989 fg	723 b-e	
Sullivan	0.2	1.2	92 ef	6.3	52 a-e	15 f-k	2.3	1.8	0.5	64 a-e	69 a-e	0.18 a-c	5883 a-e	1011 ab	
Walton	0.2	0.8	91 f	6.5	51 a-e	13 g-m	2.3	1.8	0.5	66 ab	71 ab	0.18 ab	5724 b-f	1016 ab	
N17045	0.0	0.6	97 a-c	6.4	54 a-e	15 f-k	2.0	1.8	1.3	64 a-d	70 a-d	0.17 a-d	6155 a-d	1054 ab	
N17047	0.0	0.8	96 a-d	6.3	53 a-e	13 g-m	2.5	2.0	0.8	64 a-e	69 a-e	0.18 a-c	5686 b-f	977 e	
N18010	0.0	1.2	94 c-f	6.3	50 a-e	10 i-m	1.5	1.8	1.5	63 a-f	68 a-e	0.17 a-e	6155 a-d	727 b-e	
N18012	0.0	1.4	94 c-f	6.5	49 b-e	11 h-m	2.5	2.0	1.0	61 a-h	67 a-f	0.17 a-e	5690 b-f	935 a-c	
N18026	0.2	0.8	96 a-d	6.2	57 a-e	25 cd	1.8	1.3	0.8	65 a-d	69 a-e	0.18 a-c	5864 a-e	1024 ab	
N18029	0.2	1.2	98 ab	6.1	53 a-e	19 d-g	1.0	1.8	1.0	65 a-d	69 a-e	0.17 a-d	5929 a-e	1009 ab	
N18033	0.1	0.8	96 a-d	6.3	48 b-f	18 d-h	4.0	1.5	0.8	60 a-h	67 a-f	0.17 a-e	5719 b-f	950 ab	
N18039	0.0	0.9	97 a-c	6.3	60 a	37 ab	4.3	1.0	0.8	67 a	73 a	0.19 a	6494 ab	1198 a	
N18044	0.1	1.9	97 a-d	6.3	53 a-e	24 c-e	1.5	1.5	2.5	61 a-g	67 a-f	0.17 a-e	5360 d-g	584 c-e	
N18049	0.1	0.8	94 c-f	6.5	44 e-h	17 e-j	1.8	2.5	1.5	55 gh	61 fg	0.15 de	6142 a-e	898 a-d	
N18055	0.2	2.2	96 a-d	6.5	50 a-e	30 bc	2.5	1.3	0.8	58 c-h	63 d-g	0.16 b-e	5391 c-f	854 a-d	
N19003	0.0	1.0	98 ab	6.3	58 ab	36 ab	2.5	1.0	0.8	65 a-d	69 a-e	0.18 a-c	5733 b-f	1003 ab	
N19006	0.0	0.8	95 a-e	6.3	52 a-e	11 h-m	4.0	1.3	0.8	63 a-f	69 a-e	0.17 a-d	5522 c-f	954 ab	
N19009	0.1	1.7	94 b-f	6.2	47 c-g	20 d-g	2.8	1.8	2.0	56 e-h	63 d-g	0.16 c-e	5453 c-f	557 de	
N19012	0.0	0.9	96 a-d	6.2	58 ab	19 d-h	3.0	1.3	0.5	66 a-c	71 ab	0.18 ab	6128 a-e	1097 a	
N19013	0.1	1.3	97 a-c	6.4	50 a-e	13 g-l	2.0	1.5	1.0	60 a-h	65 b-g	0.16 b-e	6059 a-e	972 ab	
N19019	0.0	1.8	96 a-d	6.2	54 a-e	16 e-j	3.3	1.3	1.0	65 a-d	71 ab	0.18 ab	5745 b-f	1014 ab	
N19021	0.2	1.3	96 a-d	6.3	46 d-h	18 d-i	1.3	2.0	1.5	59 b-h	64 c-g	0.16 c-e	5775 b-f	896 a-d	
N19024	0.1	1.4	95 a-e	6.3	55 a-d	21 d-f	1.8	2.0	0.8	65 a-d	69 a-e	0.17 a-d	6201 a-c	1076 ab	
N19026	0.0	0.8	98 a	6.5	55 a-e	17 e-j	2.3	1.8	0.5	64 a-e	69 a-e	0.17 a-d	6687 a	1150 a	
N19028	0.3	1.0	94 b-f	6.3	53 a-e	14 f-l	1.5	1.5	1.0	64 a-e	68 a-e	0.17 a-d	6003 a-e	1014 ab	
N19029	0.1	0.9	94 b-f	6.2	58 ab	35 ab	5.5	1.0	0.5	65 a-d	73 a	0.19 a	6189 a-d	1135 a	
N19030	0.4	0.6	95 a-e	6.2	60 a	39 a	5.5	1.0	0.3	65 a-d	72 a	0.19 a	5841 b-e	1074 ab	
N19033	0.2	1.0	98 ab	6.2	37 f-h	6 lm	2.3	2.3	1.5	56 e-h	63 e-g	0.15 de	6482 ab	969 ab	
N19034	0.0	0.8	94 b-f	6.6	36 gh	5 m	3.5	2.5	0.8	56 f-h	63 e-g	0.15 de	6189 a-d	951 ab	
13x101-2-11-2-1-B	0.0	0.4	96 a-d	6.2	48 b-f	18 d-i	1.0	2.5	1.0	62 a-g	66 a-f	0.16 b-e	5831 b-e	950 ab	
13x101-4-5-2-1-B	0.0	0.6	93 d-f	6.2	55 a-e	34 ab	6.0	1.0	1.3	63 a-f	72 a	0.18 ab	5731 b-f	1021 ab	
13x101-4-9-1-1-B	0.2	0.9	91 f	6.2	47 c-g	13 g-m	2.0	2.0	0.8	62 a-g	67 a-f	0.17 a-e	5320 e-g	887 a-d	
13x101-5-7-2-1-B	0.5	1.4	87 g	6.4	45 d-h	17 e-j	1.5	2.3	3.3	58 d-h	65 b-g	0.16 c-e	4555 g	481 e	
Mean	0.1	1.0	92	6.1	49	18	2.6	1.7	1.0	60	66	0.17	5663	920	
LSD	-	-	4	-	11	8	-	-	-	8	7	0.02	842	358	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 16. Performance of varieties at Martin Co., NC, in 2023. Dig I average of two replicated plots planted on 15 June, dug on 13 October, and combined on 8 November.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value
Variety						%						\$/lb	lb/A	\$/A
Bailey II	0.5	3.5	88 b-f	5.9	35 a-d	11 c-f	2.5	4.3	0.5	59 a	66 ab	0.16 a	2063 ab	328 a-c
Emery	0.6	3.2	87 c-f	6.7	27 e-i	8 f-j	1.5	4.8	0.3	53 a-d	59 ab	0.14 ab	2081 ab	300 a-d
NC-20	0.5	3.2	88 b-f	6.1	26 f-j	4 j	3.3	6.5	0.5	52 a-d	63 ab	0.15 ab	1909 a-d	275 a-e
Sullivan	0.7	4.2	80 g	6.1	26 g-j	5 h-j	1.5	6.0	0.5	59 a	67 a	0.16 a	2029 a-c	316 a-d
Walton	0.5	2.6	83 fg	6.3	26 d-j	8 f-j	1.5	4.5	0.3	57 a-c	63 ab	0.15 ab	2022 a-c	302 a-d
N17045	0.7	4.1	90 a-e	6.3	33 a-g	12 c-f	1.3	5.3	0.8	56 a-d	63 ab	0.15 ab	2478 a	368 ab
N17047	0.3	2.8	88 b-f	6.5	33 a-g	10 d-g	2.3	5.8	0.5	53 a-d	62 ab	0.15 ab	2080 ab	300 a-d
N18010	0.7	3.3	87 b-f	6.4	35 a-e	9 d-i	1.3	4.3	0.5	58 ab	64 ab	0.15 ab	2035 a-c	310 a-d
N18012	0.1	3.1	87 b-f	6.1	26 f-j	6 g-j	1.8	6.0	1.0	55 a-d	64 ab	0.15 ab	2110 ab	310 a-d
N18026	0.7	3.5	89 a-f	6.7	34 a-f	11 d-g	1.0	4.0	0.3	55 a-d	61 ab	0.15 ab	2014 a-c	298 a-d
N18029	0.4	6.2	92 a-d	6.3	26 f-j	9 d-i	1.3	5.0	0.3	56 a-d	62 ab	0.15 ab	2089 ab	306 a-d
N18033	1.0	3.3	89 b-f	5.9	27 f-j	8 e-j	3.5	5.5	0.8	53 a-d	63 ab	0.15 ab	2277 ab	332 a-c
N18039	0.5	3.8	88 b-f	6.5	35 a-d	16 a-c	1.5	4.8	0.8	55 a-d	62 ab	0.15 ab	2643 a	391 a
N18044	0.1	2.9	95 a	6.1	40 a	19 a	1.5	3.8	1.3	55 a-d	62 ab	0.15 ab	2403 ab	354 a-c
N18049	1.0	4.3	86 d-g	6.1	26 f-j	8 e-j	3.0	4.8	1.0	50 cd	59 ab	0.14 ab	2104 ab	287 a-e
N18055	0.1	3.1	93 ab	5.8	39 ab	17 ab	1.5	3.8	0.8	59 a	65 ab	0.16 ab	1292 cd	201 de
N19003	0.8	4.5	86 d-g	6.3	28 d-j	9 d-i	1.5	4.5	0.5	54 a-d	60 ab	0.15 ab	2283 ab	324 a-d
N19006	0.6	3.5	88 b-f	6.2	22 j	4 ij	1.3	5.5	1.3	51 b-d	59 ab	0.14 b	2269 ab	303 a-d
N19009	0.9	4.4	91 a-d	6.1	32 b-g	10 d-h	1.8	4.8	1.8	55 a-d	63 ab	0.15 ab	2206 ab	320 a-d
N19012	0.4	3.7	91 a-d	6.3	32 b-g	9 d-h	3.3	3.3	0.3	53 a-d	60 ab	0.15 ab	1981 a-c	286 a-e
N19013	1.0	5.8	86 c-g	5.9	23 ij	5 h-j	2.0	5.8	0.8	50 cd	58 b	0.14 b	2120 ab	281 a-e
N19019	0.8	6.5	90 a-e	5.8	31 c-h	6 g-j	2.3	5.0	1.0	56 a-d	65 ab	0.15 ab	2114 ab	318 a-d
N19021	0.4	3.7	90 a-e	6.2	32 b-g	11 d-g	1.5	4.3	1.3	55 a-d	62 ab	0.15 ab	1944 a-d	280 a-e
N19024	3.4	2.5	83 fg	6.2	28 d-j	9 d-h	1.5	6.0	0.5	54 a-d	63 ab	0.15 ab	2332 ab	338 a-c
N19026	0.4	4.9	92 a-c	6.1	30 c-i	11 d-g	1.0	5.0	0.0	53 a-d	60 ab	0.15 ab	2048 ab	292 a-d
N19028	0.5	3.7	86 c-g	6.3	31 b-h	11 c-f	2.5	5.0	0.5	52 a-d	60 ab	0.14 ab	1662 b-d	235 c-e
N19029	1.6	1.4	88 b-f	5.9	37 a-c	13 b-e	2.8	3.5	0.5	58 ab	65 ab	0.16 a	2395 ab	372 ab
N19030	0.7	3.9	87 b-f	6.0	35 a-e	13 b-d	2.8	5.3	0.5	56 a-d	64 ab	0.15 ab	2309 ab	351 a-c
N19033	0.5	5.3	89 b-f	6.0	28 d-j	5 h-j	4.0	4.8	0.5	53 a-d	63 ab	0.15 ab	1945 a-d	287 a-e
N19034	0.9	5.2	86 c-g	5.9	24 h-j	5 h-j	3.3	5.5	0.5	49 d	58 b	0.14 b	1919 a-d	260 b-e
13x101-2-11-2-1-B	0.5	3.2	89 b-f	5.9	27 f-j	6 g-j	2.0	5.8	1.0	54 a-d	63 ab	0.15 ab	1983 a-c	292 a-d
13x101-4-5-2-1-B	0.7	3.2	86 c-g	5.8	30 c-j	8 f-j	2.3	5.3	0.8	57 a-c	65 ab	0.15 ab	1992 a-c	308 a-d
13x101-4-9-1-1-B	1.2	3.4	89 a-f	6.0	32 b-g	11 d-g	1.3	6.5	0.8	55 a-d	63 ab	0.15 ab	2131 ab	315 a-d
13x101-5-7-2-1-B	0.1	3.0	84 e-g	6.3	26 g-j	6 g-j	1.0	5.0	0.0	52 a-d	58 b	0.14 b	1202 d	164 e
Mean	0.7	3.8	88	6.1	30.1	9	2.0	5.0	0.7	55	62	0.15	2072	303
LSD	-	-	6	-	8	5	-	-	-	8	9	0.09	765	126

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 17. Performance of varieties at Martin Co., NC, in 2023. Dig II averages of two replicated plots planted on 15 June, dug on 19 October, and combined on 8 November.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% ²												\$/lb	lb/A	\$/A
Bailey II	0.9	2.5	92 a-f	6.4	37 b-i	10 d-h	1.5	2.8	0.0	57 a-d	61 a-e	0.15 a-e	2809 a-c	424 a-d	
Emery	0.0	1.5	93 a-f	6.5	38 a-h	8 g-j	1.3	3.5	0.3	57 a-d	62 a-e	0.15 a-e	2201 c	332 cd	
NC-20	0.2	1.9	93 a-f	6.4	33 g-j	5 i-k	1.5	2.8	0.5	56 a-e	61 a-e	0.15 b-f	2753 a-c	406 a-d	
Sullivan	0.2	2.5	94 a-d	6.4	37 b-i	7 g-j	1.8	3.5	0.3	57 a-d	63 a-d	0.15 a-d	2856 a-c	435 a-d	
Walton	0.2	2.2	88 d-f	6.4	28 jk	4 jk	1.0	3.5	0.0	56 a-e	61 b-f	0.15 c-g	2930 a-c	432 a-d	
N17045	0.0	1.5	94 a-c	6.0	42 a-e	9 f-j	1.5	3.5	0.3	58 a-c	63 a-d	0.15 a-d	3178 ab	491 a-d	
N17047	0.1	3.2	93 a-e	6.1	43 a-d	8 g-j	2.8	3.0	0.3	60 ab	66 ab	0.16 ab	3033 a-c	489 a-d	
N18010	0.0	2.1	91 a-f	6.2	39 a-h	5 i-k	2.3	3.8	0.0	57 a-c	64 a-c	0.15 a-d	3300 a	515 a	
N18012	0.4	2.0	92 a-f	5.8	37 b-i	7 g-k	4.3	3.0	0.3	55 b-f	63 a-d	0.15 a-d	3080 a-c	474 a-d	
N18026	0.6	2.1	93 a-f	6.2	41 a-f	8 g-j	1.8	2.5	0.3	59 a-c	63 a-d	0.16 a-d	3138 a-c	498 ab	
N18029	0.2	2.8	93 a-e	6.1	42 a-e	9 e-i	1.5	3.0	0.3	59 ab	64 a-c	0.16 a-d	3061 a-c	483 a-d	
N18033	0.2	2.9	92 a-f	6.0	36 d-j	9 f-j	4.5	3.5	0.0	54 c-f	62 a-e	0.15 a-e	3367 a	508 a	
N18039	0.2	3.3	92 a-f	6.4	34 e-j	9 e-i	1.3	3.8	0.0	55 b-f	60 c-f	0.15 d-g	2283 bc	331 d	
N18044	0.0	2.1	95 a-c	6.0	43 a-d	14 b-d	2.3	2.5	0.5	58 a-c	63 a-d	0.16 a-d	2554 a-c	399 a-d	
N18049	1.1	2.9	89 c-f	6.1	36 c-i	8 g-j	3.3	3.0	0.0	55 b-f	62 a-e	0.15 a-e	3031 a-c	460 a-d	
N18055	0.0	1.6	96 ab	6.0	44 a-c	16 bc	1.0	2.3	0.0	59 ab	63 a-d	0.16 a-d	2719 a-c	425 a-d	
N19003	0.1	2.6	95 a-c	6.1	41 a-g	13 c-f	2.5	2.3	0.3	57 a-d	62 a-e	0.15 a-d	3044 a-c	466 a-d	
N19006	0.1	2.8	91 a-f	6.3	24 k	2 k	1.5	3.5	0.0	51 f	56 f	0.13 g	2955 a-c	401 a-d	
N19009	0.2	1.8	92 a-f	6.3	39 a-g	8 g-j	2.0	3.0	0.0	57 a-d	62 a-e	0.15 a-d	2906 a-c	443 a-d	
N19012	0.3	3.2	89 c-f	6.1	42 a-e	11 c-g	1.8	3.0	0.0	59 a-c	64 a-c	0.16 a-d	3143 a-c	495 ab	
N19013	0.5	2.6	95 a-c	6.1	37 b-i	7 g-j	1.3	3.3	0.3	56 a-f	61 b-f	0.15 b-g	2912 a-c	432 a-d	
N19019	0.1	2.0	94 a-c	6.2	40 a-h	8 g-j	1.8	3.5	0.0	56 a-e	62 a-e	0.15 a-e	3216 ab	485 a-d	
N19021	0.0	2.0	97 a	6.1	44 ab	18 ab	2.3	2.0	0.3	60 ab	64 a-c	0.16 a-c	3003 a-c	481 a-d	
N19024	0.3	1.8	90 b-f	6.2	38 a-i	6 h-k	1.5	3.0	0.0	59 a-c	64 a-c	0.16 a-d	2528 a-c	394 a-d	
N19026	0.1	2.4	93 a-e	6.4	32 h-j	5 i-k	0.8	4.0	0.3	52 d-f	57 ef	0.14 fg	2486 a-c	336 b-d	
N19028	0.0	3.2	87 ef	6.4	44 a-c	8 g-j	2.0	2.8	0.3	59 a-c	64 a-c	0.16 a-d	2550 a-c	409 a-d	
N19029	0.4	2.4	92 a-f	6.5	42 a-e	14 b-e	1.8	2.5	0.0	61 a	65 a-c	0.16 ab	3055 a-c	494 a-c	
N19030	0.2	2.1	94 a-d	6.0	45 a	21 a	3.3	2.5	0.0	60 ab	66 a	0.16 a	2818 a-c	456 a-d	
N19033	1.1	2.0	93 a-e	6.1	34 f-j	5 i-k	4.0	3.0	0.5	54 c-f	62 a-e	0.15 b-f	2688 a-c	401 a-d	
N19034	0.0	2.1	95 a-c	6.2	34 f-j	5 i-k	3.3	3.5	0.5	55 b-f	63 a-d	0.15 a-e	3159 a-c	476 a-d	
13x101-2-11-2-1-B	0.2	1.5	91 a-f	6.2	30 i-k	6 h-k	1.5	5.3	0.0	51 ef	58 d-f	0.14 e-g	2932 a-c	403 a-d	
13x101-4-5-2-1-B	0.2	2.2	87 ef	6.1	39 a-h	6 h-k	2.0	3.0	0.3	59 a-c	64 a-c	0.16 a-d	3058 a-c	480 a-d	
13x101-4-9-1-1-B	0.8	2.4	89 c-f	6.2	34 e-j	8 g-j	2.0	3.5	0.3	55 b-f	61 a-e	0.15 b-f	2722 a-c	407 a-d	
13x101-5-7-2-1-B	0.1	2.8	87 f	6.4	38 a-i	8 g-j	2.3	3.5	0.0	57 a-c	63 a-d	0.15 a-d	2988 a-c	463 a-d	
Mean	0.3	2.3	92	6.2	38	9	2.1	3.2	0.2	57	62	0.15	2896	442	
LSD	-	-	6	-	8	5	-	-	-	5	5	0.07	983	163	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test

2023 Results by Location

Table 18. Performance of varieties at Rocky Mount, NC, in 2023. Averages of two replicated plots planted on 16 May, dug on 11 October, and combined on 24 October.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety													\$/lb	lb/A	\$/A
Bailey II	0.0	0.4	93 cd	5.9	51 ab	11 e-h	2.0	2.0	0.5	59 a-f	64 b-f	0.16 a-e	3329 c-e	532 a-e	
Emery	0.2	0.4	96 a-c	5.6	55 ab	15 c-g	3.0	1.8	1.2	64 a-e	70 a-d	0.17 a-d	4140 a-d	718 a-c	
NC-20	0.6	0.4	96 a-c	5.3	34 cd	4 h	1.5	3.0	0.8	50 fg	55 f	0.13 e	3396 c-e	454 de	
Sullivan	0.2	0.9	93 cd	6.2	44 a-d	10 f-h	1.0	2.3	0.5	55 d-g	59 d-f	0.15 de	3128 de	462 c-e	
Walton	0.1	0.1	91 d	5.4	52 ab	9 f-h	2.5	1.5	0.3	67 a	72 ab	0.18 ab	4033 a-d	729 ab	
N17045	0.1	0.4	98 a	5.8	51 ab	15 c-g	3.0	1.3	1.3	60 a-e	66 a-d	0.16 a-d	3654 a-e	593 a-e	
N17047	0.1	0.5	95 a-d	5.4	51 ab	6 gh	3.3	1.8	0.8	63 a-e	69 a-d	0.17 a-d	3737 a-d	641 a-e	
N18010	0.1	0.2	95 a-d	5.7	45 a-d	9 f-h	2.5	2.0	1.3	56 c-g	62 c-f	0.15 b-e	3778 a-d	572 a-e	
N18012	0.3	0.4	98 ab	5.5	52 ab	15 c-g	3.5	1.5	0.8	60 a-e	66 a-d	0.16 a-d	4230 a-c	703 a-e	
N18026	0.4	0.4	97 a-c	6.1	57 ab	25 ab	1.0	1.0	0.8	65 a-d	68 a-d	0.17 a-d	3889 a-d	665 a-e	
N18029	0.3	0.7	96 a-c	5.9	53 ab	14 d-g	2.0	1.3	0.0	62 a-e	66 a-d	0.17 a-d	3780 a-d	633 a-e	
N18033	0.1	0.3	97 a-c	5.9	46 a-c	15 c-g	3.8	1.5	1.0	56 c-g	63 b-f	0.16 b-e	4269 a-c	663 a-e	
N18039	0.1	0.3	95 a-d	5.4	57 ab	33 a	3.0	2.0	0.8	65 a-c	71 a-c	0.18 a-c	3988 a-d	710 a-d	
N18044	0.5	1.1	96 a-c	5.7	41 b-d	12 e-h	1.3	2.3	1.5	55 e-g	60 d-f	0.15 de	3375 c-e	485 b-e	
N18049	0.2	0.6	95 a-d	5.9	47 a-c	18 b-f	2.3	1.8	1.3	57 b-g	62 c-f	0.15 b-e	4296 a-c	658 a-e	
N18055	0.4	0.7	96 a-c	5.4	53 ab	26 ab	2.5	2.3	0.8	60 a-e	66 a-d	0.16 a-d	4224 a-c	690 a-e	
N19003	0.0	0.5	98 ab	6.2	53 ab	26 ab	3.3	1.0	1.3	60 a-e	66 a-d	0.16 a-d	3588 b-e	585 a-e	
N19006	0.2	0.3	96 a-c	5.5	52 ab	19 b-e	3.8	1.3	1.5	62 a-e	69 a-d	0.17 a-d	4581 ab	771 a	
N19009	0.2	0.3	97 a-c	5.8	52 ab	19 b-e	2.5	2.0	0.5	59 a-f	65 a-e	0.16 a-e	4220 a-c	678 a-e	
N19012	0.5	0.8	94 a-d	5.5	42 a-d	8 f-h	3.0	2.0	0.8	56 c-g	62 c-f	0.15 c-e	3762 a-d	581 a-e	
N19013	0.1	1.0	96 a-c	5.3	38 b-d	9 f-h	1.3	2.3	1.5	56 c-g	61 d-f	0.15 de	3794 a-d	580 a-e	
N19019	0.2	0.7	93 cd	5.6	42 a-d	10 f-h	2.0	2.3	1.0	56 c-g	62 d-f	0.15 c-e	3619 b-e	557 a-e	
N19021	0.2	0.6	95 a-d	5.5	46 a-c	18 b-f	2.5	1.5	1.5	58 a-g	63 b-f	0.16 b-e	3634 a-e	571 a-e	
N19024	0.0	0.4	93 cd	5.7	52 ab	8 f-h	1.3	2.0	0.0	64 a-e	67 a-d	0.17 a-d	2614 e	444 e	
N19026	0.1	0.4	96 a-c	5.4	54 ab	11 e-h	2.0	1.8	0.5	61 a-e	65 a-d	0.16 a-d	4281 a-c	700 a-e	
N19028	0.1	0.6	93 cd	5.4	56 ab	4 h	1.5	2.0	0.3	65 a-c	69 a-d	0.17 a-d	3726 a-d	649 a-e	
N19029	0.1	0.5	95 a-d	5.5	59 a	27 ab	5.8	1.0	0.5	66 ab	74 a	0.19 a	3686 a-e	689 a-e	
N19030	0.6	0.3	95 a-d	5.4	52 ab	24 bc	2.5	2.0	1.8	63 a-e	69 a-d	0.17 a-d	3581 b-e	603 a-e	
N19033	0.3	0.6	97 a-c	5.5	29 d	4 h	2.8	3.3	1.0	49 g	56 ef	0.13 e	3767 a-d	501 b-e	
N19034	0.7	0.1	97 a-c	5.4	36 b-d	7 f-h	2.5	3.0	1.0	52 e-g	59 d-f	0.14 de	4962 a	701 a-e	
13x101-2-11-2-1-B	0.2	0.6	95 a-d	5.8	33 cd	4 h	0.5	3.5	1.3	55 e-g	60 d-f	0.14 de	3310 c-e	470 b-e	
13x101-4-5-2-1-B	0.2	0.7	93 cd	5.2	44 a-d	21 b-d	2.5	2.5	1.0	57 b-g	64 b-f	0.16 b-e	3380 c-e	523 a-e	
13x101-4-9-1-1-B	0.2	0.4	94 b-d	5.9	47 a-c	18 b-f	1.8	1.8	0.5	59 a-f	63 b-f	0.16 b-e	3319 c-e	522 a-e	
13x101-5-7-2-1-B	0.2	0.3	97 a-c	5.6	54 ab	27 ab	2.5	1.3	0.8	63 a-e	68 a-d	0.17 a-d	3957 a-d	693 a-e	
Mean	0.2	0.5	95	5.6	48	15	2.4	1.9	0.9	59	65	0.16	3795	610	
LSD	-	-	4	-	16	9	-	-	-	9	9	0.03	1149	261	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 19. Performance of varieties at Blackville, SC, in 2023. Dig I average of two replicated plots planted on 17 May, dug on 28 September, and combined on 10 October.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.4	1.7	88 a-f	5.6	42 a-h	5 fg	4.3	2.0	1.3	59 a-f	67 c-g	0.17 b-d	3672 a-d	598 b-d	
Emery	0.7	1.5	87 c-f	5.6	45 a-e	8 c-g	7.0	1.5	0.5	60 a-e	69 a-d	0.17 a-c	3224 cd	553 cd	
NC-20	0.2	1.6	89 a-e	5.6	35 h-j	15 a-d	6.8	2.5	0.5	57 d-g	67 c-g	0.16 cd	3719 a-d	611 a-d	
Sullivan	0.4	2.4	83 ef	5.6	38 e-i	5 e-g	7.0	2.5	0.8	56 e-g	69 a-e	0.17 b-d	3564 b-d	581 cd	
Walton	0.3	1.3	81 f	5.6	42 a-g	5 e-g	6.3	1.8	0.5	62 a-c	70 a-c	0.18 ab	4106 ab	716 a-c	
N17045	0.3	2.6	86 c-f	5.7	41 b-h	8 c-g	6.0	2.3	0.5	59 a-f	68 b-f	0.17 b-d	3515 b-d	584 cd	
N17047	0.3	1.6	86 c-f	5.6	41 b-h	3 fg	5.8	2.3	0.5	59 a-f	68 b-f	0.17 b-d	3508 b-d	581 cd	
N18010	0.4	1.6	91 a-d	5.8	39 d-g	8 c-g	4.5	2.3	1.0	58 b-g	66 c-g	0.17 b-d	4157 ab	673 a-c	
N18012	0.2	1.5	85 d-f	5.6	36 f-j	4 fg	6.8	2.8	0.8	56 e-g	67 c-g	0.16 cd	3917 a-d	630 a-d	
N18026	0.5	1.4	89 a-e	5.7	40 c-g	9 c-g	4.3	2.0	0.3	60 a-e	66 c-g	0.17 b-d	3795 a-d	624 a-d	
N18029	0.6	1.4	85 d-f	5.5	43 a-f	6 e-g	4.0	2.0	0.5	60 a-e	67 c-g	0.17 b-d	3312 b-d	548 cd	
N18033	0.2	2.5	88 a-e	5.6	43 a-e	9 c-g	5.3	2.5	0.8	58 b-g	66 c-g	0.17 b-d	4291 ab	700 a-c	
N18039	0.2	1.5	93 a-c	5.6	48 ab	22 a	5.8	1.5	0.3	60 a-e	68 a-e	0.17 a-c	4004 a-d	680 a-c	
N18044	0.2	1.4	85 d-f	5.5	41 a-h	8 c-g	5.3	2.0	0.8	59 a-f	68 b-f	0.17 b-d	4067 a-c	675 a-c	
N18049	0.7	1.4	88 a-f	5.9	39 d-h	7 d-g	6.5	2.8	1.5	55 e-g	66 c-g	0.16 cd	4220 ab	663 a-c	
N18055	0.4	1.8	94 a	5.6	47 a-c	20 ab	3.5	1.8	0.5	60 a-e	66 d-g	0.17 b-d	3905 a-d	642 a-d	
N19003	0.2	1.5	87 b-f	5.6	45 a-e	14 a-e	3.3	2.3	1.0	61 a-d	68 a-e	0.17 b-d	3584 b-d	594 b-d	
N19006	0.2	1.3	87 c-f	5.7	38 e-i	6 e-g	4.5	2.5	0.8	59 a-f	67 c-g	0.17 b-d	3944 a-d	647 a-c	
N19009	0.7	1.6	91 a-d	5.7	42 a-g	5 fg	5.3	1.5	1.0	59 a-f	67 c-g	0.17 b-d	3480 b-d	576 cd	
N19012	0.5	1.3	85 d-f	5.6	45 a-e	5 e-g	5.5	2.5	1.0	59 a-f	68 a-e	0.17 a-c	4519 a	757 a	
N19013	0.4	2.1	92 a-d	5.7	38 d-i	5 e-g	4.8	2.0	1.0	57 d-g	65 e-g	0.16 cd	3730 a-d	587 b-d	
N19019	0.7	1.5	92 a-d	5.6	44 a-e	9 c-g	5.0	1.5	0.8	60 a-e	67 c-g	0.17 b-d	3421 b-d	570 cd	
N19021	0.3	1.5	92 a-d	5.8	45 a-e	9 c-g	2.8	1.8	0.5	61 a-e	66 c-g	0.16 cd	3875 a-d	636 a-d	
N19024	0.5	1.6	89 a-e	5.7	48 ab	10 c-g	4.8	2.8	0.8	63 a	72 ab	0.18 a	4001 a-d	705 a-c	
N19026	0.2	1.4	94 a	5.5	45 a-e	8 c-g	3.3	1.8	0.5	61 a-d	67 c-g	0.17 b-d	3546 b-d	592 b-d	
N19028	0.3	1.3	87 b-f	5.6	45 a-d	6 e-g	5.5	2.3	0.3	60 a-e	68 b-f	0.17 a-c	3588 b-d	604 a-d	
N19029	0.6	1.7	85 d-f	5.7	43 a-f	11 b-f	6.8	1.8	1.0	62 ab	72 a	0.18 a	4221 ab	742 ab	
N19030	0.8	2.0	94 ab	5.5	48 a	16 a-c	8.3	1.5	0.5	60 a-e	70 a-c	0.18 ab	3886 a-d	681 a-c	
N19033	0.3	1.4	92 a-d	5.5	31 ij	3 fg	5.8	2.5	0.5	55 fg	64 fg	0.16 d	3820 a-d	591 b-d	
N19034	0.6	1.2	87 b-f	5.7	29 j	2 g	7.3	2.8	1.0	54 g	65 d-g	0.16 d	3466 b-d	541 cd	
13x101-2-11-2-1-B	0.6	1.7	90 a-d	5.7	35 g-j	6 e-g	4.3	2.8	0.5	56 e-g	63 g	0.16 d	3161 d	489 d	
13x101-4-5-2-1-B	0.2	1.4	92 a-d	5.7	42 a-g	15 a-d	5.8	1.5	1.0	57 c-g	66 d-g	0.16 cd	3756 a-d	609 a-d	
13x101-4-9-1-1-B	0.5	3.2	84 d-f	5.5	42 a-h	13 a-f	2.5	1.9	0.5	61 a-e	66 c-g	0.16 b-d	3244 b-d	534 cd	
13x101-5-7-2-1-B	0.5	1.0	88 a-e	5.7	41 a-h	16 a-c	3.5	2.0	1.5	59 a-f	66 c-g	0.16 cd	3575 b-d	572 cd	
Mean	0.4	1.6	88	5.6	41	9	5	2	0.7	59	67	0.17	3759	620	
LSD	-	-	7	-	7	9	-	-	-	5	4	0.01	865	155	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

2023 Results by Location

Table 20. Performance of varieties at Blackville, SC, in 2023. Dig II average of two replicated plots planted on 17 May, dug on 3 October, and combined on 10 November.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.3	0.6	89 a-c	5.9	47 ab	11 b-d	5.5	1.8	0.3	63 ab	71 a	0.18 a	3253 ef	576 d-i	
Emery	0.8	1.6	91 a-c	5.8	48 ab	7 c-g	4.0	1.8	1.0	64 a	71 a	0.18 ab	3193 ef	559 e-i	
NC-20	0.3	1.0	86 bc	5.8	39 bc	6 d-g	6.8	2.0	0.8	58 cd	68 a-d	0.17 b-d	3381 c-f	565 e-i	
Sullivan	0.1	1.0	87 bc	5.8	39 bc	5 d-g	5.3	2.0	1.5	59 cd	68 b-e	0.17 b-d	3465 c-f	567 e-i	
Walton	0.8	1.4	70 d	5.7	36 cd	7 d-g	5.5	2.8	0.8	59 b-d	69 a-c	0.17 a-c	3007 f	499 hi	
N17045	0.4	1.1	89 a-c	5.3	43 a-c	9 c-f	4.5	2.0	0.8	60 a-c	68 b-e	0.17 a-c	3961 a-e	661 a-g	
N17047	1.3	1.1	86 bc	5.6	39 bc	3 fg	5.0	2.0	0.5	61 a-c	69 a-c	0.17 b-d	3617 b-f	611 b-i	
N18010	0.6	1.0	87 bc	5.8	40 bc	4 e-g	4.0	2.0	0.8	60 a-c	67 c-f	0.17 b-d	3925 a-e	650 a-g	
N18012	0.4	1.0	87 bc	5.7	43 a-c	5 d-g	4.5	2.3	1.0	58 cd	66 c-g	0.16 c-e	3274 ef	529 g-i	
N18026	0.4	0.7	90 a-c	5.7	45 ab	12 b-d	3.5	1.8	1.5	62 a-c	69 a-c	0.17 a-c	3543 c-f	594 d-i	
N18029	0.4	1.4	85 c	5.6	41 bc	8 c-g	4.3	2.0	1.8	59 b-d	68 b-e	0.17 b-d	3033 f	492 i	
N18033	0.2	1.9	90 a-c	5.7	43 a-c	10 b-d	4.3	1.5	0.5	61 a-c	68 b-e	0.17 b-d	3815 a-e	642 a-g	
N18039	0.3	0.7	91 a-c	5.7	46 ab	17 ab	6.0	1.8	0.5	59 cd	67 c-f	0.17 b-d	4354 a	726 ab	
N18044	0.3	1.5	94 a	5.9	48 ab	12 b-d	3.0	1.5	1.0	61 a-c	67 c-f	0.17 b-d	3643 b-f	602 b-i	
N18049	0.1	2.4	86 bc	5.7	38 b-d	4 d-g	3.8	2.0	1.0	57 cd	63 g	0.16 cd	3934 a-e	617 a-i	
N18055	2.8	4.4	89 a-c	5.9	45 ab	14 bc	3.0	1.8	1.8	60 a-c	67 c-f	0.16 cd	3867 a-e	622 a-h	
N19003	0.3	0.8	92 a-c	5.7	50 a	15 a-c	4.3	1.3	1.0	62 a-c	69 a-c	0.18 ab	3924 a-e	676 a-f	
N19006	0.1	0.6	90 a-c	5.7	40 bc	8 c-g	5.3	1.5	1.0	57 cd	65 e-g	0.16 cd	3504 c-f	560 e-i	
N19009	0.4	1.0	90 a-c	5.2	41 bc	8 c-g	5.8	1.8	1.0	57 cd	66 d-g	0.17 b-d	3587 c-f	581 d-i	
N19012	0.3	0.9	89 a-c	5.6	42 a-c	8 c-g	5.0	2.3	0.8	60 a-c	68 a-d	0.17 b-d	4293 ab	723 a-c	
N19013	0.3	1.6	91 a-c	5.8	46 ab	10 b-e	2.8	1.5	1.0	61 a-c	66 c-g	0.17 b-d	3804 a-e	622 a-h	
N19019	0.3	3.0	88 a-c	5.7	44 a-c	10 b-e	4.5	1.8	0.3	61 a-c	67 c-f	0.17 a-c	4053 a-c	682 a-e	
N19021	0.3	1.3	91 a-c	5.9	42 a-c	11 b-d	3.8	2.3	1.3	58 cd	65 e-g	0.16 cd	3540 c-f	561 e-i	
N19024	0.3	0.8	89 a-c	5.5	47 ab	10 b-e	5.0	2.0	0.8	62 a-c	70 ab	0.18 ab	4023 a-d	697 a-d	
N19026	0.3	1.3	94 ab	5.8	51 a	13 bc	3.5	2.0	0.8	60 a-c	67 c-f	0.17 b-d	3939 a-e	654 a-g	
N19028	0.4	1.1	87 bc	5.5	45 ab	8 c-g	4.3	2.3	0.8	62 a-c	69 a-c	0.18 ab	3642 b-f	618 a-i	
N19029	0.1	0.6	89 a-c	5.8	44 a-c	17 ab	6.8	1.5	1.0	60 a-c	69 a-c	0.17 a-c	4565 a	781 a	
N19030	0.6	0.8	89 a-c	5.7	48 ab	20 a	5.8	1.8	1.0	62 a-c	70 ab	0.18 ab	4418 a	766 a	
N19033	0.3	1.2	90 a-c	5.7	35 cd	6 d-g	5.3	2.3	0.8	58 cd	66 c-g	0.16 cd	4505 a	726 ab	
N19034	0.2	1.3	88 a-c	5.5	30 d	2 g	5.5	3.5	1.0	54 d	65 fg	0.16 d	3615 b-f	550 f-i	
13x101-2-11-2-1-B	0.7	0.9	92 a-c	5.7	43 a-c	15 a-c	2.7	2.0	1.0	59 a-d	66 c-g	0.16 cd	3148 ef	505 g-i	
13x101-4-5-2-1-B	0.3	0.7	89 a-c	5.7	45 ab	16 ab	4.8	1.5	0.8	61 a-c	68 a-d	0.17 b-d	3351 d-f	566 e-i	
13x101-4-9-1-1-B	0.6	1.2	88 a-c	5.8	46 ab	15 a-c	4.0	1.3	0.3	51 a-c	67 c-f	0.17 a-c	3222 ef	642 g-i	
13x101-5-7-2-1-B	0.7	0.5	90 a-c	5.8	48 ab	20 a	3.8	1.8	0.5	62 a-c	68 a-d	0.17 a-c	3519 c-f	596 c-i	
Mean	0.5	1.2	89	5.7	43	10	4.6	1.9	0.9	60	67	0.17	3703	618	
LSD	-	-	7	-	9	6	-	-	-	4	3	0.01	702	127	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

2023 Results Across Locations

Table 21. Performance of varieties averaged across all test locations and digs in 2023.

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value
Variety	% Bailey II 0.3 1.5 91 c-i 5.9 45 a-d 11 f-k 3.3 2.2 0.6 60 a-f 67 b-d 0.17 b-f 3711 a 620 a-c Emery 0.3 1.3 91 c-i 6.0 46 a-d 9 h-l 3.1 2.3 0.6 61 a-d 67 a-d 0.17 a-e 3664 a 628 a-c NC-20 0.3 1.6 91 d-i 5.9 35 f-h 7 kl 3.7 3.1 0.6 55 i 63 g 0.15 j 3550 a 546 bc Sullivan 0.3 2.0 89 i 6.0 40 d-h 9 h-l 3.1 2.9 0.6 59 b-h 66 b-f 0.16 b-i 3793 a 619 a-c Walton 0.3 1.3 85 j 5.9 41 b-f 8 h-l 3.0 2.6 0.4 62 ab 68 a-c 0.17 a-c 3877 a 662 a-c N17045 0.2 1.7 92 a-g 5.9 44 a-d 12 e-j 3.0 2.5 0.8 60 a-g 66 b-e 0.16 b-h 4059 a 668 a-c N17047 0.3 1.5 91 b-i 5.9 44 a-d 7 j-l 3.4 2.8 0.5 60 a-g 67 b-d 0.16 b-f 3893 a 647 a-c N18010 0.3 1.5 91 c-i 5.9 42 b-e 8 i-l 2.6 2.6 1.2 59 b-h 65 c-g 0.16 c-j 4048 a 603 a-c N18012 0.2 1.6 91 d-i 5.8 41 b-g 8 h-l 3.8 2.9 0.8 58 f-i 65 c-g 0.16 c-j 3960 a 637 a-c N18026 0.4 1.4 93 a-g 6.0 47 a-d 15 d-f 2.1 2.1 0.6 61 a-d 66 b-e 0.17 b-f 3658 a 616 a-c N18029 0.3 2.1 92 a-h 5.8 44 a-d 11 f-k 2.2 2.4 0.7 61 a-f 66 b-f 0.16 b-g 3739 a 616 a-c N18033 0.3 1.8 92 a-g 5.8 42 b-e 12 d-i 4.3 2.5 0.6 58 f-i 65 c-g 0.16 c-j 4157 a 676 a-c N18039 0.2 1.7 93 a-g 5.9 48 ab 24 a 3.6 2.4 0.6 61 a-f 67 a-d 0.17 a-e 4174 a 715 ab N18044 0.2 1.8 94 a-c 5.9 45 a-d 15 d-f 2.7 2.2 1.4 58 d-i 65 d-g 0.16 c-j 3753 a 557 a-c N18049 0.5 1.9 90 e-i 6.0 40 c-g 12 d-h 3.2 2.7 1.0 55 hi 63 g 0.15 g-j 4195 a 646 a-c N18055 0.6 2.1 95 ab 5.9 47 a-d 22 a 2.5 2.1 0.8 59 a-g 65 c-g 0.16 d-j 3734 a 603 a-c N19003 0.2 1.6 93 a-g 5.9 48 ab 20 a-c 2.9 1.9 0.8 61 a-f 66 b-e 0.17 b-f 3993 a 672 a-c N19006 0.2 1.5 92 a-i 5.9 40 d-h 9 g-l 3.4 2.4 0.9 58 e-i 65 d-g 0.16 d-j 4030 a 655 a-c N19009 0.3 1.8 93 a-f 5.8 43 a-e 13 d-h 3.1 2.4 1.3 58 f-i 65 d-g 0.16 e-j 3855 a 569 a-c N19012 0.3 1.6 91 b-i 5.8 45 a-d 11 f-k 3.6 2.3 0.5 59 b-g 66 c-g 0.16 b-f 4219 a 703 a-c N19013 0.4 2.2 93 a-e 5.8 40 d-h 9 h-l 2.2 2.6 1.2 57 g-i 63 fg 0.15 h-j 3924 a 608 a-c N19019 0.3 2.5 93 a-g 5.8 43 a-e 10 g-k 3.1 2.5 0.7 59 b-h 65 c-g 0.16 b-j 3956 a 644 a-c N19021 0.2 1.7 94 a-d 5.9 44 a-e 16 c-e 2.3 2.3 1.3 58 c-i 65 d-g 0.16 f-j 3825 a 601 a-c N19024 0.7 1.3 90 e-i 5.9 46 a-d 12 e-j 2.7 2.9 0.5 62 a-c 68 a-c 0.17 a-d 3853 a 657 a-c N19026 0.2 1.7 95 a 5.9 46 a-d 12 d-i 2.2 2.7 0.5 59 a-g 65 c-g 0.16 d-j 3862 a 635 a-c N19028 0.2 1.7 90 g-i 5.9 47 a-c 10 g-k 2.7 2.5 0.5 61 a-f 67 b-d 0.17 b-f 3836 a 647 a-c N19029 0.5 1.3 91 d-i 5.9 49 a 21 ab 4.8 1.8 0.6 63 a 70 a 0.18 a 4170 a 739 a N19030 0.5 1.6 93 a-g 5.7 49 a 24 a 4.5 2.3 1.0 61 a-e 69 ab 0.17 ab 3745 a 638 a-c N19033 0.4 1.8 93 a-f 5.8 33 h 5 l 4.0 2.8 0.8 55 i 63 fg 0.15 h-j 4095 a 631 a-c N19034 0.4 1.7 91 b-i 5.9 34 gh 4 l 4.1 3.1 0.7 55 i 63 e-g 0.15 ij 3978 a 619 a-c 13x101-2-11-2-1-B 0.3 1.3 92 a-g 5.8 37 e-h 9 h-l 1.8 3.4 1.0 57 g-i 63 e-g 0.15 ij 3561 a 548 bc 13x101-4-5-2-1-B 0.3 1.4 90 f-i 5.9 44 a-d 17 b-d 3.8 2.4 0.7 60 a-g 67 b-d 0.16 b-f 3770 a 632 a-c 13x101-4-9-1-1-B 0.5 1.6 90 d-i 5.9 43 a-e 14 d-g 2.1 2.7 0.5 60 a-g 65 c-g 0.16 b-i 3645 a 599 a-c 13x101-5-7-2-1-B 0.4 1.5 89 hi 6.0 43 a-e 17 b-d 2.4 2.5 1.1 59 b-g 65 c-g 0.16 c-j 3439 a 527 c													
Mean	0.3	1.7	92	5.9	43	12	3.1	2.5	0.8	60	66	0.16	3874	629
LSD	-	-	3	-	7	5	-	-	-	3	3	0.01	997	185

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Two-year Averages by Location

RESULTS — TWO-YEAR AVERAGES

Table 22. Performance of varieties at Tidewater AREC (Suffolk), VA. Two-year averages (2022-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	%												\$/lb	lb/A	\$/A
Bailey II	0.5	1.3	96 a-d	6.1	49	49 a-e	2.6	1.1	0.6	65 a-c	70 a-c	0.17 a-d	4956 a	865 a	
Emery	0.4	1.0	95 de	6.1	53	53 ab	2.6	1.1	0.4	66 a	71 ab	0.18 ab	4771 a	854 a	
NC-20	0.3	1.6	95 b-d	6.1	36	36 f	3.1	1.8	0.3	60 d-f	66 d-f	0.16 e-g	4387 a	713 ab	
Sullivan	0.3	1.8	95 cd	6.1	47	47 b-e	2.4	1.4	0.4	65 a-c	69 a-c	0.17 a-d	4897 a	850 a	
Walton	0.3	1.4	93 e	6.1	45	45 de	1.8	1.4	0.6	66 a	70 ab	0.18 a-c	4685 a	827 a	
N17045	0.2	1.5	96 a-d	6.1	49	49 a-e	2.3	1.1	0.7	64 a-d	68 b-e	0.17 c-e	5039 a	866 a	
N17047	0.4	1.5	97 a-d	6.0	51	51 a-e	2.9	1.5	0.6	64 a-d	69 a-c	0.18 a-d	4778 a	826 a	
N18010	1.3	2.0	94 de	6.0	45	45 c-e	2.5	1.4	1.7	62 b-e	68 b-e	0.17 d-f	4644 a	695 ab	
N18012	0.4	1.8	96 a-d	6.2	45	45 c-e	3.9	1.6	0.7	60 d-f	67 c-e	0.17 c-f	4828 a	801 ab	
N18026	0.4	1.2	97 a-d	6.0	52	52 a-c	1.8	1.2	0.6	66 ab	69 a-c	0.18 a-d	4353 a	767 ab	
N18029	0.4	1.8	97 a-c	5.9	50	50 a-e	1.6	1.3	0.5	65 ab	69 a-c	0.17 a-d	4858 a	841 a	
N18033	0.2	1.7	97 a-d	6.0	44	44 e	4.2	1.2	0.4	62 b-e	69 b-d	0.17 b-e	4746 a	816 ab	
N18039	0.3	1.5	97 ab	6.1	56	56 a	2.8	1.0	0.8	67 a	72 a	0.18 a	4829 a	878 a	
N18044	0.5	2.8	96 a-d	6.2	45	45 c-e	2.3	1.9	1.8	59 ef	65 ef	0.16 fg	4341 a	622 b	
N18049	0.4	1.8	95 b-d	6.2	44	44 de	3.1	1.8	1.3	57 f	64 f	0.16 g	4770 a	742 ab	
N18055	0.8	2.2	97 a	6.2	51	51 a-d	3.0	1.3	0.6	62 c-e	67 c-e	0.17 c-f	4312 a	721 ab	
Mean	0.4	1.7	96	6.1	48	48	2.7	1.4	0.8	63	68	0.17	4700	793	
LSD	-	-	2	-	6	5	-	-	-	4	3	0.01	1077	190	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Two-year Averages by Location

Table 23. Performance of varieties at Martin Co., NC. Two-year averages (2022-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.7	2.0	92 ab	6.0	41 a-c	11 b-d	1.8	2.3	1.1	61 a	66 ab	0.16 ab	3082 a	393 a-c	
Emery	0.4	1.6	92 ab	6.3	41 a-c	10 b-d	1.6	2.6	0.7	61 a	66 ab	0.16 ab	3128 a	523 a	
NC-20	0.5	1.9	92 ab	6.2	31 de	5 e	3.1	3.4	1.4	59 b-d	64 ab	0.15 ab	3061 a	321 bc	
Sullivan	0.4	2.4	90 bc	6.2	35 b-e	8 b-e	2.4	3.4	1.0	60 ab	67 a	0.16 a	3028 a	435 a-c	
Walton	0.6	1.7	87 c	6.3	30 e	7 de	1.5	2.9	1.4	59 a-c	65 ab	0.16 ab	3012 a	367 a-c	
N17045	0.4	1.9	94 ab	6.1	41 ab	12 bc	2.1	2.8	1.2	59 a-c	66 ab	0.16 ab	3395 a	433 a-c	
N17047	0.4	2.0	93 ab	6.3	40 a-c	10 b-d	2.6	2.8	0.9	60 ab	66 ab	0.16 ab	3160 a	515 a	
N18010	0.5	2.1	92 ab	6.2	39 a-c	8 d-e	1.9	2.7	1.8	60 ab	66 ab	0.16 ab	3118 a	367 a-c	
N18012	0.3	1.9	93 ab	6.0	34 c-e	9 b-e	3.8	3.3	2.4	54 d	64 ab	0.15 b	2970 a	279 c	
N18026	0.7	1.8	94 ab	6.4	40 a-c	13 b	1.6	2.3	1.9	58 a-d	64 ab	0.16 ab	3003 a	329 bc	
N18029	0.5	2.8	94 a	6.3	39 a-c	11 b-d	1.5	2.9	1.0	60 ab	66 ab	0.16 ab	3012 a	424 a-c	
N18033	0.5	2.1	93 ab	6.1	35 b-e	11 b-d	3.4	3.3	0.9	57 a-d	65 ab	0.16 ab	3306 a	521 a	
N18039	0.6	2.4	93 ab	6.4	41 ab	18 a	1.6	2.6	1.1	61 a	66 ab	0.16 ab	3149 a	453 ab	
N18044	0.5	1.9	96 a	6.1	43 a	18 a	1.8	2.1	1.3	59 a-c	65 ab	0.16 ab	2736 a	385 a-c	
N18049	0.9	2.4	92 ab	6.2	38 a-d	12 bc	2.7	2.6	2.0	55 cd	62 b	0.15 b	3173 a	286 c	
N18055	0.8	1.7	96 a	6.0	44 a	21 a	1.6	2.5	1.9	60 ab	66 ab	0.16 ab	2682 a	350 bc	
Mean	0.5	2.0	93	6.2	38	12	2.2	2.8	1.4	59	65	0.16	3063	399	
LSD	-	-	4	-	7	5	-	-	-	5	4	0.01	861	164	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Two-year Averages by Location

Table 24. Performance of varieties at Rocky Mount, NC. Two-year averages (2022-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.1	0.5	95 a-c	6.1	50 a-c	10 cd	1.9	1.4	0.4	64 a-c	67 a-c	0.17 ab	3727 b	603 a	
Emery	0.2	0.4	95 ab	5.9	51 a-c	11 cd	2.6	1.4	0.6	65 ab	70 ab	0.18 ab	3646 b	603 a	
NC-20	0.4	0.4	97 a	5.7	39 d	7 d	3.0	1.9	0.4	57 c	62 c	0.16 b	4385 ab	759 a	
Sullivan	0.3	0.8	94 bc	6.2	46 bc	11 cd	1.8	1.6	0.4	61 a-c	65 bc	0.16 ab	3682 b	626 a	
Walton	0.1	0.4	93 c	5.7	48 a-c	8 d	2.3	1.0	0.3	68 a	72 a	0.18 a	4417 ab	808 a	
N17045	0.3	0.5	97 ab	6.1	49 a-c	12 cd	2.8	1.0	0.8	63 a-c	67 a-c	0.17 ab	3688 b	568 a	
N17047	0.2	0.5	96 ab	5.9	52 ab	8 d	3.0	2.4	0.4	65 ab	70 ab	0.18 a	4066 ab	705 a	
N18010	0.1	0.2	96 ab	5.9	49 a-c	9 d	2.1	1.3	0.6	62 a-c	67 a-c	0.17 ab	4340 ab	727 a	
N18012	0.2	0.6	97 a	5.8	51 a-c	13 cd	3.1	1.3	0.4	63 a-c	68 a-c	0.17 ab	3932 ab	683 a	
N18026	0.3	0.5	97 a	6.1	53 ab	21 ab	2.3	0.9	0.6	64 a-c	68 a-c	0.17 ab	4265 ab	733 a	
N18029	0.2	0.6	95 ab	5.9	53 ab	17 a-c	2.4	1.0	0.0	65 ab	69 a-c	0.18 ab	4350 ab	747 a	
N18033	0.1	0.4	97 a	6.1	48 a-c	14 b-d	4.1	1.1	0.8	61 a-c	67 a-c	0.17 ab	3980 ab	647 a	
N18039	0.3	0.5	96 ab	5.9	52 ab	23 a	2.6	1.5	0.4	66 ab	71 ab	0.18 a	4916 a	821 a	
N18044	0.4	0.7	97 ab	6.0	45 cd	12 cd	1.8	1.4	0.9	60 bc	65 bc	0.16 ab	4278 ab	750 a	
N18049	0.2	0.4	95 ab	6.0	49 a-c	18 a-c	2.6	1.4	0.9	60 bc	65 a-c	0.16 ab	4685 ab	790 a	
N18055	0.3	0.9	97 ab	5.8	55 a	24 a	2.1	1.5	0.5	63 a-c	68 a-c	0.17 ab	3566 b	601 a	
Mean	0.2	0.5	96	5.9	49	14	2.5	1.4	0.5	63	68	0.17	4120	698	
LSD	-	-	3	-	7	8	-	-	-	8	7	0.02	1127	257	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test

Two-year Averages by Location

Table 25. Performance of varieties at Blackville, SC. Two-year averages (2022-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value
Variety	% %											\$/lb	lb/A	\$/A
Bailey II	0.2	1.1	88 a-c	5.7	47 ab	13 b	4.6	1.8	0.5	63 a	70 ab	0.18 a	4028 a	703 a
Emery	0.6	1.5	87 c	5.7	47 ab	11 b	4.6	1.8	0.7	63 a	70 a	0.17 ab	3964 a	692 a
NC-20	0.4	1.2	88 a-c	5.7	37 e	10 b	6.1	2.3	0.8	58 c	67 c-e	0.16 cd	4233 a	694 a
Sullivan	0.3	1.4	87 c	5.8	42 b-e	8 b	5.5	2.0	0.8	60 a-c	69 a-c	0.17 a-c	4022 a	684 a
Walton	0.4	1.2	79 d	5.6	40 de	8 b	4.9	2.3	0.6	61 ab	69 a-c	0.17 ab	4151 a	709 a
N17045	0.3	1.5	89 a-c	5.6	45 a-d	11 b	4.4	1.8	0.6	61 ab	68 a-d	0.17 a-c	4404 a	752 a
N17047	0.6	1.2	88 bc	5.6	43 a-e	8 b	5.3	2.2	0.5	61 a-c	69 a-c	0.17 a-d	4293 a	735 a
N18010	0.5	1.3	91 a-c	5.8	42 b-e	8 b	3.9	1.9	0.6	61 a-c	67 b-e	0.17 b-d	4316 a	722 a
N18012	0.3	1.2	87 bc	5.7	40 c-e	8 b	4.9	2.5	0.8	58 bc	66 de	0.16 d	4056 a	658 a
N18026	0.3	1.0	91 a-c	5.7	47 a-c	16 ab	3.5	1.8	0.9	62 a	68 a-d	0.17 ab	4224 a	723 a
N18029	0.4	1.3	88 a-c	5.7	45 a-d	12 b	3.9	2.0	1.0	61 ab	68 a-d	0.17 a-d	3924 a	666 a
N18033	0.1	1.8	89 a-c	5.6	43 a-e	12 b	4.9	2.3	0.7	60 a-c	68 a-e	0.17 b-d	4501 a	756 a
N18039	0.2	1.1	92 ab	5.7	49 a	24 a	5.8	1.7	0.4	61 ab	70 ab	0.17 ab	4659 a	815 a
N18044	0.3	1.4	91 a-c	5.7	47 ab	15 ab	3.4	1.6	0.8	62 a	68 a-d	0.17 a-d	4021 a	679 a
N18049	0.4	1.3	88 a-c	5.7	41 b-e	10 b	5.0	2.2	1.2	57 c	65 e	0.16 cd	4297 a	684 a
N18055	1.2	2.4	93 a	5.9	49 a	24 a	3.3	1.5	0.9	62 a	68 b-e	0.17 b-d	4033 a	680 a
Mean	0.4	1.4	89	5.7	44	12	4.6	2.0	0.7	61	68	0.17	4195	710
LSD	-	-	5	-	7	9	-	-	-	4	3	0.01	1094	208

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Two-year Averages by Location

Table 26. Performance of varieties at all locations. Two-year averages (2022-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.3	1.5	91 cd	5.9 ab	45 ab	11 c-e	3.3	2.3	0.6	60 a-d	67 a-c	0.17 a-c	3717 a	621 a-c	
Emery	0.3	1.3	91 c-e	6.0 ab	46 a	9 d-f	3.1	2.3	0.6	61 ab	67 a	0.17 ab	3670 a	630 a-c	
NC-20	0.3	1.6	91 c-e	5.9 ab	35 e	7 f	3.7	3.1	0.6	55 h	63 de	0.15 f	3556 a	547 c	
Sullivan	0.3	2.0	89 e	6.0 ab	40 d	9 d-f	3.1	2.9	0.6	59 c-f	66 a-c	0.16 b-d	3800 a	620 a-c	
Walton	0.3	1.3	85 f	5.9 ab	41 b-d	8 ef	3.0	2.6	0.4	62 a	68 a	0.17 a	3883 a	663 a-c	
N17045	0.2	1.7	92 a-d	5.9 ab	44 a-c	12 cd	2.9	2.5	0.8	60 a-f	66 a-c	0.16 a-d	4065 a	669 a-c	
N17047	0.3	1.5	91 cd	5.9 ab	44 a-d	7 f	3.4	2.8	0.5	60 a-e	67 ab	0.16 a-d	3899 a	648 a-c	
N18010	0.3	1.5	91 c-e	5.9 ab	42 b-d	8 f	2.6	2.6	1.2	59 c-f	65 bc	0.16 de	4054 a	605 a-c	
N18012	0.2	1.6	91 c-e	5.8 b	41 b-d	8 ef	3.8	2.8	0.8	58 fg	65 bc	0.16 de	3966 a	639 a-c	
N18026	0.4	1.4	93 a-d	6.0 a	47 a	15 b	2.1	2.1	0.6	61 ab	66 a-c	0.17 a-c	3664 a	617 a-c	
N18029	0.3	2.1	92 b-d	5.8 ab	44 a-d	11 c-e	2.2	2.4	0.7	61 a-c	66 a-c	0.16 a-d	3745 a	617 a-c	
N18033	0.3	1.8	92 a-d	5.8 ab	42 b-d	12 c	4.3	2.5	0.6	58 ef	65 bc	0.16 cd	4163 a	678 ab	
N18039	0.2	1.7	93 a-c	5.9 ab	47 a	24 a	3.6	2.3	0.6	61 a-c	67 a	0.17 ab	4181 a	716 a	
N18044	0.2	1.8	94 ab	5.9 ab	45 ab	15 b	2.7	2.2	1.4	58 d-f	65 cd	0.16 de	3759 a	558 bc	
N18049	0.5	1.9	90 de	6.0 ab	40 cd	13 bc	3.3	2.7	1.0	55 gh	63 e	0.15 ef	4207 a	647 a-c	
N18055	0.6	2.1	95 a	5.9 ab	47 a	22 a	2.5	2.1	0.8	59 b-f	65 bc	0.16 cd	3740 a	604 a-c	
Mean	0.3	1.7	91	5.9	43	12	3.1	2.5	0.7	59	66	0.16	3879	629	
LSD	-	-	2	-	4	3	-	-	-	2	2	0.01	675	125	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Three-year Averages by Location

Table 27. Performance of varieties at Tidewater AREC (Suffolk), VA. Three-year averages (2021-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	%												\$/lb	lb/A	\$/A
Bailey II	0.4	1.4	96 a	6.7	50 a	13 a	3.0	1.2	0.4	65 a	70 a	0.18 a	4578 a	805 a	
Emery	0.3	0.9	93 bc	6.5	47 ab	9 ab	4.0	1.1	0.4	65 a	71 a	0.18 a	4543 a	811 a	
NC-20	0.3	1.3	96 a	6.6	37 c	6 b	3.0	1.6	0.3	61 b	66 b	0.16 b	4323 a	710 a	
Sullivan	0.2	1.5	95 ab	6.5	45 ab	12a	3.0	1.3	0.4	64 a	69 a	0.17 a	4381 a	759 a	
Walton	0.3	1.1	91 c	6.8	41 bc	10 ab	2.0	1.4	0.4	66 a	70 a	0.17 a	4445 a	781 a	
N17045	0.3	1.2	96 a	6.4	47 ab	13 a	3.0	1.2	0.7	64 a	69 a	0.17 a	4672 a	812 a	
N17047	0.3	1.3	96 a	6.4	48 ab	10 ab	3.0	1.6	0.5	63 ab	69 a	0.17 a	4584 a	790 a	
Mean	0.3	1.2	95	6.6	45	9	3.0	1.3	0.4	64	69	0.17	4504	781	
LSD	-	-	4	-	8	5	-	-	-	3	2	0.01	858	157	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Three-year Averages by Location

Table 28. Performance of varieties at Martin Co., NC. Three-year averages (2021-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.8	2.8	93 ab	6.0	40 a	10a	1.9	2.3	2.0	60 a	67 a	0.16 a	2622 a	389 a	
Emery	0.6	2.5	91 ab	6.2	39 ab	8 ab	2.3	2.5	1.7	60 a	67 a	0.16 a	2696 a	410 a	
NC-20	0.9	3.5	92 ab	6.1	30 c	6 b	4.2	3.3	2.3	55 b	65 a	0.15 a	2663 a	363 a	
Sullivan	0.6	3.4	90 b	6.1	33 bc	7 ab	2.9	3.2	2.2	59 a	68 a	0.16 a	2498 a	353 a	
Walton	0.8	2.5	86 c	6.2	30 c	7 b	2.2	2.9	2.2	59 a	67 a	0.16 a	2646 a	371 a	
N17045	0.7	3.7	94 a	6.1	39 a	10a	2.3	2.8	2.2	59 ab	66 a	0.16 a	2753 a	401 a	
N17047	0.6	3.3	93 ab	6.2	36 a-c	8 ab	3.0	3.2	2.3	58 ab	66 a	0.16 a	2558 a	378 a	
Mean	0.7	3.1	91	6.1	35	8	2.7	2.9	2.1	59	67	0.16	2634	381	
LSD	-	-	4	-	6	3	-	-	-	3	3	0.01	895	196	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Three-year Averages by Location

Table 29. Performance of varieties at Rocky Mount, NC. Three-year averages (2021-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.1	0.4	96 ab	6.0	51 ab	9 ab	2.1	0.9	0.2	66 a	70 ab	0.18 ab	2964 a	2594 a	
Emery	0.2	0.4	96 ab	5.8	51 a	9 ab	3.3	1.1	0.5	66 ab	71 a	0.18 ab	3270 a	2187 a	
NC-20	0.4	0.6	98 a	5.7	44 b	9 ab	3.1	1.6	0.3	60 b	65 b	0.16 b	3036 a	2116 a	
Sullivan	0.3	1.0	94 bc	6.1	49 ab	10 ab	2.1	1.6	0.3	63 ab	67 ab	0.17 ab	2556 a	1606 a	
Walton	0.2	0.5	93 c	5.7	49 ab	9 ab	2.6	1.0	0.2	69 a	73 a	0.18 a	3251 a	2089 a	
N17045	0.3	0.6	97 a	6.0	52 a	13 a	2.7	1.0	0.7	65 ab	70 ab	0.18 ab	2751 a	2024 a	
N17047	0.2	0.6	96 ab	5.7	51 a	7 b	4.3	1.8	0.3	64 ab	70 a	0.18 ab	3135 a	2182 a	
Mean	0.2	0.6	96	5.9	50	9	2.9	1.3	0.4	65	69	0.18	2995	2114	
LSD	-	-	2	-	7	5	-	-	-	6	6	0.02	2142	2490	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Three-year Averages by Location

Table 30. Performance of varieties at Blackville, SC. Three-year averages (2021-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.3	1.1	88 a	5.7	48 ab	11a	3.8	1.9	0.5	64 a	70 a	0.18 a	4109 a	720 a	
Emery	0.5	1.3	89 a	5.7	49 a	10a	3.6	2.1	0.6	64 a	71 a	0.17 a	4083 a	715 a	
NC-20	0.5	1.2	89 a	5.7	35 d	9a	5.0	2.4	0.6	55 b	63 b	0.15 b	4177 a	643 a	
Sullivan	0.4	1.4	87 a	5.8	42 bc	8a	4.6	2.1	0.7	61 a	70 a	0.17 a	3962 a	674 a	
Walton	0.5	1.2	79 b	5.6	41 cd	9a	4.1	2.0	0.5	63 a	70 a	0.17 a	3908 a	675 a	
N17045	0.3	1.4	90 a	5.6	46 a-c	12a	3.7	1.7	0.6	63 a	69 a	0.17 a	4199 a	727 a	
N17047	0.5	1.3	89 a	5.6	44 a-c	7a	4.8	2.0	0.5	62 a	70 a	0.17 a	4188 a	728 a	
Mean	0.4	1.3	87	5.7	44	9.4	4.2	2.0	0.6	62	69	0.17	4089	697	
LSD	-	-	5	-	6	6	-	-	-	5	5	0.01	906	173	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

Three-year Averages by Location

Table 31. Performance of genotypes at all locations. Three-year averages (2021-2023).

	LSK	FM	Fancy	Water	ELK	Super ELK	SS	OK	DK	SMK	Total Kernels	Support Price	Yield ¹	Value	
Variety	% %												\$/lb	lb/A	\$/A
Bailey II	0.5	1.6	93 ab	6.1	47 a	11 ab	2.6	1.7	0.9	63 a	69 a	0.17 a	3857 a	656 a	
Emery	0.4	1.4	92 b	6.1	45 a	9 bc	3.1	1.8	0.9	63 a	70 a	0.17 a	3890 a	670 a	
NC-20	0.5	1.9	93 ab	6.1	36 d	7 c	3.9	2.3	1.0	58 b	65 b	0.16 b	3797 a	593 a	
Sullivan	0.4	2.0	92 b	6.1	41 bc	9 a-c	3.1	2.1	1.0	62 a	68 a	0.17 a	3581 a	592 a	
Walton	0.5	1.5	87 c	6.2	39 cd	8 c	2.6	2.0	1.0	64 a	69 a	0.17 a	3788 a	639 a	
N17045	0.4	1.9	94 a	6.1	45 ab	12a	2.8	1.8	1.2	62 a	68 a	0.17 a	3883 a	652 a	
N17047	0.4	1.8	94 ab	6.1	44 ab	8 c	3.6	2.2	1.0	61 a	69 a	0.17 a	3864 a	652 a	
Mean	0.4	1.7	92	6.1	42	9	3.1	2.0	1.0	62	68	0.17	3809	636	
LSD	-	-	2	-	4	2	-	-	-	2	2	0.01	580	121	

¹All yields are net, adjusted to 7% standard moisture and foreign material is deducted.

²Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's LSD test.

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