2012

Peanut Variety and Quality Evaluation Results

Quality Data

Tidewater Agricultural Research and Extension Center

Virginia Agricultural Experiment Station

Virginia Extension Cooperative

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VIRGINIA STATE

AREC-41NP

PEANUT VARIETY AND QUALITY EVALUATION RESULTS 2012

II. Quality Data

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Pam Copeland, below

From the far left to the right: Doug Redd, Frank Bryant, Louis Mehalko, Carolyn Daughtrey, and Brenda Kennedy

Brenda Kennedy, left

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TABLE OF CONTENTS

List of Tables

List of tables continued

Introduction

INTRODUCTION

Along with agronomic and grade information, data on kernel and pod quality are essential for release of new peanut cultivars to ensure acceptability by the entire peanut trade. The present report contains the quality data collected on 7 Virginia-type cultivars that currently are on the market and 19 advanced breeding lines tested in the Peanut Variety and Quality Evaluation (PVQE) small plots in 2012. The small PVQE plots with 26 varieties were tested at five locations in Virginia, North Carolina, and South Carolina: Suffolk, VA, Martin Co., NC, Rocky Mount, NC, Bladen, NC, and Blackville, SC. At Suffolk three and at Martin Co., NC, two Digs were achieved. For the other locations, only one Dig was done. Each genotype was replicated 3 times at each location and Dig. Varieties' names and pedigree are presented in Table 1. Since none of the advanced breeding lines were proposed for release, PVQE seed increase plots were not planted in 2012. A detailed description of the plant material, test locations, weather conditions, and cultural practices is included in the PVQE 2012 Results. I. Agronomic and Grade Data, at http://pubs.ext.vt.edu/AREC/AREC-32/AREC-32.html.

2012 SMALL PLOT TESTS

Blanching evaluations were determined by a laboratory sample blancher of two 250 g peanut samples from the early-dig at Martin Co., NC, and the Tidewater AREC. Tables 2 through 19 contain blanching data for the extra large kernels (ELK) and medium size kernels. Statistical analysis were determined for percentage of splits, whole blanched, not blanched, and partially blanched.

Small Plot Tests

PLANT MATERIAL AND TEST LOCATIONS

Table 1. Names and pedigree of the genotypes (advanced breeding lines and commercial varieties) evaluated in 2012.

Genotype Number	Variety or Line	Pedigree
1	NC-V 11	Florigiant / NC 5 // Florigiant / Valencia
2	Gregory	NC 7 / NC 9
3	VA 98R	VA 81B x VA 780839P
4	Perry	NC 7 / Florigiant // N90021
5	Phillips	N90014E / N91024
6	Bailey	NC 12C*2 / N96076L
7	Florida Fancy	F87 x 8-2-1 / F 85410 / 93Q10
8	N08070olJC	N03079FT / X03034 (F01)
9	N08071olJC	N03079FT / X03034 (F01)
10	N08075olCT	N03079FT / X03034 (F01)
11	N08081olJC	Bailey / X03036 (F01)
12	N08082olJCT	Bailey / X03036 (F01)
13	N08085olJCT	Bailey / X03036 (F01)
14	N08087olJCT	Bailey / X03036 (F01)
15	N09037ol	N03079FT / X03031 (F01)
16	N09053olCSm	N03075FT / N00098ol (Gre)
17	N10046ol	N03079FT / X03031 (F01)
18	N10047ol	N03079FT / X03031 (F01)
19	N10053ol	Bailey / X03036 (F01)
20	N10066olSmT	N03076FT / X05019 (F01)
21	N10078olJC	N03088T / X05030 (F01)
22	N10080olJCL	N03088T / X05030 (F01)
23	N10082olJC	N03088T / X05030 (F01)
24	SPT 10-05	VA 98R / 04 L LAU 003
25	SPT 10-11ol	04 L LAU 003 / ANorden
26	SPT 10-14	04 L LAU 003 / Brantley

Small Plot Tests

Fatty acid content and composition of the sound mature kernels (SMK) was determined by gas chromatography and expressed as % from total seed oil content. Iodine value, oleic/linoleic (O/L) ratio, % total saturated, polyunsaturated/saturated (P/S) ratio, and % total long chain-saturated acids were also calculated using the following formulas:

Iodine Value = (% oleic) (0.8601) + (% linoleic) (1.7321) + (% eicosenoic) (0.7854)

Oleic/Linoleic (O/L) ratio = % oleic / % linoleic

% Total Saturated = % palmitic + % stearic + % arachidic + % benehic + % lingnoceric

Polyunsaturated/Saturated (P/S) ratio = % polyunsaturated (linoleic)/% total saturated

% Total Long Chain Saturated = % arachidic + % behenic + % lignoceric

The definition of a high oleic peanut is a peanut line and seed that has an oleic acid content of from about 74% to about 84% and a linoleic acid content of from about 2% to about 8%, each based upon the total fatty acid content of the seed, and a ratio of the amount of oleic acid to linoleic acid in the seed of from about 9:1 to about 42:1.

Fatty acid composition is reported from all 2012 PVQE locations and digging dates in Tables 20 through 28. Table 29 shows the content of the fatty acids averaged across all locations in 2012. Two- and three-year averages are included in Tables 30 and 31.

Blanching Results

Table 2. Laboratory sample blanching of Extra Large Kernels (ELK) from Tidewater AREC (Suffolk) VA, Dig 1, 2012 (21 September).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.80	4.80	1.70	0.90 cd	97.40 ab	0.00 a	0.00 c
Gregory	5.80	4.80	1.30	0.65 cd	98.05 a	0.00 a	0.00 c
VA 98R	5.75	4.85	1.60	0.90 cd	97.50 ab	0.00 a	0.00 c
Perry	5.80	4.95	1.75	1.10 cd	97.15 ab	0.00 a	0.00 c
Phillips	5.75	4.90	1.45	2.25 a-d	95.80 b-d	0.00 a	0.50 bc
Bailey	5.75	4.85	1.60	2.65 a-c	95.75 b-d	0.00 a	0.00 c
Florida Fancy	5.75	4.85	1.60	1.80 a-d	96.20 a-c	0.00 a	0.40 bc
N08070olJC	5.75	4.85	1.50	1.00 cd	97.50 ab	0.00 a	0.00 c
N08071olJC	5.70	4.80	1.35	1.10 cd	97.25 ab	0.00 a	0.30 bc
N08075olCT	5.80	4.85	1.55	1.05 cd	97.25 ab	0.00 a	0.15 bc
N08081olJC	5.80	4.80	1.85	0.80 cd	97.20 ab	0.00 a	0.15 bc
N08082olJCT	5.80	4.90	1.50	0.95 cd	97.45 ab	0.00 a	0.10 bc
N08085olJCT	5.75	4.90	1.65	1.15 b-d	96.95 ab	0.00 a	0.25 bc
N08087olJCT	5.70	4.85	1.55	1.20 b-d	97.15 ab	0.00 a	0.10 bc
N09037ol	5.75	4.90	1.80	0.65 cd	97.45 ab	0.00 a	0.10 bc
N09053olCSm	5.80	4.80	1.45	1.35 b-d	97.05 ab	0.00 a	0.15 bc
N10046ol	5.80	4.85	1.35	0.75 cd	97.90 ab	0.00 a	0.00 c
N10047ol	5.70	4.85	2.05	0.40 d	97.55 ab	0.00 a	0.00 c
N10053ol	5.75	4.80	2.05	1.15 b-d	96.80 ab	0.00 a	0.00 c
N10066olSmT	5.85	4.80	2.00	3.15 ab	94.50 cd	0.00 a	0.35 bc
N10078olJC	5.75	4.85	1.15	1.60 a-d	97.05 ab	0.00 a	0.20 bc
N10080olJCL	5.70	4.75	1.35	1.40 b-d	97.15 ab	0.00 a	0.10 bc
N10082olJC	5.80	4.85	1.60	1.15 b-d	96.70 ab	0.00 a	0.55 bc
SPT 10-05	5.70	4.85	1.45	1.50 b-d	96.20 a-c	0.00 a	0.85 bc
SPT 10-11ol	5.75	4.85	1.85	2.50 a-c	91.05 e	0.00 a	4.60 a
SPT 10-14	5.65	4.85	1.60	3.60 a	93.80 d	0.00 a	1.00 b
Mean	**5.76**	**4.84**	**1.60**	**1.41**	**96.61**	**0.00**	**0.38**

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

Blanching Results

Table 3. Laboratory sample blanching of Extra Large Kernels (ELK) from Tidewater AREC (Suffolk) VA, Dig 2, 2012 (10 October).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.85	4.90	1.65	1.75 c-e	96.20 a-c	0.00 a	0.40 d
Gregory	5.85	4.85	1.65	0.70 e	97.65 a-c	0.00 a	0.00 d
VA 98R	5.75	4.85	1.60	2.40 b-e	95.30 bc	0.00 a	0.70 d
Perry	5.80	4.90	1.65	2.35 b-e	95.75 a-c	0.00 a	0.25 d
Phillips	5.75	4.85	1.45	1.50 c-e	97.05 a-c	0.00 a	0.00 d
Bailey	5.80	4.90	1.50	0.50 e	97.85 ab	0.00 a	0.15 d
Florida Fancy	5.75	4.90	1.60	1.30 c-e	96.95 a-c	0.00 a	0.15 d
N08070olJC	5.75	4.85	1.60	1.25 c-e	97.15 a-c	0.00 a	0.00 d
N08071olJC	5.75	4.75	1.55	2.00 c-e	95.75 a-c	0.00 a	0.70 d
N08075olCT	5.85	4.90	1.65	2.15 b-e	95.50 a-c	0.00 a	0.70 d
N08081olJC	5.70	4.80	1.60	1.25 c-e	95.90 a-c	0.00 a	1.25 d
N08082olJCT	5.85	5.00	1.65	0.60 e	96.85 a-c	0.00 a	0.90 d
N08085olJCT	5.80	4.95	1.55	3.25 bc	95.00 c	0.00 a	0.20 d
N08087olJCT	5.75	4.85	1.60	0.60 e	96.65 a-c	0.00 a	1.15 d
N09037ol	5.80	4.90	1.60	0.90 de	97.15 a-c	0.00 a	0.35 d
N09053olCSm	5.70	4.90	1.60	1.05 de	97.05 a-c	0.00 a	0.30 d
N10046ol	5.70	4.95	1.60	0.50 e	97.70 ab	0.00 a	0.20 d
N10047ol	5.75	4.85	1.60	0.50 e	97.30 a-c	0.00 a	0.60 d
N10053ol	5.75	4.90	1.60	1.00 de	97.40 a-c	0.00 a	0.00 d
N10066olSmT	5.75	4.90	1.55	1.45 c-e	96.80 a-c	0.00 a	0.20 d
N10078olJC	5.75	4.95	1.55	1.80 c-e	96.65 a-c	0.00 a	0.00 d
N10080olJCL	5.85	4.90	1.65	1.20 c-e	96.70 a-c	0.00 a	0.45 d
N10082olJC	5.70	4.95	1.50	0.30 e	98.10 a	0.00 a	0.10 d
SPT 10-05	5.85	4.90	1.55	2.95 b-d	91.15 d	0.00 a	4.35 c
SPT 10-11ol	5.95	5.00	1.65	4.25 ab	81.35 f	0.00 a	12.75 a
SPT 10-14	5.85	4.95	1.70	5.80 a	84.35 e	0.00 a	8.15 b
Mean	**5.78**	**4.90**	**1.59**	**1.67**	**95.43**	**0.00**	**1.31**

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

Blanching Results

Table 4. Laboratory sample blanching of Extra Large Kernels (ELK). Averages of both digging dates from Tidewater AREC (Suffolk), VA, 2012.

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.83	4.85	1.68	1.33 c-e	96.80 a	0.00 a	0.20 d
Gregory	5.83	4.83	1.48	0.68 e	97.85 a	0.00 a	0.00 d
VA 98R	5.75	4.85	1.60	1.65 c-e	96.40 a	0.00 a	0.35 d
Perry	5.80	4.93	1.70	1.73 c-e	96.45 a	0.00 a	0.13 d
Phillips	5.75	4.88	1.45	1.88 c-e	96.43 a	0.00 a	0.25 d
Bailey	5.78	4.88	1.55	1.58 c-e	96.80 a	0.00 a	0.08 d
Florida Fancy	5.75	4.88	1.60	1.55 c-e	96.58 a	0.00 a	0.28 d
N08070olJC	5.75	4.85	1.55	1.13 c-e	97.33 a	0.00 a	0.00 d
N08071olJC	5.73	4.78	1.45	1.55 c-e	96.50 a	0.00 a	0.50 d
N08075olCT	5.83	4.88	1.60	1.60 c-e	96.38 ab	0.00 a	0.43 d
N08081olJC	5.75	4.80	1.73	1.03 c-e	96.55 a	0.00 a	0.70 d
N08082olJCT	5.83	4.95	1.58	0.78 de	97.15 a	0.00 a	0.50 d
N08085olJCT	5.78	4.93	1.60	1.60 b-d	95.98 ab	0.00 a	0.23 d
N08087olJCT	5.73	4.85	1.58	0.90 c-e	96.90 a	0.00 a	0.63 d
N09037ol	5.78	4.90	1.70	0.78 de	97.30 a	0.00 a	0.23 d
N09053olCSm	5.75	4.85	1.53	1.20 c-e	97.05 a	0.00 a	0.23 d
N10046ol	5.75	4.90	1.48	0.63 e	97.80 a	0.00 a	0.10 d
N10047ol	5.73	4.85	1.83	0.45 e	97.43 a	0.00 a	0.30 d
N10053ol	5.75	4.85	1.83	1.08 c-e	97.10 a	0.00 a	0.00 d
N10066olSmT	5.80	4.85	1.78	2.30 bc	95.65 ab	0.00 a	0.28 d
N10078olJC	5.75	4.90	1.35	1.70 c-e	96.85 a	0.00 a	0.10 d
N10080olJCL	5.78	4.83	1.50	1.30 c-e	96.93 a	0.00 a	0.28 d
N10082olJC	5.75	4.90	1.55	0.73 e	97.40 a	0.00 a	0.33 d
SPT 10-05	5.78	4.88	1.50	2.23 b-d	93.68 b	0.00 a	2.60 c
SPT 10-11ol	5.85	4.93	1.75	3.38 ab	86.20 d	0.00 a	8.68 a
SPT 10-14	5.75	4.90	1.65	4.70 a	89.08 c	0.00 a	4.58 b
Mean	**5.77**	**4.87**	**1.60**	**1.54**	**95.02**	**0.00**	**0.84**

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

Blanching Results

Table 5. Laboratory sample blanching of Extra Large Kernels (ELK) from Martin County, NC, Dig 1, 2012 (5 October).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	6.00	4.90	1.80	1.75 a-e	96.30 ab	0.00 a	0.15 c
Gregory	5.75	4.85	1.80	1.55 a-e	96.20 ab	0.00 a	0.45 c
VA 98R	5.85	4.90	1.65	0.80 c-e	97.30 a	0.00 a	0.25 c
Perry	6.00	4.90	1.85	1.40 c-e	96.55 ab	0.00 a	0.20 c
Phillips	5.90	5.10	2.10	1.70 a-e	94.90 a-c	0.00 a	1.30 c
Bailey	5.85	5.05	1.75	1.40 c-e	96.85 ab	0.00 a	0.00 c
Florida Fancy	5.80	5.00	1.60	0.40 e	97.30 a	0.00 a	0.70 c
N08070olJC	5.85	4.90	1.75	1.05 c-e	96.80 ab	0.00 a	0.40 c
N08071olJC	5.90	4.85	1.70	1.65 a-e	94.40 a-c	0.00 a	2.25 bc
N08075olCT	5.85	4.85	1.65	2.15 a-e	95.90 ab	0.00 a	0.30 c
N08081olJC	5.95	5.00	1.70	1.45 b-e	96.85 ab	0.00 a	0.00 c
N08082olJCT	5.80	4.90	1.70	1.30 c-e	97.00 ab	0.00 a	0.00 c
N08085olJCT	5.80	4.90	1.80	3.00 a-d	95.00 a-c	0.00 a	0.20 c
N08087olJCT	5.85	4.85	1.60	0.95 c-e	97.35 a	0.00 a	0.10 c
N09037ol	5.80	4.90	1.60	3.15 a-c	93.35 a-c	0.00 a	1.90 bc
N09053olCSm	5.70	4.95	1.55	1.90 a-e	96.45 ab	0.00 a	0.15 c
N10046ol	5.85	4.85	1.60	1.20 c-e	96.95 ab	0.00 a	0.25 c
N10047ol	5.90	4.80	1.70	4.00 ab	93.60 a-c	0.00 a	0.70 c
N10053ol	5.80	4.90	1.75	1.60 a-e	96.40 ab	0.00 a	0.20 c
N10066olSmT	5.85	4.95	1.60	0.90 c-e	97.50 a	0.00 a	0.00 c
N10078olJC	5.80	4.85	1.60	1.30 c-e	96.90 ab	0.00 a	0.20 c
N10080olJCL	5.85	4.90	1.55	2.00 a-e	96.30 ab	0.00 a	0.15 c
N10082olJC	5.90	4.90	1.50	0.50 de	97.80 a	0.00 a	0.20 c
SPT 10-05	5.80	5.00	4.80	2.30 a-e	92.55 bc	0.00 a	0.35 c
SPT 10-11ol	5.70	4.95	1.65	4.10 a	79.20 d	0.00 a	15.05 a
SPT 10-14	5.85	5.00	1.85	2.20 a-e	91.15 c	0.00 a	4.80 b
Mean	**5.84**	**4.92**	**1.83**	**1.75**	**95.18**	**0.00**	**1.25**

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

Blanching Results

Table 6. Laboratory sample blanching of Extra Large Kernels (ELK) from Martin County, NC, Dig 2, 2012 (17 October).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.70	4.90	1.60	1.40 c-g	96.45 a	0.00 b	0.55 bc
Gregory	5.75	4.85	1.65	0.90 d-g	96.85 a	0.00 b	0.60 bc
VA 98R	5.75	4.90	1.45	0.45 e-g	97.90 a	0.00 b	0.20 c
Perry	5.70	4.95	1.60	0.80 d-g	97.50 a	0.00 b	0.10 c
Phillips	5.75	4.85	1.55	2.40 b-d	95.60 a	0.00 b	0.25 c
Bailey	5.70	4.75	1.60	3.00 bc	95.10 a	0.00 b	0.30 c
Florida Fancy	5.70	4.90	1.55	2.35 b-e	92.25 a	0.00 b	0.85 bc
N08070olJC	5.80	4.75	1.60	2.10 b-f	95.55 a	0.00 b	0.75 bc
N08071olJC	5.70	4.80	1.55	1.05 d-g	97.10 a	0.00 b	0.30 c
N08075olCT	5.70	4.80	1.45	1.30 c-g	96.90 a	0.00 b	0.35 bc
N08081olJC	5.70	4.85	1.65	0.40 fg	96.90 a	0.00 b	1.05 bc
N08082olJCT	5.75	4.90	1.55	0.80 d-g	96.25 a	0.00 b	1.30 bc
N08085olJCT	5.70	4.90	1.65	1.85 b-g	95.90 a	0.00 b	0.60 bc
N08087olJCT	5.70	4.90	1.55	1.35 c-g	96.35 a	0.00 b	0.75 bc
N09037ol	5.70	4.85	1.50	0.55 d-g	97.80 a	0.00 b	0.15 c
N09053olCSm	5.75	4.95	1.60	1.90 b-g	95.80 a	0.00 b	0.70 bc
N10046ol	5.65	4.80	1.65	1.10 c-g	96.05 a	0.00 b	1.20 bc
N10047ol	5.80	5.00	1.50	0.00 g	98.00 a	0.00 b	0.50 bc
N10053ol	5.80	4.90	1.50	1.55 b-g	96.25 a	0.00 b	0.70 bc
N10066olSmT	5.80	4.90	1.45	1.30 c-g	96.40 a	0.00 b	0.85 bc
N10078olJC	5.75	4.85	1.45	2.45 b-d	95.60 a	0.00 b	0.50 bc
N10080olJCL	5.70	4.80	-2.20	1.10 c-g	96.15 a	0.00 b	4.95 b
N10082olJC	5.75	4.85	1.50	1.40 c-g	97.10 a	0.00 b	0.00 c
SPT 10-05	5.75	4.90	1.55	2.35 b-e	94.15 a	0.00 b	1.95 bc
SPT 10-11ol	5.75	4.90	1.50	5.05 a	81.65 b	0.00 b	11.80 a
SPT 10-14	5.75	4.85	1.50	3.45 ab	77.00 b	2.50 a	15.55 a
Mean	**5.73**	**4.86**	**1.40**	**1.66**	**95.01**	**0.10**	**1.83**

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

Blanching Results

Table 7. Laboratory sample blanching of Extra Large Kernels (ELK). Averages of both digging dates from Martin County, NC, 2012.

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.85	4.90	1.70	1.58 b-d	96.38 ab	0.00 b	0.35 c
Gregory	5.75	4.85	1.73	1.23 cd	96.53 ab	0.00 b	0.53 c
VA 98R	5.80	4.90	1.55	0.63 d	97.60 a	0.00 b	0.23 c
Perry	5.85	4.93	1.73	1.10 cd	97.03 ab	0.00 b	0.15 c
Phillips	5.80	4.93	1.73	2.17 b-d	95.50 ab	0.00 b	0.60 c
Bailey	5.78	4.90	1.68	2.20 bc	95.98 ab	0.00 b	0.15 c
Florida Fancy	5.73	4.93	1.57	1.70 b-d	95.93 ab	0.00 b	0.80 c
N08070olJC	5.83	4.83	1.68	1.58 b-d	96.18 ab	0.00 b	0.58 c
N08071olJC	5.80	4.83	1.63	1.35 b-d	95.75 ab	0.00 b	1.28 c
N08075olCT	5.78	4.83	1.55	1.73 b-d	96.40 ab	0.00 b	0.33 c
N08081olJC	5.83	4.93	1.68	0.93 cd	96.88 ab	0.00 b	0.53 c
N08082olJCT	5.77	4.90	1.60	1.03 cd	96.50 ab	0.00 b	0.87 c
N08085olJCT	5.73	4.90	1.70	2.23 bc	95.60 ab	0.00 b	0.47 c
N08087olJCT	5.78	4.88	1.58	1.15 cd	96.85 ab	0.00 b	0.43 c
N09037ol	5.75	4.88	1.55	1.85 b-d	95.58 ab	0.00 b	1.03 c
N09053olCSm	5.73	4.95	1.58	1.90 b-d	96.10 ab	0.00 b	0.43 c
N10046ol	5.75	4.83	1.63	1.15 cd	96.50 ab	0.00 b	0.73 c
N10047ol	5.85	4.90	1.60	2.00 b-d	95.80 ab	0.00 b	0.60 c
N10053ol	5.80	4.90	1.63	1.58 b-d	96.35 ab	0.00 b	0.45 c
N10066olSmT	5.83	4.93	1.53	1.10 cd	96.95 ab	0.00 b	0.43 c
N10078olJC	5.78	4.85	1.53	1.88 b-d	96.25 ab	0.00 b	0.35 c
N10080olJCL	5.78	4.85	-0.33	1.55 b-d	96.23 ab	0.00 b	2.55 c
N10082olJC	5.80	4.87	1.50	1.10 cd	97.33 a	0.00 b	0.07 c
SPT 10-05	5.78	4.95	3.18	2.33 bc	93.35 b	0.00 b	1.15 c
SPT 10-11ol	5.73	4.93	1.58	4.58 a	80.43 c	0.00 b	13.43 a
SPT 10-14	5.80	4.93	1.68	2.83 b	84.08 c	1.25 a	10.18 b
Mean	**5.78**	**4.89**	**1.60**	**1.71**	**95.09**	**0.52**	**1.55**

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

Blanching Results

Table 8. Laboratory sample blanching of Extra Large Kernels (ELK). Averages from Tidewater AREC (Suffolk) VA and Martin County, NC, 2012.

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.84	4.88	1.69	1.45 b-d	96.59 a	0.00 b	0.28 c
Gregory	5.79	4.84	1.60	0.95 d	97.19 a	0.00 b	0.26 c
VA 98R	5.78	4.88	1.58	1.14 cd	97.00 a	0.00 b	0.29 c
Perry	5.83	4.93	1.71	1.41 b-d	96.74 a	0.00 b	0.14 c
Phillips	5.77	4.90	1.57	2.00 bc	96.03 a	0.00 b	0.40 c
Bailey	5.78	4.89	1.61	1.89 b-d	96.39 a	0.00 b	0.11 c
Florida Fancy	5.74	4.90	1.59	1.61 b-d	96.30 a	0.00 b	0.50 c
N08070olJC	5.79	4.84	1.61	1.35 b-d	96.75 a	0.00 b	0.29 c
N08071olJC	5.76	4.80	1.54	1.45 b-d	96.13 a	0.00 b	0.89 c
N08075olCT	5.80	4.85	1.58	1.66 b-d	96.39 a	0.00 b	0.38 c
N08081olJC	5.79	4.43	1.70	0.98 cd	96.71 a	0.07 b	0.40 c
N08082olJCT	5.80	4.93	1.59	0.89 d	96.87 a	0.00 b	0.66 c
N08085olJCT	5.76	4.91	1.64	2.21 b	95.81 ab	0.00 b	0.33 c
N08087olJCT	5.75	4.86	1.58	1.03 cd	96.88 a	0.00 b	0.53 c
N09037ol	5.76	4.89	1.63	1.31 b-d	96.44 a	0.00 b	0.63 c
N09053olCSm	5.78	4.90	1.55	1.55 b-d	96.58 a	0.00 b	0.33 c
N10046ol	5.75	4.86	1.55	0.89 d	97.15 a	0.00 b	0.41 c
N10047ol	5.77	4.87	1.75	0.97 cd	96.88 a	0.00 b	0.40 c
N10053ol	5.78	4.88	1.73	1.33 b-d	96.73 a	0.00 b	0.23 c
N10066olSmT	5.81	4.89	1.65	1.70 b-d	96.30 a	0.00 b	0.35 c
N10078olJC	5.76	4.88	1.44	1.79 b-d	96.55 a	0.00 b	0.23 c
N10080olJCL	5.78	4.84	0.59	1.43 b-d	96.58 a	0.00 b	1.41 c
N10082olJC	5.77	4.89	1.53	0.89 d	97.37 a	0.00 b	0.21 c
SPT 10-05	5.78	4.91	2.34	2.28 b	93.51 b	0.00 b	1.88 c
SPT 10-11ol	5.79	4.93	1.66	3.98 a	83.31 d	0.00 b	11.05 a
SPT 10-14	5.78	4.91	1.66	3.76 a	86.58 c	0.63 a	7.38 b
Mean	**5.78**	**4.88**	**1.60**	**1.62**	**95.57**	**0.02**	**1.19**

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

Blanching Results

Table 9. Laboratory sample blanching of Extra Large Kernels (ELK). Averages from Tidewater AREC (Suffolk) VA, and Martin County, NC. Two-year averages (2011- 2012).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.91	4.89	1.62	1.77 a-d	95.16 a-d	0.00 b	1.45 b-d
Gregory	5.90	4.84	1.43	1.30 d	96.15 a	0.00 b	1.13 cd
VA 98R	5.94	4.88	1.58	1.76 a-d	94.88 a-d	0.00 b	1.78 b-d
Perry	5.89	4.92	1.63	1.82 a-d	94.99 a-d	0.00 b	1.56 b-d
Phillips	5.89	4.91	1.69	2.28 ab	94.41 a-d	0.00 b	1.61 b-d
Bailey	5.88	4.89	1.56	1.86 a-d	95.57 a-c	0.00 b	1.01 d
Florida Fancy	5.86	4.88	1.59	2.45 a	94.61 a-d	0.00 b	1.31 cd
N08070olJC	5.88	4.85	1.59	1.81 a-d	93.78 d	0.01 b	2.81 ab
N08075olCT	5.92	4.88	1.51	2.06 a-c	94.20 b-d	0.06 a	2.50 a-c
N08081olJC	5.90	4.87	1.61	1.17 d	95.54 a-c	0.00 b	1.69 b-d
N08082olJCT	5.90	4.93	1.54	1.28 d	93.87 cd	0.00 b	3.31 a
N08085olJCT	5.89	4.94	1.56	2.14 a-c	95.17 a-d	0.00 b	1.13 cd
N08087olJCT	5.85	4.88	1.60	1.49 cd	94.53 a-d	0.00 b	2.38 a-d
N09037ol	5.88	4.90	1.44	1.57 b-d	95.11 a-d	0.00 b	1.88 a-d
N09053olCSm	5.88	4.89	1.54	1.54 cd	95.84 ab	0.00 b	1.07 cd
Mean	**5.89**	**4.89**	**1.56**	**1.75**	**94.93**	**0.01**	**1.77**

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

Blanching Results

Table 10. Laboratory sample blanching of Extra Large Kernels (ELK). Averages from Tidewater AREC (Suffolk) VA, and Martin County, NC. Three-year averages (2010- 2012).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.70	4.84	1.18 a	2.08 cd	92.59 a	0.00 b	3.64 c-f
Gregory	5.68	4.80	1.07 a	1.99 d	90.74 ab	0.00 b	3.24 ef
VA 98R	5.69	4.81	1.15 a	2.41 b-d	90.27 a-c	0.00 b	5.65 bc
Perry	5.66	4.86	1.14 a	2.45 b-d	93.00 a	0.00 b	2.85 f
Phillips	5.65	4.86	1.24 a	2.58 a-d	92.05 ab	0.00 b	3.64 c-f
Bailey	5.66	4.82	1.14 a	2.68 a-d	92.31 a	0.00 b	3.37 d-f
Florida Fancy	5.68	4.81	1.18 a	3.34 a	92.12 a	0.00 b	2.87 f
N08070olJC	5.65	4.78	1.21 a	2.67 ab	87.43 c	0.01 b	8.04 a
N08075olCT	5.70	4.83	1.10 a	2.74 a-d	91.15 ab	0.03 a	4.70 b-f
N08081olJC	5.68	4.81	1.16 a	2.29 b-d	90.79 ab	0.00 b	5.35 b-e
N08082olJCT	5.67	4.84	1.13 a	2.40 b-d	90.63 a-c	0.00 b	5.44 b-d
N08085olJCT	5.64	4.84	1.11 a	2.85 a-c	88.80 bc	0.00 b	6.76 ab
N08087olJCT	5.63	4.80	1.12 a	2.47 b-d	90.77 ab	0.00 b	5.26 b-e
Mean	**5.67**	**4.82**	**1.15**	**2.56**	**90.97**	**0.00**	**4.67**

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

Blanching Results

Table 11. Laboratory sample blanching of Medium Kernels from Tidewater AREC (Suffolk) VA, Dig 1, 2012 (21 Septmeber).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.75	4.90	1.55	1.90 c-f	95.30 ab	0.00 c	0.80 ef
Gregory	5.75	4.90	1.70	1.65 d-f	93.45 ab	0.00 c	3.20 c-f
VA 98R	5.70	4.85	1.60	1.75 c-f	94.35 ab	0.50 c	1.80 d-f
Perry	5.80	4.95	1.50	2.00 c-f	94.25 ab	0.75 c	1.50 d-f
Phillips	5.80	4.95	1.55	2.50 cd	93.35 ab	0.70 c	1.90 d-f
Bailey	5.95	5.00	1.55	2.20 c-e	94.30 ab	0.55 c	1.40 d-f
Florida Fancy	5.80	4.85	1.60	2.20 c-e	92.45 a-c	0.00 c	3.75 c-e
N08070olJC	5.90	5.00	1.60	1.65 d-f	94.10 ab	0.10 c	2.55 d-f
N08071olJC	5.85	4.95	2.00	1.85 c-f	92.40 a-c	0.20 c	3.55 c-f
N08075olCT	5.80	5.00	1.65	1.30 d-f	95.35 ab	0.00 c	1.70 d-f
N08081olJC	5.85	4.95	1.50	1.50 d-f	95.00 ab	0.50 c	1.50 d-f
N08082olJCT	5.75	5.35	1.65	1.20 d-f	95.15 ab	0.00 c	2.00 d-f
N08085olJCT	5.85	4.90	1.50	1.45 d-f	95.45 ab	0.00 c	1.60 d-f
N08087olJCT	5.80	4.80	1.05	1.60 d-f	93.80 ab	0.00 c	3.55 c-f
N09037ol	5.75	4.90	1.65	1.20 d-f	91.65 bc	1.15 bc	4.35 cd
N09053olCSm	5.85	5.00	1.65	2.00 c-f	95.95 a	0.00 c	0.40 f
N10046ol	5.75	4.95	1.55	0.70 f	94.45 ab	0.00 c	3.30 c-f
N10047ol	5.80	4.95	1.50	0.90 ef	94.25 ab	0.75 c	2.60 d-f
N10053ol	5.70	4.90	1.65	2.40 cd	92.00 a-c	0.50 c	3.45 c-f
N10066olSmT	5.80	4.90	1.55	2.25 c-e	93.50 ab	0.50 c	2.20 d-f
N10078olJC	5.80	5.00	1.65	1.35 d-f	93.70 ab	0.00 c	3.30 c-f
N10080olJCL	5.80	4.95	1.55	1.80 c-f	93.50 ab	0.15 c	3.00 d-f
N10082olJC	5.85	5.00	1.65	1.50 d-f	96.05 a	0.00 c	0.40 f
SPT 10-05	5.85	5.00	1.70	3.10 bc	88.40 c	0.50 c	6.30 c
SPT 10-11ol	5.80	4.95	1.70	4.25 ab	80.10 d	2.80 a	11.15 b
SPT 10-14	5.85	4.85	1.60	4.50 a	74.10 e	2.00 ab	17.80 a
Mean	**5.81**	**4.95**	**1.59**	**1.95**	**92.55**	**0.45**	**3.46**

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

Blanching Results

Table 12. Laboratory sample blanching of Medium Kernels from Tidewater AREC (Suffolk) VA, Dig 2, 2012 (10 October).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.60	4.75	1.55	2.50 d-h	93.00 a-c	0.75 bc	2.15 e-g
Gregory	5.60	4.85	1.60	2.50 d-h	91.70 a-d	0.50 c	3.70 c-g
VA 98R	5.65	4.90	1.50	1.80 e-h	94.80 a	0.00 c	1.90 fg
Perry	5.70	4.80	1.00	3.45 a-e	91.65 a-d	0.55 c	3.35 d-g
Phillips	5.75	4.90	1.40	2.80 c-h	91.00 a-d	2.00 bc	2.80 d-g
Bailey	5.70	4.85	1.55	3.10 b-f	92.35 a-c	0.00 c	3.00 d-g
Florida Fancy	5.75	4.85	1.55	3.30 b-f	88.10 b-e	1.10 bc	5.95 c-f
N08070olJC	5.70	4.85	1.60	2.20 e-h	91.55 a-d	0.55 c	4.10 c-g
N08071olJC	5.70	4.85	0.95	4.30 a-d	86.80 de	1.50 bc	6.45 cd
N08075olCT	5.70	4.90	1.60	2.95 b-g	92.35 a-c	1.00 bc	2.10 e-g
N08081olJC	5.75	4.95	1.50	2.80 c-h	91.70 a-d	0.10 c	3.90 c-g
N08082olJCT	5.60	4.85	1.55	1.50 f-h	92.90 a-c	0.500 c	3.55 c-g
N08085olJCT	5.70	4.85	1.55	2.15 e-h	91.90 a-d	0.00 c	4.40 c-g
N08087olJCT	5.65	4.90	1.05	3.20 b-f	92.00 a-d	0.50 c	3.25 d-g
N09037ol	5.70	4.85	1.55	3.35 b-f	92.45 a-c	0.60 c	2.05 fg
N09053olCSm	5.65	4.80	1.15	1.60 e-h	93.45 ab	1.05 bc	2.75 d-g
N10046ol	5.70	4.85	1.45	2.70 c-h	87.65 c-e	1.85 bc	6.35 c-e
N10047ol	5.60	4.80	1.55	1.20 gh	93.85 a	1.25 bc	2.15 e-g
N10053ol	5.70	4.80	1.50	2.00 e-h	91.95 a-d	1.25 bc	3.30 d-g
N10066olSmT	5.70	4.90	1.50	1.50 f-h	93.70 a	0.00 c	3.30 d-g
N10078olJC	5.70	4.90	1.55	1.05 h	94.95 a	0.00 c	2.45 d-g
N10080olJCL	5.70	4.85	1.40	3.25 b-f	93.50 a	0.25 c	1.60 g
N10082olJC	5.60	4.90	1.55	2.50 d-h	92.95 a-c	0.20 c	2.80 d-g
SPT 10-05	5.70	4.80	1.50	4.80 ab	84.25 e	1.75 bc	7.70 bc
SPT 10-11ol	5.65	4.80	1.15	4.50 a-c	76.45 f	2.80 b	14.75 a
SPT 10-14	5.55	4.80	1.55	5.30 a	76.05 f	5.45 a	11.65 ab
Mean	**5.67**	**4.85**	**1.44**	**2.78**	**90.50**	**0.98**	**4.29**

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

Blanching Results

Table 13. Laboratory sample blanching of Medium Kernels. Averages from both digging dates from Tidewater AREC (Suffolk) VA, 2012.

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.68	4.83	1.55	2.20 c-f	94.15 ab	0.38 bc	1.73 e
Gregory	5.68	4.88	1.65	2.08 c-g	92.58 a-d	0.25 bc	3.45 c-e
VA 98R	5.68	4.88	1.55	1.78 d-g	94.58 a	0.25 bc	1.85 e
Perry	5.75	4.88	1.25	2.73 cd	92.95 a-c	0.65 bc	2.43 c-e
Phillips	5.78	4.93	1.48	2.65 cd	92.18 a-d	1.35 b	2.35 c-e
Bailey	5.83	7.93	1.55	2.65 cd	93.33 a-c	0.28 bc	2.20 de
Florida Fancy	5.78	4.85	1.58	2.75 cd	90.28 cd	0.55 bc	4.85 b-d
N08070olJC	5.80	4.93	1.60	1.93 d-g	92.83 a-c	0.33 bc	3.33 c-e
N08071olJC	5.78	4.90	1.48	3.08 bc	89.60 d	0.85 bc	5.00 bc
N08075olCT	5.75	4.95	1.63	2.13 c-g	93.85 ab	0.50 bc	1.90 e
N08081olJC	5.80	4.95	1.50	2.15 c-g	93.35 a-c	0.30 bc	2.70 c-e
N08082olJCT	5.68	5.10	1.60	1.35 e-g	94.03 ab	0.25 bc	2.78 c-e
N08085olJCT	5.78	4.88	1.53	1.80 d-g	93.68 ab	0.00 c	3.00 c-e
N08087olJCT	5.73	4.85	1.05	2.40 c-e	92.90 a-c	0.25 bc	3.40 c-e
N09037ol	5.73	4.88	1.60	2.28 c-f	92.05 a-d	0.88 bc	3.20 c-e
N09053olCSm	5.75	4.90	1.40	1.80 d-g	94.70 a	0.53 bc	1.58 e
N10046ol	5.73	4.90	1.50	1.70 d-g	91.05 b-d	0.93 bc	4.83 b-d
N10047ol	5.70	4.88	1.53	1.05 g	94.05 ab	1.00 bc	2.38 c-e
N10053ol	5.70	4.85	5.58	2.20 c-f	91.98 a-d	0.88 bc	3.38 c-e
N10066olSmT	5.75	4.90	1.53	1.88 d-g	93.60 ab	0.25 bc	2.75 c-e
N10078olJC	5.75	4.95	1.60	1.20 fg	94.33 a	0.00 c	2.88 c-e
N10080olJCL	5.75	4.90	1.48	2.53 cd	93.50 ab	0.20 bc	2.30 de
N10082olJC	5.73	4.95	1.60	2.00 c-g	94.50 a	0.10 c	1.80 e
SPT 10-05	5.78	4.90	1.60	3.95 ab	86.33 e	1.13 bc	7.00 b
SPT 10-11ol	5.73	4.88	1.43	4.38 a	78.28 f	2.80 a	12.95 a
SPT 10-14	5.70	4.83	1.58	4.90 a	75.08 f	3.73 a	14.73 a
Mean	**5.74**	**4.90**	**1.51**	**2.37**	**81.53**	**0.71**	**3.87**

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

Blanching Results

Table 14. Laboratory sample blanching of Medium Kernels from Martin County, NC, Dig 1, 2012 (5 October).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.75	5.00	1.50	1.25 ef	95.15 ab	0.00 c	2.10 bc
Gregory	5.70	4.80	1.50	2.10 c-f	93.15 a-c	0.80 c	2.45 bc
VA 98R	5.60	4.85	1.55	1.90 c-f	94.60 a-c	0.00 c	1.95 bc
Perry	5.65	4.90	1.60	1.75 c-f	92.60 a-c	0.50 c	3.55 bc
Phillips	5.70	4.80	1.50	2.00 c-f	94.20 a-c	0.00 c	2.30 bc
Bailey	5.75	4.95	1.40	3.05 bc	93.20 a-c	0.00 c	2.35 bc
Florida Fancy	5.70	4.90	1.50	2.30 c-f	93.80 a-c	0.00 c	2.40 bc
N08070olJC	5.70	4.80	1.50	2.90 b-d	90.00 bc	1.25 bc	4.35 bc
N08071olJC	5.75	4.95	1.50	2.00 c-f	90.70 a-c	1.10 c	4.70 bc
N08075olCT	5.75	4.90	1.50	2.45 c-f	93.65 a-c	0.30 c	2.10 bc
N08081olJC	5.70	4.90	1.50	1.60 c-f	95.70 a	0.20 c	1.00 c
N08082olJCT	5.70	4.80	1.60	1.50 d-f	95.50 ab	0.00 c	1.40 c
N08085olJCT	5.70	4.85	1.50	1.35 ef	96.15 a	0.00 c	1.00 c
N08087olJCT	5.70	4.80	1.40	2.05 c-f	93.65 a-c	0.80 c	2.10 bc
N09037ol	5.75	5.30	1.50	2.40 c-f	91.90 a-c	0.85 c	3.35 bc
N09053olCSm	5.70	4.95	1.45	1.65 c-f	94.00 a-c	0.60 c	2.30 bc
N10046ol	5.65	4.90	1.50	1.20 f	92.75 a-c	1.00 c	3.55 bc
N10047ol	5.60	4.90	1.50	1.80 c-f	94.00 a-c	0.00 c	2.70 bc
N10053ol	5.75	4.90	1.55	2.65 c-f	93.95 a-c	0.70 c	1.15 c
N10066olSmT	5.70	5.05	1.45	1.25 ef	93.95 a-c	0.55 c	2.80 bc
N10078olJC	5.75	4.95	1.45	2.15 c-f	95.10 ab	0.00 c	1.30 c
N10080olJCL	5.75	5.00	1.50	1.65 c-f	92.35 a-c	0.00 c	3.85 bc
N10082olJC	5.70	4.80	1.50	2.70 b-e	93.50 a-c	0.65 c	2.30 bc
SPT 10-05	5.70	5.00	1.50	1.65 c-f	89.50 c	1.25 bc	6.10 b
SPT 10-11ol	5.70	4.95	1.50	5.40 a	72.30 e	3.35 a	17.45 a
SPT 10-14	5.70	4.85	1.50	4.15 ab	77.90 d	3.05 ab	13.40 a
Mean	**5.71**	**4.92**	**1.50**	**2.21**	**91.73**	**0.73**	**3.82**

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

Blanching Results

Table 15. Laboratory sample blanching of Medium Kernels from Martin County, NC, Dig 2, 2012 (17 October).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.65	4.75	1.45	2.60 b-d	93.60 ab	0.35 ef	2.00 d
Gregory	5.65	4.80	1.45	1.95 b-d	93.30 ab	1.25 b-f	2.05 d
VA 98R	5.70	4.85	1.55	2.95 b-d	93.30 ab	0.25 f	1.95 d
Perry	5.65	4.80	1.45	3.50 bc	91.20 b-d	1.30 b-f	2.55 cd
Phillips	5.75	4.90	1.55	3.05 b-d	91.70 a-d	0.30 ef	3.40 cd
Bailey	5.65	4.80	1.55	2.65 b-d	93.15 ab	0.95 b-f	1.70 d
Florida Fancy	5.70	4.85	1.50	2.40 b-d	94.70 a	0.00 f	1.40 d
N08070olJC	5.65	4.80	1.45	3.25 b-d	89.65 c-e	0.75 d-f	4.90 c
N08071olJC	5.70	5.00	1.45	2.75 b-d	91.25 a-d	1.05 b-f	3.50 cd
N08075olCT	5.65	4.80	1.50	2.50 b-d	93.70 ab	0.55 d-f	1.75 d
N08081olJC	5.70	4.90	1.50	1.85 cd	92.90 a-d	0.00 f	3.75 cd
N08082olJCT	5.65	4.85	1.55	2.20 b-d	90.85 b-e	1.75 b-d	3.65 cd
N08085olJCT	5.60	4.90	1.45	2.80 b-d	93.00 a-c	0.70 d-f	2.05 d
N08087olJCT	5.65	4.80	1.50	2.85 b-d	92.65 a-d	0.10 f	2.90 cd
N09037ol	5.65	4.85	1.10	2.65 b-d	91.65 a-d	1.15 b-f	3.45 cd
N09053olCSm	5.65	4.90	1.50	3.30 b-d	92.50 a-d	0.75 d-f	1.95 d
N10046ol	5.65	4.85	1.55	1.65 d	92.90 a-d	0.00 f	3.90 cd
N10047ol	5.70	4.85	1.55	2.10 b-d	91.90 a-d	1.00 b-f	3.45 cd
N10053ol	5.65	4.95	1.50	1.75 cd	89.50 de	2.30 b	4.95 c
N10066olSmT	5.65	4.80	1.55	2.85 b-d	90.85 b-e	1.65 b-e	3.10 cd
N10078olJC	5.65	4.85	1.45	2.95 b-d	91.85 a-d	1.30 b-f	2.45 cd
N10080olJCL	5.70	4.90	1.50	2.75 b-d	90.95 b-d	1.35 b-f	3.45 cd
N10082olJC	5.70	4.95	1.50	2.50 b-d	93.60 ab	0.15 f	2.25 cd
SPT 10-05	5.70	4.85	1.55	2.35 b-d	87.45 e	0.90 c-f	7.75 b
SPT 10-11ol	5.65	4.80	1.45	6.80 a	70.05 g	2.25 bc	19.45 a
SPT 10-14	5.60	4.90	1.40	3.65 b	78.55 f	6.00 a	10.40 b
Mean	**5.67**	**4.85**	**1.48**	**2.79**	**90.64**	**1.08**	**4.00**

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

Blanching Results

Table 16. Laboratory sample blanching of Medium Kernels. Averages from both digging dates from Martin County, NC, 2012.

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.70	4.88	1.48	1.93 de	94.38 ab	0.18 de	2.05 e-g
Gregory	5.68	4.80	1.48	2.03 c-e	93.23 a-d	1.03 c-e	2.25 e-g
VA 98R	5.65	4.85	1.55	2.43 c-e	93.95 a-c	0.13 de	1.95 e-g
Perry	5.65	4.85	1.53	2.63 cd	91.90 a-e	0.90 c-e	3.05 d-g
Phillips	5.73	4.87	1.53	2.70 cd	92.53 a-d	0.20 de	3.03 d-g
Bailey	5.70	4.88	1.48	2.85 b-d	93.18 a-d	0.48 c-e	2.03 e-g
Florida Fancy	5.70	4.87	1.50	2.37 c-e	94.40 ab	0.00 e	1.73 fg
N08070olJC	5.68	4.80	1.48	3.08 bc	89.83 ef	1.00 c-e	4.63 d
N08071olJC	5.73	4.97	1.48	2.38 c-e	90.98 d-f	1.08 c-e	4.10 de
N08075olCT	5.70	4.85	1.50	2.48 c-e	93.68 a-c	0.43 c-e	1.93 fg
N08081olJC	5.70	4.90	1.50	1.77 de	93.83 a-c	0.07 de	2.83 d-g
N08082olJCT	5.67	4.83	1.57	1.97 de	92.40 a-e	1.17 cd	2.90 d-g
N08085olJCT	5.65	4.88	1.48	2.08 c-e	94.58 a	0.35 de	1.53 g
N08087olJCT	5.68	4.80	1.45	2.45 c-e	93.15 a-d	0.45 c-e	2.50 d-g
N09037ol	5.70	5.08	1.30	2.53 cd	91.78 b-e	1.00 c-e	3.40 d-g
N09053olCSm	5.68	4.93	1.48	2.48 c-e	93.25 a-d	0.68 c-e	2.13 e-g
N10046ol	5.65	4.88	1.53	1.43 e	92.83 a-d	0.50 c-e	3.73 d-f
N10047ol	5.67	4.87	1.53	2.00 c-e	92.60 a-d	0.67 c-e	3.20 d-g
N10053ol	5.70	4.93	1.53	2.20 c-e	91.73 b-e	1.50 c	3.05 d-g
N10066olSmT	5.68	4.93	1.50	2.05 c-e	92.40 a-e	1.10 c-e	2.95 d-g
N10078olJC	5.70	4.90	1.45	2.55 cd	93.48 a-d	0.65 c-e	1.88 fg
N10080olJCL	5.73	4.95	1.50	2.20 c-e	91.65 c-e	1.00 c-e	3.65 d-g
N10082olJC	5.70	4.90	1.50	2.57 cd	93.57 a-d	0.10 de	2.27 e-g
SPT 10-05	5.70	4.93	1.53	2.00 c-e	88.48 f	1.08 c-e	6.93 c
SPT 10-11ol	5.68	4.88	1.48	6.10 a	71.18 h	2.80 b	18.45 a
SPT 10-14	5.65	4.88	1.45	3.90 b	78.23 g	4.53 a	11.90 b
Mean	**5.68**	**4.89**	**1.49**	**2.52**	**91.16**	**0.92**	**3.92**

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

Blanching Results

Table 17. Laboratory sample blanching of Medium Kernels. Averages from Tidewater AREC (Suffolk) VA and Martin County, NC, 2012.

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.69	4.85	1.51	2.06 d-h	94.26 a	0.28 ef	1.89 g
Gregory	5.68	4.84	1.56	2.05 d-h	92.90 a-d	0.64 c-f	2.85 d-g
VA 98R	5.66	4.86	1.55	2.10 d-h	94.26 a	0.19 ef	1.90 g
Perry	5.70	4.86	1.39	2.68 c-e	92.43 a-e	0.78 c-f	2.74 d-g
Phillips	5.76	4.90	1.50	2.67 c-e	92.33 a-e	0.86 c-f	2.64 e-g
Bailey	5.76	4.90	1.51	2.75 cd	93.25 a-d	0.38 d-f	2.11 g
Florida Fancy	5.74	4.86	1.54	2.59 c-e	92.04 a-e	0.31 d-f	3.51 d-g
N08070olJC	5.74	4.86	1.54	2.50 c-e	91.33 de	0.66 c-f	3.98 d-f
N08071olJC	5.75	4.93	1.48	2.73 cd	90.29 e	0.96 c-e	4.55 d
N08075olCT	5.73	4.90	1.56	2.30 c-g	93.76 a-c	0.46 c-f	1.91 g
N08081olJC	5.76	4.93	1.50	1.99 d-h	93.56 a-d	0.20 ef	2.76 d-g
N08082olJCT	5.67	4.99	1.59	1.61 e-h	93.33 a-d	0.64 c-f	2.83 d-g
N08085olJCT	5.71	4.88	1.50	1.94 d-h	94.13 ab	0.18 ef	2.26 fg
N08087olJCT	5.70	4.83	1.25	2.43 c-f	93.03 a-d	0.35 d-f	2.95 d-g
N09037ol	5.71	4.98	1.45	2.40 c-f	91.91 b-e	0.94 c-e	3.30 d-g
N09053olCSm	5.71	4.91	1.44	2.14 d-h	93.98 a-c	0.60 c-f	1.85 g
N10046ol	5.69	4.89	1.51	1.56 gh	91.94 b-e	0.71 c-f	4.28 de
N10047ol	5.69	4.87	1.53	1.46 h	93.43 a-d	0.86 c-f	2.73 d-g
N10053ol	5.70	4.89	1.55	2.20 c-h	91.85 c-e	1.19 c	3.21 d-g
N10066olSmT	5.71	4.91	1.51	1.96 d-h	93.00 a-d	0.68 c-f	2.85 d-g
N10078olJC	5.73	4.93	1.53	1.88 e-h	93.90 a-c	0.33 d-f	2.38 fg
N10080olJCL	5.74	4.93	1.49	2.36 c-g	92.58 a-d	0.60 c-f	2.98 d-g
N10082olJC	5.71	4.93	1.56	2.24 c-h	94.10 ab	0.10 f	2.00 g
SPT 10-05	5.74	4.91	1.56	2.98 c	87.40 f	1.10 cd	6.96 c
SPT 10-11ol	5.70	4.88	1.45	5.24 a	74.73 g	2.80 b	15.70 a
SPT 10-14	5.68	4.85	1.51	4.40 b	76.65 g	4.13 a	13.31 b
Mean	**5.71**	**4.89**	**1.50**	**2.44**	**91.35**	**0.81**	**3.90**

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

Blanching Results

Table 18. Laboratory sample blanching of Medium Kernels. Averages from Tidewater AREC (Suffolk) VA, and Martin County, NC. Two-year averages (2011- 2012).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.80	4.86	1.79	3.03 b-d	90.45 a	0.49 bc	4.25 c
Gregory	5.78	4.84	1.81	3.82 a-c	86.98 a-c	0.96 a-c	6.43 bc
VA 98R	5.79	4.89	1.79	3.51 a-d	88.64 ab	0.36 c	5.71 bc
Perry	5.76	4.89	1.71	4.69 a	88.01 ab	0.87 a-c	4.71 c
Phillips	5.82	4.92	1.85	4.47 ab	86.01 a-c	1.54 ab	6.13 bc
Bailey	5.83	4.91	1.78	3.30 a-d	89.81 ab	0.66 bc	4.45 c
Florida Fancy	5.83	4.89	1.79	3.53 a-d	86.34 a-c	1.89 a	6.45 bc
N08070olJC	5.82	4.88	1.78	3.01 b-d	82.09 c	0.91 a-c	12.21 a
N08075olCT	5.82	4.93	1.77	2.66 cd	87.33 ab	0.49 bc	7.76 bc
N08081olJC	5.85	4.93	1.70	2.10 d	87.51 ab	0.63 bc	8.06 bc
N08082olJCT	5.81	4.99	1.81	2.46 cd	85.17 bc	1.87 a	8.69 ab
N08085olJCT	5.83	4.94	1.63	2.89 cd	89.40 ab	0.55 bc	5.54 bc
N08087olJCT	5.83	4.86	1.63	2.97 b-d	87.24 ab	0.70 bc	7.46 bc
N09037ol	5.81	4.95	1.70	2.60 cd	85.31 bc	1.83 a	8.56 ab
N09053olCSm	5.79	4.93	1.68	2.49 cd	89.53 ab	0.52 bc	5.78 bc
Mean	**5.81**	**4.91**	**1.75**	**3.17**	**87.34**	**0.94**	**6.80**

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

Blanching Results

Table 19. Laboratory sample blanching of Medium Kernels. Averages from Tidewater AREC (Suffolk), VA and Martin County, NC. Three-year averages (2010- 2012).

Variety or Line	% H_2O before Roasting	% H_2O after Roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
NC-V 11	5.60	4.81	1.26	2.91 b-d	85.80 ab	0.73 e	8.71 cd
Gregory	5.59	4.78	1.30	3.53 a-d	83.37 a-c	1.56 a-d	9.73 b-d
VA 98R	5.59	4.81	1.25	3.54 a-d	80.47 c	1.07 b-e	13.18 b
Perry	5.61	4.83	1.29	3.89 ab	85.86 a	0.81 de	7.73 d
Phillips	5.64	4.84	1.39	4.06 a	83.33 a-c	1.65 a-c	9.19 cd
Bailey	5.61	4.83	1.26	3.51 a-d	85.90 a	0.68 e	8.13 d
Florida Fancy	5.65	4.82	1.32	3.29 a-d	84.25 a-c	1.80 ab	8.82 cd
N08070olJC	5.60	4.79	1.28	3.65 a-c	76.00 d	1.07 b-e	17.50 a
N08075olCT	5.60	4.82	1.24	3.21 a-d	81.51 bc	1.10 b-e	12.47 bc
N08081olJC	5.65	4.84	1.28	2.56 d	83.64 a-c	0.97 c-e	11.15 b-d
N08082olJCT	5.57	4.85	1.23	2.86 b-d	80.24 cd	1.87 a	13.26 b
N08085olJCT	5.56	4.80	1.14	2.82 cd	84.97 ab	0.76 e	9.72 b-d
N08087olJCT	5.59	4.79	1.17	3.33 a-d	82.02 a-c	0.93 c-e	12.03 bc
Mean	**5.60**	**4.82**	**1.26**	**3.31**	**82.84**	**1.14**	**10.95**

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

Fatty Acid Results

Table 20. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk), VA Dig 1, 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	9.95 a	2.23 c-g	51.48 c	30.38 a	1.12 e-i	1.27 hi
Gregory	8.89 ab	2.98 a	54.93 c	27.01 a	1.39 a	1.19 i
VA 98R	9.98 a	2.54 bc	51.14 c	31.03 a	1.14 c-h	1.13 i
Perry	9.51 a	2.73 ab	51.23 c	30.41 a	1.34 ab	1.13 i
Phillips	9.47 a	2.32 c-f	51.38 c	30.49 a	1.21 c-g	1.31 g-i
Bailey	9.54 a	2.26 c-g	50.86 c	31.04 a	1.21 c-g	1.27 hi
Florida Fancy	6.08 de	2.36 c-f	79.65 a	4.72 c	1.25 bc	1.82 a-f
N08070olJC	5.89 de	1.98 g	81.15 a	5.02 c	1.01 i	1.76 b-f
N08071olJC	5.83 de	2.08 fg	82.29 a	3.93 c	1.04 hi	1.75 b-f
N08075olCT	5.56 e	2.18 e-g	81.32 a	4.19 c	1.15 c-h	1.91 a-e
N08081olJC	5.86 de	2.46 b-e	79.92 a	5.44 c	1.21 c-g	1.67 d-f
N08082olJCT	5.79 de	2.42 b-e	81.01 a	4.72 c	1.18 c-g	1.58 e-h
N08085olJCT	5.93 de	2.24 c-g	80.05 a	4.93 c	1.18 c-g	2.00 a-c
N08087olJCT	5.57 e	2.52 b-d	82.16 a	3.55 c	1.22 c-g	1.63 d-g
N09037ol	5.86 de	2.21 d-g	80.88 a	4.90 c	1.11 f-i	1.74 b-f
N09053olCSm	5.92 de	2.33 c-f	80.20 a	4.40 c	1.22 c-f	2.06 ab
N10046ol	5.63 de	2.54 bc	81.49 a	4.12 c	1.23 b-e	1.69 c-f
N10047ol	5.61 de	2.26 c-g	82.51 a	3.46 c	1.12 e-i	1.72 c-f
N10053ol	5.75 de	2.21 d-g	81.15 a	4.20 c	1.15 c-h	1.93 a-d
N10066olSmT	7.66 c	2.35 c-f	65.62 b	17.76 b	1.21 c-g	1.56 e-h
N10078olJC	5.47 e	2.27 c-g	82.16 a	3.93 c	1.10 g-i	1.76 b-f
N10080olJCL	5.68 de	2.06 fg	80.80 a	5.20 c	1.05 hi	1.80 a-f
N10082olJC	5.80 de	2.16 e-g	80.17 a	5.65 c	1.13 d-h	1.77 b-f
SPT 10-05	6.75 cd	2.30 c-g	77.23 a	5.83 c	1.22 c-f	1.81 a-f
SPT 10-11ol	5.84 de	2.54 bc	79.95 a	4.39 c	1.24 b-d	2.10 a
SPT 10-14	7.78 bc	2.20 d-g	66.72 b	15.68 b	1.20 c-g	1.75 b-f
Mean	**6.78**	**2.33**	**73.40**	**11.02**	**1.17**	**1.67**
LSD $_{0.05}$[2]	**1.15**	**0.33**	**9.47**	**8.23**	**0.12**	**0.33**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 20. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk), VA Dig 1, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	2.28 c-i	1.30 bc	97.91 a	1.70 c	16.87 a	1.80 a	4.69 d-i
Gregory	2.43 b-g	1.19 cd	94.96 a	2.03 c	16.88 a	1.60 a	5.01 c-g
VA 98R	2.06 h-j	0.99 d	98.62 a	1.65 c	16.71 a	1.86 a	4.19 i
Perry	2.48 b-f	1.17 cd	97.63 a	1.68 c	17.23 a	1.77 a	4.99 c-g
Phillips	2.59 bc	1.24 b-d	98.03 a	1.69 c	16.82 a	1.81 a	5.03 c-g
Bailey	2.54 b-d	1.28 bc	98.50 a	1.65 c	16.84 a	1.84 a	5.03 c-g
Florida Fancy	2.76 b	1.37 a-c	78.11 d	17.32 ab	13.81 cd	0.34 c	5.38 bc
N08070olJC	1.95 ij	1.27 b-d	79.86 d	17.96 ab	12.09 ef	0.41 c	4.22 hi
N08071olJC	1.89 j	11.21 cd	78.96 d	21.44 a	12.04 f	0.33 c	4.13 i
N08075olCT	2.28 c-i	1.43 a-c	78.69 d	19.55 a	12.59 d-f	0.33 c	4.86 c-h
N08081olJC	2.23 d-j	1.23 b-d	79.46 d	14.80 ab	12.99 d-f	0.42 c	4.67 d-i
N08082olJCT	2.13 g-j	1.19 cd	79.08 d	17.84 ab	12.70 d-f	0.37 c	4.49 e-i
N08085olJCT	2.34 c-h	1.35 a-c	78.97 d	16.62 ab	13.02 d-f	0.38 c	4.85 c-h
N08087olJCT	2.17 e-j	1.22 b-d	78.08 d	23.27 a	12.67 d-f	0.28 c	4.60 d-i
N09037ol	2.12 g-j	1.19 cd	79.41 d	16.78 ab	12.49 d-f	0.40 c	4.41 g-i
N09053olCSm	2.45 b-g	1.43 a-c	78.21 d	18.27 ab	13.35 d-f	0.33 c	5.10 c-e
N10046ol	2.14 f-j	1.18 cd	78.54 d	19.84 a	12.71 d-f	0.33 c	4.54 d-i
N10047ol	2.08 h-j	1.25 b-d	78.32 d	24.00 a	12.31 ef	0.29 c	4.44 f-i
N10053ol	2.29 c-i	1.33 a-c	78.57 d	19.35 ab	12.74 d-f	0.33 c	4.77 c-i
N10066olSmT	2.49 b-e	1.37 a-c	88.41 b	9.82 bc	15.08 bc	1.07 b	5.07 c-f
N10078olJC	2.16 f-j	1.16 cd	78.85 d	20.94 a	12.16 ef	0.32 c	4.42 g-i
N10080olJCL	2.22 d-j	1.20 cd	79.93 cd	16.62 ab	12.20 ef	0.43 c	4.46 e-i
N10082olJC	2.14 f-j	1.20 cd	80.12 cd	16.57 ab	12.42 d-f	0.45 c	4.47 e-i
SPT 10-05	3.28 a	1.60 a	77.94 d	14.65 ab	15.14 bc	0.39 c	6.09 a
SPT 10-11ol	2.46 b-g	1.49 ab	78.02 d	18.96 ab	13.57 de	0.33 c	5.19 cd
SPT 10-14	3.33 a	1.37 a-c	85.91 bc	4.26 c	15.86 ab	0.99 b	5.88 ab
Mean	**2.35**	**2.76**	**83.54**	**14.05**	**13.91**	**0.72**	**4.80**
LSD $_{0.05}$[2]	**0.34**	**0.28**	**6.03**	**9.59**	**1.50**	**0.46**	**0.65**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 21. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk), VA Dig 2, 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	10.20 a	1.99 h-j	47.79 f	33.96 a	1.05 i-m	1.36 h-j
Gregory	8.81 cd	2.67 a	53.86 e	28.54 c	1.29 a	1.27 j
VA 98R	9.49 b	2.41 a-d	50.46 ef	31.55 a-c	1.20 b-d	1.29 j
Perry	9.04 b-d	2.36 b-f	52.90 e	29.43 bc	1.22 a-c	1.30 j
Phillips	9.41 bc	2.35 b-f	50.08 ef	31.95 ab	1.19 b-e	1.29 j
Bailey	9.47 b	2.09 f-j	51.12 ef	31.24 a-c	1.13 d-i	1.35 ij
Florida Fancy	6.03 f	2.41 a-d	78.86 bc	5.70 e	1.25 ab	1.80 c-g
N08070olJC	5.70 f-i	1.96 ij	80.70 a-c	5.66 e	0.98 m	1.89 a-f
N08071olJC	5.58 f-i	1.98 ij	82.44 ab	4.06 e	0.98 m	1.87 a-f
N08075olCT	5.33 g-i	2.11 e-j	82.24 a-c	3.97 e	1.06 h-l	1.94 a-d
N08081olJC	5.71 f-i	2.23 c-i	81.61 a-c	4.38 e	1.09 f-k	1.81 b-g
N08082olJCT	5.83 f-i	2.38 b-e	80.32 a-c	5.27 e	1.15 c-g	1.72 d-g
N08085olJCT	5.77 f-i	2.39 b-d	81.43 a-c	4.02 e	1.14 e-h	1.88 a-f
N08087olJCT	5.40 g-i	2.23 c-i	82.56 ab	3.85 e	1.08 g-k	1.75 d-g
N09037ol	5.88 f-h	2.07 g-j	79.83 a-c	5.92 e	1.05 j-m	1.90 a-e
N09053olCSm	5.81 f-i	2.11 f-j	80.92 a-c	5.14 e	1.03 k-m	1.81 b-g
N10046ol	5.53 f-i	2.45 a-c	82.55 ab	3.68 e	1.14 c-g	1.58 g-i
N10047ol	5.47 f-i	2.33 b-g	82.32 a-c	4.02 e	1.12 e-j	1.63 e-g
N10053ol	5.81 f-i	1.91 j	81.20 a-c	4.70 e	0.99 m	2.03 a-c
N10066olSmT	5.70 f-i	2.20 c-i	81.66 a-c	4.54 e	1.04 k-m	1.73 d-g
N10078olJC	5.29 hi	2.04 h-j	82.92 a	3.91 e	1.00 lm	1.79 c-g
N10080olJCL	5.25 i	2.11 f-j	83.10 a	3.69 e	1.03 k-m	1.77 c-g
N10082olJC	5.90 fg	2.26 c-h	79.41 a-c	6.65 e	1.09 f-k	1.62 f-h
SPT 10-05	7.01 e	2.21 c-i	78.41 c	4.94 e	1.17 b-e	2.08 ab
SPT 10-11ol	5.74 f-i	2.58 ab	80.38 a-c	4.45 e	1.19 b-e	2.12 a
SPT 10-14	8.74 d	2.14 d-j	60.31 d	21.28 d	1.16 c-f	1.72 d-g
Mean	**6.69**	**2.23**	**73.44**	**11.40**	**1.11**	**1.70**
LSD $_{0.05}$[2]	**0.60**	**0.27**	**3.96**	**3.32**	**0.08**	**0.27**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 21. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk), VA Dig 2, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	2.33 d-f	1.32 a-c	101.00 a	1.41 b	16.90 a	2.01 a	4.70 d-h
Gregory	2.37 de	1.20 c-h	96.75 c	1.89 b	16.34 a	1.75 b	4.85 de
VA 98R	2.39 c-e	1.24 a-h	99.05 a-c	1.60 b	16.72 a	1.89 ab	4.83 de
Perry	2.46 cd	1.32 a-c	97.49 bc	1.82 b	16.38 a	1.80 ab	4.99 cd
Phillips	2.47 cd	1.28 a-e	99.42 ab	1.57 b	16.69 a	1.92 ab	4.93 cd
Bailey	2.39 c-e	1.25 a-g	99.12 a-c	1.64 b	16.31 a	1.92 ab	4.76 d-f
Florida Fancy	2.59 c	1.37 a	79.11 e-g	15.61 a	13.64 c	0.42 d	5.21 bc
N08070olJC	1.91 jk	1.23 a-h	80.69 ef	15.11 a	11.77 f-i	0.48 d	4.11 kl
N08071olJC	1.89 k	1.21 b-h	79.41 e-g	20.83 a	11.63 g-i	0.35 d	4.07 l
N08075olCT	2.08 g-k	1.28 a-e	79.13 e-g	20.74 a	11.86 f-i	0.33 d	4.42 g-k
N08081olJC	2.05 g-k	1.15 e-h	79.18 e-g	19.26 a	12.22 e-g	0.36 d	4.28 i-l
N08082olJCT	2.15 f-h	1.20 c-h	79.56 e-g	15.26 a	12.70 de	0.42 d	4.49 f-j
N08085olJCT	2.13 f-i	1.27 a-f	78.47 fg	20.43 a	12.69 de	0.32 d	4.53 e-i
N08087olJCT	1.99 g-k	1.17 d-h	79.04 e-g	21.80 a	11.86 f-i	0.33 d	4.23 i-l
N09037ol	2.12 f-j	1.25 a-g	80.41 ef	15.32 a	12.36 ef	0.48 d	4.41 h-k
N09053olCSm	1.99 g-k	1.21 b-h	79.93 e-g	17.17 a	12.14 e-h	0.42 d	4.23 i-l
N10046ol	1.97 h-k	1.12 gh	78.61 fg	22.48 a	12.20 e-g	0.30 d	4.22 j-l
N10047ol	1.98 g-k	1.14 e-h	79.05 e-g	20.49 a	12.03 f-i	0.34 d	4.24 i-l
N10053ol	2.09 g-k	1.30 a-d	79.56 e-g	17.82 a	12.08 e-h	0.39 d	4.37 h-l
N10066olSmT	1.95 h-k	1.20 c-h	79.45 e-g	18.65 a	12.08 e-h	0.38 d	4.18 j-l
N10078olJC	1.92 i-k	1.13 f-h	79.51 e-g	21.44 a	11.38 i	0.35 d	4.04 l
N10080olJCL	1.96 h-k	1.12 gh	79.24 e-g	23.00 a	11.45 hi	0.32 d	4.11 kl
N10082olJC	1.98 g-k	1.11 h	81.10 e	15.67 a	12.32 e-g	0.53 d	4.16 j-l
SPT 10-05	2.86 b	1.34 ab	77.63 g	16.49 a	14.58 b	0.34 d	0.37 b
SPT 10-11ol	2.19 e-g	1.37 a	78.51 fg	18.98 a	13.06 cd	0.35 d	4.74 d-g
SPT 10-14	3.30a	1.35 ab	90.08 d	2.84 b	16.69 a	1.28 c	5.81 a
Mean	**2.21**	**1.23**	**84.25**	**14.20**	**13.46**	**0.76**	**4.55**
LSD $_{0.05}$[2]	**0.22**	**0.14**	**2.44**	**9.38**	**0.69**	**0.23**	**0.32**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 22. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Averages of all Digs from Tidewater AREC (Suffolk), VA , 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	10.07 a	2.11 i-m	49.63 d	32.17 a	1.08 h-l	1.31 f
Gregory	8.85 cd	2.83 a	54.40 d	27.77 b	1.34 a	1.23 f
VA 98R	9.73 ab	2.47 b-f	50.80 d	31.29 ab	1.17 d-g	1.21 f
Perry	9.20 bc	2.48 b-d	52.34 d	29.76 ab	1.26 b	1.24 f
Phillips	9.44 bc	2.33 c-h	50.73 d	31.22 ab	1.20 b-d	1.30 f
Bailey	9.50 ab	2.18 g-l	50.99 d	31.14 ab	1.17 d-g	1.31 f
Florida Fancy	6.05 fg	2.39 b-f	79.26 a	5.21 e	1.25 bc	1.81 b-e
N08070olJC	5.79 gh	1.97 m	80.92 a	5.34 e	0.99 n	1.82 b-e
N08071olJC	5.71 gh	2.03 lm	82.36 a	3.99 e	1.01mn	1.81 b-e
N08075olCT	5.44 gh	2.15 h-m	81.78 a	4.08 e	1.11 g-l	1.92 a-d
N08081olJC	5.78 gh	2.35 c-h	80.76 a	4.91 e	1.15 d-h	1.74 de
N08082olJCT	5.81 gh	2.40 b-f	80.66 a	4.99 e	1.17 d-g	1.65 e
N08085olJCT	5.85 gh	2.31 c-h	80.74 a	4.47 e	1.15 d-h	1.94 a-c
N08087olJCT	5.48 gh	2.37 b-g	82.36 a	3.70 e	1.15 d-i	1.69 e
N09037ol	5.87 gh	2.15 h-m	80.35 a	5.41 e	1.08 i-m	1.82 b-e
N09053olCSm	5.86 gh	2.22 f-l	80.56 a	4.77 e	1.12 e-j	1.93 a-c
N10046ol	5.58 gh	2.49 bc	82.02 a	3.90 e	1.18 c-f	1.63 e
N10047ol	5.54 gh	2.29 d-i	82.42 a	3.74 e	1.12 f-k	1.68 e
N10053ol	5.78 gh	2.06 k-m	81.17 a	4.45 e	1.07 j-m	1.98 ab
N10066olSmT	6.68 ef	2.28 e-j	73.64 b	11.15 d	1.12 f-k	1.64 e
N10078olJC	5.38 h	2.15 h-m	82.54 a	3.92 e	1.05 k-n	1.78 c-e
N10080olJCL	5.46 gh	2.08 j-m	81.95 a	4.44 e	1.04 l-n	1.79 b-e
N10082olJC	5.85 gh	2.21 f-l	79.79 a	6.15 e	1.11 g-l	1.70 e
SPT 10-05	6.88 e	2.25 f-k	77.82 ab	5.38 e	1.20 b-d	1.94 a-c
SPT 10-11ol	5.79 gh	2.56 b	80.16 a	4.42 e	1.21 b-d	2.11 a
SPT 10-14	8.26 d	2.17 h-m	63.52 c	18.48 c	1.18 c-g	1.73 de
Mean	**6.73**	**2.28**	**73.42**	**11.21**	**1.14**	**1.68**
LSD $_{0.05}$[2]	**0.63**	**0.20**	**4.97**	**4.26**	**0.07**	**0.19**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 22. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Average of all Digs from Tidewater AREC (Suffolk), VA, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	2.31 e-g	1.31 b-f	99.45 a	1.55 e	16.88 a	1.91 a	4.70 c-e
Gregory	2.40 d-f	1.19 g-h	95.85 b	1.96 e	16.61 a	1.68 a	4.93 b-d
VA 98R	2.22 f-h	1.12 h	98.83 ab	1.63 e	16.71 a	1.88 a	4.51 e-h
Perry	2.46 c-e	1.27 c-g	97.54 ab	1.77 e	16.66 a	1.79 a	4.99 bc
Phillips	2.53 cd	1.26 c-h	98.72 ab	1.63 e	16.75 a	1.86 a	4.98 bc
Bailey	2.46 c-e	1.27 c-g	98.81 ab	1.64 e	16.57 a	1.88 a	4.90 cd
Florida Fancy	2.67 c	1.37 a-c	78.61 e	16.47 cd	13.73 c	0.38 d	5.29 b
N08070olJC	1.93 ij	1.25 c-h	80.27 e	16.53 b-d	11.93 g-i	0.45 d	4.17 ij
N08071olJC	1.89 j	1.21 e-h	79.18 e	21.14 a-c	11.83 hi	0.34 d	4.10 j
N08075olCT	2.18 gh	1.35 a-e	78.91 e	20.14 a-c	12.22 f-i	0.33 d	4.64 c-g
N08081olJC	2.14 g-i	1.19 g-h	79.32 e	17.03 a-d	12.60 e-h	0.39 d	4.48 e-j
N08082olJCT	2.14 g-i	1.19 g-h	79.32 e	16.55 b-d	12.70 e-g	0.39 d	4.49 e-i
N08085olJCT	2.23 f-h	1.31 b-f	78.72 e	18.52 a-d	12.85 d-f	0.35 d	4.69 c-e
N08087olJCT	2.08 h-j	1.19 g-h	78.56 e	22.53 a	12.26 f-i	0.30 d	4.41 e-j
N09037ol	2.12 g-i	1.22 d-h	79.91 e	16.05 cd	12.42 f-i	0.44 d	4.41 e-j
N09053olCSm	2.22 f-h	1.32 b-f	79.07 e	17.72 a-d	12.74 e-g	0.38 d	4.66 c-f
N10046ol	2.05 h-j	1.15 gh	78.58 e	21.16 a-c	12.45 f-i	0.31 d	4.38 e-j
N10047ol	2.03 h-j	1.20 f-h	78.68 e	22.24 ab	12.17 f-i	0.31 d	4.3.4 e-j
N10053ol	2.19 f-h	1.31 b-f	79.06 e	18.59 a-d	12.41 f-i	0.36 d	4.57 d-h
N10066olSmT	2.22 f-h	1.29 b-g	83.93 d	14.24 d	13.58 cd	0.72 c	4.62 c-g
N10078olJC	2.04 h-j	1.15 gh	79.18 e	21.19 a-c	11.77 i	0.33 d	4.23 h-j
N10080olJCL	2.09 h-j	1.16 gh	79.58 e	19.81 a-d	11.82 hi	0.37 d	4.28 h-j
N10082olJC	2.06 h-j	1.15 gh	80.61 e	16.12 cd	12.37 f-i	0.49 cd	4.31 f-j
SPT 10-05	3.07 b	1.47 a	77.78 e	15.57 cd	14.86 b	0.36 d	5.73 a
SPT 10-11ol	2.32 d-g	1.43 ab	78.26 e	18.97 a-d	13.31 c-e	0.34 d	4.96 bc
SPT 10-14	3.32 a	1.36 a-d	88.00 c	3.55 e	16.28 a	1.13 b	5.85 a
Mean	**2.28**	**1.25**	**83.90**	**14.13**	**13.68**	**0.74**	**4.67**
LSD $_{0.05}$[2]	**0.21**	**0.15**	**3.09**	**5.76**	**0.83**	**0.24**	**0.38**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 23. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 1, 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	10.17 a	2.25 c-f	49.22 e	32.29 a	1.13 e-i	1.24 k
Gregory	9.05 ab	2.71 ab	54.92 de	27.14 a	1.30 a-c	1.21 k
VA 98R	9.72 a	2.52 a-d	52.15 e	29.43 a	1.23 b-f	1.24 k
Perry	9.83 a	2.31 c-f	48.92 e	32.11 a	1.25 b-e	1.34 i-k
Phillips	9.90 a	2.19 d-f	49.05 e	32.40 a	1.17 d-h	1.29 jk
Bailey	9.63 a	2.25 c-f	51.28 e	30.51 a	1.20 c-g	1.28 jk
Florida Fancy	5.87 ef	2.37 b-f	80.84 a	3.35 d	1.26 a-d	1.88 a-e
N08070olJC	6.28 d-f	2.07 ef	77.48 a	7.66 cd	1.07 hi	1.86 a-g
N08071olJC	6.09 ef	2.01 f	80.54 a	5.02 d	1.03 i	1.87 a-f
N08075olCT	5.75 ef	2.10 ef	80.26 a	5.10 d	1.11 f-i	1.89 a-d
N08081olJC	9.21 ab	2.76 a	53.45 de	27.25 a	1.38 a	1.52 h-j
N08082olJCT	5.89 ef	2.52 a-d	81.53 a	4.08 d	1.17 d-h	1.58 hi
N08085olJCT	7.55 cd	2.72 ab	66.07 bc	16.58 bc	1.34 ab	1.66 d-h
N08087olJCT	5.79 ef	2.53 a-d	80.89 a	4.53 d	1.21 c-g	1.64 e-h
N09037ol	5.82 ef	2.26 c-f	79.93 a	5.49 d	1.14 d-i	1.76 a-h
N09053olCSm	5.96 ef	2.25 c-f	80.28 a	4.55 d	1.16 d-h	1.95 ab
N10046ol	5.81 ef	2.60 a-c	80.09 a	5.09 d	1.24 b-e	1.69 c-h
N10047ol	5.63 ef	2.51 a-d	81.88 a	3.88 d	1.20 c-g	1.61 gh
N10053ol	5.87 ef	2.11 ef	80.86 a	4.35 d	1.10 g-i	1.98 a
N10066olSmT	5.96 ef	2.33 c-f	80.91 a	4.49 d	1.11 f-i	1.70 c-h
N10078olJC	5.47 f	2.22 d-f	81.94 a	4.15 d	1.11 f-i	1.73 a-h
N10080olJCL	6.17 ef	2.37 b-f	77.47 a	7.84 b-d	1.15 d-i	1.64 e-h
N10082olJC	6.01 ef	2.52 a-d	79.08 a	6.06 d	1.20 c-g	1.63 f-h
SPT 10-05	6.97 c-e	2.41 a-e	77.45 a	5.44 d	1.25 b-e	1.96 ab
SPT 10-11ol	6.37 d-f	2.42 a-e	76.27 ab	7.95 b-d	1.20 c-g	1.92 a-c
SPT 10-14	8.25 bc	2.43 a-e	64.02 cd	17.31 b	1.30 a-c	1.73 b-h
Mean	**7.12**	**2.36**	**71.04**	**12.85**	**1.19**	**1.65**
LSD $_{0.05}$[2]	**1.36**	**0.37**	**11.12**	**9.47**	**0.13**	**0.25**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 23. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 1, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	2.34 f-j	1.38 d-g	99.23 a	1.53 f	17.26 ab	1.87 a	4.85 e-i
Gregory	2.44 e-h	1.26 f-j	95.18 a	2.03 f	16.75 a-c	1.62 a	5.00 d-g
VA 98R	2.46 e-h	1.27 f-j	96.80 a	1.78 f	17.19 ab	1.71 a	4.95 d-h
Perry	2.81 b-d	1.44 b-e	98.74 a	1.53 f	17.65 a	1.82 a	5.50 bc
Phillips	2.60 c-f	1.41 c-e	99.32 a	1.51 f	17.27 ab	1.88 a	5.18 c-e
Bailey	2.52 d-g	1.36 d-h	97.96 a	1.68 f	16.94 a-c	1.80 a	5.07 c-f
Florida Fancy	2.84 bc	1.59 a	76.81 d	24.11 a	13.93 de	0.24 e	5.69 b
N08070olJC	2.21 g-j	1.39 d-f	81.37 b-d	11.36 c-e	13.00 e	0.59 c-e	4.66 f-i
N08071olJC	2.11 ij	1.34 e-i	79.43 d	16.18 a-d	12.58 e	0.40 e	4.48 hi
N08075olCT	2.35 f-j	1.47 a-e	79.33 d	15.77 a-d	12.76 e	0.40 e	4.92 e-h
N08081olJC	2.91 bc	1.52 a-c	94.37 a	1.96 f	17.78 a	1.53 ab	5.81 ab
N08082olJCT	2.08 j	1.15 j	78.43 d	19.97 a-c	12.81 e	0.32 e	4.40 i
N08085olJCT	2.69 b-e	1.41 c-e	86.84 b	9.65 d-f	15.70 b-d	0.97 cd	5.43 b-d
N08087olJCT	2.19 h-j	1.24 h-j	78.70 d	17.89 a-d	12.96 e	0.35 e	4.64 f-i
N09037ol	2.26 g-j	1.36 d-h	79.63 cd	14.57 b-d	12.83 e	0.43 e	4.75 e-i
N09053olCSm	2.42 e-i	1.44 b-e	78.47 d	17.67 a-d	13.22 e	0.35 e	5.02 c-g
N10046ol	2.25 g-j	1.26 g-j	79.01 d	17.17 a-d	13.15 e	0.39 e	4.70 e-i
N10047ol	2.07 j	1.21 j	78.41 d	21.10 ab	12.63 e	0.31 e	4.49 hi
N10053ol	2.31 f-j	1.44 b-e	78.64 d	18.60 a-c	12.82 e	0.35 e	4.84 e-i
N10066olSmT	2.17 h-j	1.35 e-i	78.69 d	18.20 a-d	12.91 e	0.35 e	4.62 f-i
N10078olJC	2.15 h-j	1.25 h-j	79.02 d	19.96 a-c	12.19 e	0.34 e	4.51 hi
N10080olJCL	2.20 h-j	1.18 j	81.49 b-d	11.71 c-e	13.07 e	0.59 c-e	4.53 g-i
N10082olJC	2.28 g-j	1.22 ij	79.80 cd	13.04 b-d	13.23 e	0.46 de	4.70 e-i
SPT 10-05	2.99 b	1.54 ab	77.58 d	14.26 b-d	15.15 cd	0.36 e	5.77 b
SPT 10-11ol	2.41 e-i	1.48 a-d	80.87 b-d	9.63 d-f	13.87 de	0.57 c-e	5.08 c-f
SPT 10-14	3.55 a	1.43 b-e	86.40 bc	3.73 ef	16.95 a-c	1.02 bc	6.28 a
Mean	**2.44**	**1.36**	**84.65**	**11.55**	**14.47**	**0.81**	**4.99**
LSD $_{0.05}$[2]	**0.31**	**0.13**	**6.77**	**8.63**	**1.89**	**0.51**	**0.49**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 24. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 2, 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	10.35 ab	1.90 g	46.71 g	34.39 a	1.07 a-d	1.43 d-i
Gregory	10.12 b	2.59 a	54.54 f	27.76 b	1.10 a-d	1.12 hi
VA 98R	11.68 a	2.23 c-e	53.11 f	29.41 b	0.84 d	1.05 i
Perry	11.44 ab	2.55 a	52.84 f	28.97 b	1.10 a-d	1.31 e-i
Phillips	10.29 ab	2.22 c-e	52.17 f	30.45 ab	1.00 a-d	1.23 f-i
Bailey	10.94 ab	2.14 d-f	52.71 f	30.25 ab	0.87 b-d	1.20 g-i
Florida Fancy	6.66 c-f	2.52 ab	78.62 a-d	6.34 d-g	1.15 a	1.66 a-e
N08070olJC	6.13 d-f	2.02 e-f	81.46 a-d	5.39 d-g	0.92 a-d	1.57 a-g
N08071olJC	6.64 c-f	1.97 fg	76.75 cd	8.80 d	0.94 a-d	1.97 a
N08075olCT	6.13 d-f	2.25 cd	79.72 a-d	6.26 d-g	1.04 a-d	1.84 a-c
N08081olJC	5.71 d-f	2.40 a-c	81.85 a-c	4.10 e-g	1.14 a-c	1.66 a-e
N08082olJCT	6.83 c-f	2.21 c-e	77.04 cd	8.48 de	1.00 a-d	1.86 a-c
N08085olJCT	6.11 d-f	2.20 c-e	81.02 a-d	4.83 d-g	1.02 a-d	1.87 a-c
N08087olJCT	6.08 d-f	2.51 ab	82.51 ab	3.76 g	1.06 a-d	1.55 b-g
N09037ol	6.58 c-f	2.16 d-f	82.50 ab	4.69 d-g	0.84 d	1.52 c-h
N09053olCSm	7.05 cd	2.11 d-g	80.32 a-d	6.20 d-g	0.84 d	1.76 a-d
N10046ol	5.84 d-f	2.41 a-c	82.55 ab	4.02 fg	1.06 a-d	1.53 c-g
N10047ol	5.50 f	2.25 cd	81.71 a-d	4.13 e-f	1.15 ab	1.83 a-d
N10053ol	6.38 c-f	2.11 d-g	83.37 a	3.58 g	0.88 a-d	1.73 a-d
N10066olSmT	6.59 c-f	2.30 b-d	81.26 a-d	5.14 d-g	0.94 a-d	1.52 c-h
N10078olJC	5.61 ef	2.15 d-f	83.11 a	3.85 g	0.98 a-d	1.67 a-e
N10080olJCL	6.88 c-f	2.09 e-g	77.65 b-d	8.28 d-f	0.92 a-d	1.72 a-e
N10082olJC	5.68 d-f	2.21 c-e	80.30 a-d	5.63 d-g	1.13 a-c	1.63 a-f
SPT 10-05	7.68 c	2.16 d-f	76.59 d	7.33 d-g	1.05 a-d	1.94 ab
SPT 10-11ol	6.97 c-e	2.12 d-g	77.70 b-d	8.44 de	0.86 cd	1.84 a-c
SPT 10-14	9.70 b	2.10 d-g	63.53 e	18.39 c	0.96 a-d	1.78 a-d
Mean	**7.48**	**2.22**	**73.14**	**11.88**	**0.99**	**1.61**
LSD $_{0.05}$[2]	**1.43**	**0.23**	**5.15**	**4.39**	**0.28**	**0.41**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 24. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 2, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	2.64 a	1.54 a	100.85 a	1.36 j	17.48 a	1.97 a	5.24 a
Gregory	1.92 a-c	0.86 a-d	95.87 b	1.98 j	16.59 ab	1.68 b	3.88 ab
VA 98R	1.26 c	0.44 d	97.44 b	1.81 j	16.43 ab	1.79 ab	2.52 b
Perry	1.97 a-c	0.84 a-d	96.65 b	1.89 j	16.89 ab	1.71 b	3.90 ab
Phillips	1.86 a-c	0.79 a-d	98.58 ab	1.73 j	16.15 b	1.89 ab	3.65 ab
Bailey	1.42 bc	0.48 b-d	98.68 ab	1.78 j	15.84 b	1.91 ab	2.76 b
Florida Fancy	2.13 a-c	0.94 a-d	79.91 d-g	12.64 d-h	13.39 cd	0.47 d-h	4.22 ab
N08070olJC	1.62 a-c	0.92 a-d	80.63 d-g	16.19 c-f	11.59 ef	0.46 d-h	3.45 ab
N08071olJC	1.89 a-c	1.06 a-d	82.80 de	8.73 hi	12.49 d-f	0.71 d	3.89 ab
N08075olCT	1.85 a-c	0.94 a-d	80.85 d-g	12.74 d-h	12.19 d-f	0.52 d-h	3.81 ab
N08081olJC	2.02 a-c	1.13 a-d	78.80 g	20.22 a-c	12.40 d-f	0.33 h	4.29 ab
N08082olJCT	1.77 a-c	0.81 a-d	82.41 d-f	9.12 gh	12.62 de	0.68 d-f	3.58 ab
N08085olJCT	1.94 a-c	1.03 a-d	79.51 e-g	16.90 c-f	12.29 d-f	0.40 h	3.99 ab
N08087olJCT	1.71 a-c	0.85 a-d	78.68 g	22.00 ab	12.19 d-f	0.31 h	3.61 ab
N09037ol	1.24 c	0.48 b-d	80.28 d-g	18.15 a-d	11.29 f	0.42 gh	2.56 b
N09053olCSm	1.28 bc	0.46 cd	81.19 d-g	13.08 d-h	11.73 ef	0.53 d-h	2.58 b
N10046ol	1.71 a-c	0.90 a-d	79.16 g	20.58 a-c	11.90 ef	0.34 h	3.66 ab
N10047ol	2.18 a-c	1.27 a-c	78.85 g	20.01 a-c	12.35 d-f	0.34 h	4.60 ab
N10053ol	1.39 bc	0.58 b-d	79.27 fg	23.32 a	11.33 f	0.32 h	2.84 b
N10066olSmT	1.53 bc	0.75 a-d	79.98 d-g	15.87 c-f	12.09 ef	0.43 f-h	3.21 ab
N10078olJC	1.76 a-c	0.89 a-d	79.45 e-g	21.81 ab	11.38 f	0.34 h	3.63 ab
N10080olJCL	1.71 a-c	0.76 a-d	82.49 d-f	11.38 f-h	12.35 d-f	0.67 d-g	3.38 ab
N10082olJC	2.14 a-c	1.30 ab	80.09 d-g	14.41 d-g	12.45 d-f	0.45 e-h	4.56 ab
SPT 10-05	2.32 ab	0.94 a-d	80.09 d-g	11.44 e-h	14.15 c	0.51 d-h	4.31 ab
SPT 10-11ol	1.45 bc	0.63 b-d	82.89 d	9.29 gh	12.03 ef	0.70 de	2.94 b
SPT 10-14	2.60 a	0.98 a-d	87.88 c	3.49 ij	16.32 ab	1.13 c	4.53 ab
Mean	**1.82**	**0.86**	**84.74**	**11.99**	**13.38**	**0.81**	**3.67**
LSD $_{0.05}$[2]	**1.06**	**0.83**	**3.37**	**5.51**	**1.23**	**0.25**	**2.14**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 25. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Average of Digs from Martin County, NC , 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	10.26 ab	2.07 h-j	47.96 f	33.34 a	1.10 a-g	1.34 g
Gregory	9.58 bc	2.65 a	54.73 e	27.45 b	1.20 ab	1.16 g
VA 98R	10.70 a	2.37 b-f	52.63 ef	29.42 ab	1.03 d-g	1.15 g
Perry	10.14 ab	2.43 b-e	50.88 ef	30.54 ab	1.18 a-e	1.33 g
Phillips	10.16 ab	2.21 e-i	51.13 ef	31.10 ab	1.06 b-g	1.25 g
Bailey	10.28 ab	2.20 f-j	51.99 ef	30.38 ab	1.03 d-g	1.24 g
Florida Fancy	6.40 d-f	2.47 a-d	79.36 ab	5.34 ef	1.19 a-c	1.73 a-f
N08070olJC	6.20 ef	2.04 ij	79.47 ab	6.52 d-f	0.99 g	1.71 b-f
N08071olJC	6.36 d-f	1.99 j	78.65 a-c	6.91 d-f	0.98 g	1.92 ab
N08075olCT	5.94 ef	2.18 f-j	79.99 ab	5.68 ef	1.07 a-g	1.87 a-d
N08081olJC	6.88 de	2.52 ab	72.38 c	11.82 d	1.22 a	1.61 f
N08082olJCT	6.52 d-f	2.31 b-g	78.54 a-c	7.01 d-f	1.05 b-g	1.77 a-f
N08085olJCT	6.83 de	2.46 a-d	73.54 bc	10.70 de	1.18 a-d	1.76 a-f
N08087olJCT	5.94 ef	2.52 ab	81.70 a	4.14 f	1.13 a-g	1.59 f
N09037ol	6.20 ef	2.21 f-j	81.21 a	5.09 f	0.99 g	1.64 d-f
N09053olCSm	6.51 d-f	2.18 f-j	80.30 a	5.37 ef	1.00 fg	1.86 a-e
N10046ol	5.82 ef	2.50 a-c	81.32 a	4.55 f	1.15 a-f	1.61 f
N10047ol	5.54 f	2.33 b-f	81.76 a	4.04 f	1.16 a-e	1.75 a-f
N10053ol	6.12 ef	2.11 g-j	82.12 a	3.97 f	0.99 g	1.85 a-e
N10066olSmT	6.27 d-f	2.31 b-g	81.08 a	4.81 f	1.03 e-g	1.61 f
N10078olJC	5.54 f	2.19 f-j	82.52 a	4.00 f	1.05 c-g	1.70 b-f
N10080olJCL	6.53 d-f	2.23 e-i	77.56 a-c	8.06 d-f	1.03 d-g	1.68 c-f
N10082olJC	5.79 ef	2.31 b-g	79.89 ab	5.77 ef	1.15 a-e	1.63 ef
SPT 10-05	7.32 d	2.28 c-h	77.02 a-c	6.38 d-f	1.15 a-f	1.95 a
SPT 10-11ol	6.67 de	2.27 d-h	76.98 a-c	8.19 d-f	1.03 d-g	1.88 a-c
SPT 10-14	8.97 c	2.26 d-h	63.77 d	17.85 c	1.13 a-g	1.75 a-f
Mean	**7.31**	**2.29**	**72.15**	**12.33**	**1.08**	**1.63**
LSD $_{0.05}$[2]	**1.11**	**0.22**	**6.57**	**5.55**	**0.15**	**0.23**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 25. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Average of Digs from Martin County, NC, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	2.49 bc	1.46 a	100.04 a	1.44 f	17.37 a	1.92 a	5.04 ab
Gregory	2.18 b-e	1.06 ab	95.52 b	2.00 f	16.67 a	1.65 a	4.44 a-d
VA 98R	1.86 de	0.85 b	97.12 ab	1.80 f	16.81 a	1.75 a	3.74 cd
Perry	2.39 b-d	1.14 ab	97.69 ab	1.71 f	17.27 a	1.76 a	4.70 a-d
Phillips	2.10 b-e	1.00 b	98.83 ab	1.65 f	16.53 a	1.88 a	4.16 b-d
Bailey	1.97 c-e	0.92 b	98.32 ab	1.73 f	16.39 a	1.86 a	3.91 cd
Florida Fancy	2.37 b-d	1.15 ab	78.87 f	16.46 a-d	13.57 b-d	0.39 d-f	4.71 a-d
N08070olJC	1.91 de	1.15 ab	81.00 d-f	13.78 c-e	12.29 e	0.52 c-f	4.05 b-d
N08071olJC	2.00 c-e	1.20 ab	81.11 d-f	12.46 de	12.53 de	0.55 c-f	4.18 b-d
N08075olCT	2.10 b-e	1.20 ab	80.09 d-f	14.25 b-e	12.47 de	0.46 c-f	4.36 a-d
N08081olJC	2.32 b-d	1.26 ab	83.99 cd	14.13 c-e	14.19 b	0.73 c	4.79 a-c
N08082olJCT	1.87 de	0.92 b	81.08 d-f	12.73 de	12.68 de	0.56 c-f	3.85 cd
N08085olJCT	2.31 b-d	1.22 ab	83.17 c-e	13.27 c-e	14.00 bc	0.68 cd	4.71 a-d
N08087olJCT	1.95 c-e	1.04 ab	78.69 f	19.94 ab	12.57 de	0.33 f	4.12 b-d
N09037ol	1.75 e	0.92 b	79.95 ef	16.36 a-d	12.06 e	0.42 d-f	3.65 d
N09053olCSm	1.85 de	0.95 b	79.83 ef	15.37 a-d	12.48 de	0.44 c-f	3.80 cd
N10046ol	1.98 c-e	1.08 ab	79.09 f	18.87 a-c	12.52 de	0.36 ef	4.20 b-d
N10047ol	2.14 b-e	1.25 ab	78.70 f	20.37 a	12.44 de	0.33 f	4.56 a-d
N10053ol	1.85 de	1.01 b	78.95 f	20.96 a	12.07 e	0.33 f	3.84 cd
N10066olSmT	1.85 de	1.05 ab	79.34 ef	17.04 a-d	12.50 de	0.39 d-f	3.91 cd
N10078olJC	1.95 c-e	1.07 ab	79.23 ef	20.88 a	11.79 e	0.34 ef	4.07 b-d
N10080olJCL	1.95 c-e	0.97 b	81.99 d-f	11.55 de	12.71 de	0.63 c-f	3.95 b-d
N10082olJC	2.19 b-e	1.27 ab	79.99 ef	13.95 c-e	12.71 de	0.45 c-f	4.61 a-d
SPT 10-05	2.65 ab	1.24 ab	78.83 f	12.85 de	14.65 b	0.43 c-f	5.04 ab
SPT 10-11ol	1.93 c-e	1.05 ab	81.88 d-f	9.46 e	12.95 c-e	0.64 c-e	4.01 b-d
SPT 10-14	3.07 a	1.20 ab	87.14 c	3.61 f	16.63 a	1.08 b	5.40 a
Mean	**2.11**	**1.10**	**84.70**	**11.79**	**13.89**	**0.81**	**4.29**
LSD $_{0.05}$[2]	**0.56**	**0.43**	**4.00**	**5.80**	**1.20**	**0.31**	**1.11**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 26. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Rocky Mount, NC, 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	11.23 ab	2.10 b	53.97 e	28.65 a	0.84 b	1.20 ef
Gregory	10.74 a-c	2.36 b	57.89 de	25.60 ab	0.84 b	1.07 f
VA 98R	11.96 a	2.24 b	52.94 e	29.39 a	0.80 b	1.08 f
Perry	11.50 ab	2.54 b	55.42 de	26.60 ab	1.00 b	1.05 f
Phillips	9.28 cd	2.45 b	61.21 d	21.67 bc	4.46 a	1.33 d-f
Bailey	11.21 ab	2.27 b	56.70 de	26.33 ab	0.82 b	1.10 f
Florida Fancy	7.41 ef	2.38 b	80.41 a-c	5.41 de	0.95 b	1.44 b-e
N08070olJC	8.18 de	2.04 b	75.99 bc	9.73 d	0.77 b	1.59 a-d
N08071olJC	7.24 ef	1.99 b	81.07 a-c	5.36 de	0.78 b	1.64 a-d
N08075olCT	7.37 ef	2.22 b	80.27 a-c	6.22 de	0.82 b	1.48 a-e
N08081olJC	7.30 ef	2.27 b	79.46 a-c	7.02 de	0.84 b	1.44 b-e
N08082olJCT	7.20 ef	2.53 b	78.98 a-c	6.99 de	0.97 b	1.42 c-e
N08085olJCT	7.54 d-f	2.42 b	79.10 a-c	6.37 de	0.91 b	1.74 ab
N08087olJCT	6.22 f	2.43 b	82.12 ab	4.41 de	1.03 b	1.47 b-e
N09037ol	6.98 ef	2.40 b	79.01 a-c	6.54 de	1.04 b	1.56 a-d
N09053olCSm	7.06 ef	2.30 b	81.66 ab	4.73 de	0.87 b	1.56 a-d
N10046ol	6.82 ef	2.38 b	81.55 a-c	5.15 de	0.89 b	1.48 a-e
N10047ol	6.73 ef	2.33 b	81.15 a-c	5.16 de	0.92 b	1.55 a-d
N10053ol	6.94 ef	1.98 b	81.59 a-c	5.03 de	0.80 b	1.56 a-d
N10066olSmT	7.00 ef	2.30 b	80.38 a-c	6.14 de	0.87 b	1.44 b-e
N10078olJC	6.81 ef	2.28 b	80.92 a-c	5.82 de	0.89 b	1.45 b-e
N10080olJCL	7.20 ef	2.23 b	82.40 a	4.36 de	0.76 b	1.45 b-e
N10082olJC	6.88 ef	2.33 b	80.13 a-c	6.12 de	0.94 b	1.52 a-d
SPT 10-05	10.02 bc	3.10 ab	78.43 a-c	3.51 e	0.92 b	1.68 a-c
SPT 10-11ol	7.86 d-f	2.23 b	75.50 c	9.91 d	0.86 b	1.71 a-c
SPT 10-14	12.02 a	4.13 a	60.97 d	16.94 c	1.18 b	1.42 c-e
Mean	**8.33**	**2.39**	**73.82**	**11.12**	**1.03**	**1.45**
LSD $_{0.05}$[2]	**1.83**	**1.22**	**6.14**	**5.85**	**1.79**	**0.31**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 26. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Rocky Mount, NC, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	1.45 cd	0.56 a-c	96.99 a	2.04 g	16.17 b-d	1.76 a	2.84 bc
Gregory	1.14 cd	0.36 c	94.97 a	2.26 g	15.44 b-f	1.66 a	2.34 c
VA 98R	1.20 cd	0.40 c	97.29 a	1.81 g	16.59 bc	1.77 a	2.40 c
Perry	1.39 cd	0.50 bc	94.57 a	2.10 g	16.93 ab	1.57 a	2.89 bc
Phillips	2.11 ab	0.78 ab	91.21 a	3.43 fg	19.08 ab	1.11 b	7.34 a
Bailey	1.19 cd	0.37 c	95.23 a	2.20 g	15.88 b-e	1.65 a	2.39 c
Florida Fancy	1.46 cd	0.53 a-c	79.67 bc	15.93 bc	12.73 c-f	0.42 fg	2.94 bc
N08070olJC	1.23 cd	0.47 bc	83.47 b	8.78 d-f	12.69 c-f	0.76 c-e	2.46 c
N08071olJC	1.39 cd	0.53 a-c	80.29 bc	15.34 bc	11.94 ef	0.45 d-g	2.70 bc
N08075olCT	1.18 cd	0.45 bc	80.97 bc	14.48 b-d	12.04 ef	0.52 d-g	2.45 c
N08081olJC	1.20 cd	0.51 bc	81.63 b	12.93 b-e	12.08 ef	0.57 d-f	2.51 bc
N08082olJCT	1.39 cd	0.52 bc	81.15 bc	12.79 b-e	12.61 d-f	0.55 d-g	2.88 bc
N08085olJCT	1.44 cd	0.48 bc	80.43 bc	12.67 c-e	12.79 c-f	0.50 d-g	2.83 bc
N08087olJCT	1.64 b-d	0.68 a-c	79.42 bc	18.72 a-c	12.00 ef	0.37 fg	3.35 bc
N09037ol	1.76 b-d	0.71 a-c	80.51 bc	12.98 b-e	12.89 c-f	0.50 d-g	3.51 bc
N09053olCSm	1.28 cd	0.53 a-c	79.67 bc	17.80 a-c	12.04 ef	0.39 fg	2.68 bc
N10046ol	1.25 cd	0.47 bc	80.21 bc	16.54 a-c	11.83 f	0.44 e-g	2.62 bc
N10047ol	1.59 b-d	0.59 a-c	79.94 bc	16.14 bc	12.15 ef	0.43 fg	3.09 bc
N10053ol	1.31 cd	0.57 a-c	80.29 bc	16.24 bc	11.59 f	0.44 e-g	2.67 bc
N10066olSmT	1.30 cd	0.58 a-c	80.89 bc	14.41 b-d	12.05 ef	0.51 d-g	2.75 bc
N10078olJC	1.33 cd	0.50 bc	80.83 bc	15.05 bc	11.80 f	0.49 d-g	2.72 bc
N10080olJCL	1.08 d	0.51 bc	79.57 bc	18.96 ab	11.78 f	0.38 fg	2.35 c
N10082olJC	1.55 b-d	0.51 bc	80.72 bc	16.03 bc	12.23 ef	0.48 d-g	3.01 bc
SPT 10-05	1.65 b-d	0.69 a-c	74.87 c	22.62 a	16.37 b-d	0.23 g	3.25 bc
SPT 10-11ol	1.37 cd	0.57 a-c	83.45 b	7.68 e-g	12.88 c-f	0.77 cd	2.79 bc
SPT 10-14	2.46 a	0.88 a	82.90 b	5.51 fg	20.67 a	1.01 bc	4.52 b
Mean	**1.44**	**0.55**	**83.89**	**11.75**	**13.74**	**0.76**	**3.01**
LSD $_{0.05}$[2]	**0.64**	**0.36**	**6.31**	**6.28**	**3.94**	**0.33**	**2.02**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 27. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Bladen County, NC, 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	12.40 ab	2.35 b	51.46 d	30.11 a	0.88 c-f	0.93 i
Gregory	10.83 bc	2.65 b	56.49 d	26.29 ab	0.97 b-f	0.95 i
VA 98R	12.79 a	2.56 b	54.58 d	26.93 ab	0.81 ef	0.88 i
Perry	10.83 bc	2.69 b	56.70 d	25.91 b	1.01 a-c	0.97 hi
Phillips	11.56 ab	2.48 b	54.93 d	27.61 ab	0.88 c-f	0.94 i
Bailey	10.80 bc	2.46 b	54.72 d	27.93 ab	0.99 b-d	0.99 hi
Florida Fancy	7.70 d-h	2.66 b	79.76 ab	5.43 d	1.02 a-c	1.34 a-e
N08070olJC	7.35 f-h	2.31 b	81.04 ab	5.29 d	0.83 d-f	1.38 a-c
N08071olJC	8.49 d-g	2.31 b	78.81 ab	7.10 d	0.79 f	1.17 e-g
N08075olCT	7.29 f-h	2.38 b	80.06 ab	6.33 d	0.89 b-f	1.33 a-e
N08081olJC	7.14 f-h	2.60 b	82.69 a	3.81 d	0.92 b-f	1.24 b-g
N08082olJCT	7.33 f-h	2.58 b	79.98 ab	6.26 d	0.94 b-f	1.22 c-g
N08085olJCT	7.69 d-h	2.57 b	79.12 ab	6.55 d	0.94 b-f	1.37 a-c
N08087olJCT	7.52 e-h	2.48 b	80.06 ab	6.47 d	0.86 c-f	1.14 gh
N09037ol	7.01 f-h	2.37 b	80.38 ab	5.71 d	0.92 b-f	1.34 a-e
N09053olCSm	7.36 f-h	2.69 b	81.14 ab	4.45 d	1.00 a-d	1.40 ab
N10046ol	7.33 f-h	2.55 b	80.14 ab	6.28 d	0.91 b-f	1.16 fg
N10047ol	7.17 f-h	2.47 b	82.28 a	4.40 d	0.87 c-f	1.20 d-g
N10053ol	6.67 h	2.37 b	83.27 a	3.53 d	0.91 b-f	1.40 ab
N10066olSmT	9.40 cd	4.55 a	75.94 b	4.46 d	1.17 a	1.39 a-c
N10078olJC	7.19 f-h	2.50 b	81.60 ab	4.87 d	0.89 c-f	1.24 b-g
N10080olJCL	6.64 h	2.34 b	81.93 a	4.95 d	0.90 b-f	1.35 a-d
N10082olJC	6.91gh	2.45 b	82.15 a	4.64 d	0.90 b-f	1.26 b-g
SPT 10-05	8.71 d-f	2.77 b	78.61 ab	5.75 d	0.97 b-e	1.31 a-g
SPT 10-11ol	6.95 f-h	2.62 b	81.90 a	4.10 d	0.96 b-f	1.46 a
SPT 10-14	9.20 c-e	2.75 b	68.70 c	14.33 c	1.06 ab	1.32 a-f
Mean	**8.47**	**2.60**	**74.18**	**10.75**	**0.93**	**1.22**
LSD $_{0.05}$[2]	**1.75**	**1.12**	**5.79**	**4.16**	**0.18**	**0.17**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 27. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Bladen County, NC, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	1.32 c-e	0.54 b-d	97.15 a	1.71 d	17.49 a	1.72 a	2.74 cd
Gregory	1.35 c-e	0.48 b-d	94.86 a	2.17 d	16.27 ab	1.62 a	2.80 cd
VA 98R	1.09 de	0.36 cd	94.28 a	2.03 d	17.61 a	1.53 a	2.25 cd
Perry	1.37 c-e	0.52 b-d	94.41 a	2.19 d	16.42 ab	1.58 a	2.90 b-d
Phillips	1.21 c-e	0.39 b-d	95.81 a	2.01 d	16.52 ab	1.67 a	2.47 cd
Bailey	1.52 b-d	0.59 b-d	96.21 a	1.99 d	16.37 ab	1.71 a	3.10 bc
Florida Fancy	1.56 bc	0.54 b-d	79.06 c	17.54 ab	13.47 b-d	0.40 c	3.11 bc
N08070olJC	1.24 c-e	0.57 b-d	79.94 c	16.87 ab	12.29 d	0.43 c	2.63 cd
N08071olJC	1.01 e	0.32 d	81.00 bc	18.45 ab	12.92 cd	0.52 c	2.12 d
N08075olCT	1.24 c-e	0.47 b-d	80.87 c	14.56 b	12.28 d	0.51 c	2.60 cd
N08081olJC	1.18 c-e	0.42 b-d	78.70 c	22.20 ab	12.25 d	0.31 c	2.52 cd
N08082olJCT	1.24 c-e	0.44 b-d	80.60 c	13.84 bc	12.53 cd	0.50 c	2.62 cd
N08085olJCT	1.31 c-e	0.45 b-d	80.46 c	13.19 bc	12.96 cd	0.51 c	2.70 cd
N08087olJCT	1.08 de	0.39 b-d	80.95 c	19.51 ab	12.34 d	0.49 c	2.33 cd
N09037ol	1.35 c-e	0.58 b-d	80.38 c	16.69 ab	12.22 d	0.46 c	2.84 b-d
N09053olCSm	1.46 c-e	0.50 b-d	78.59 c	18.54 ab	13.02 cd	0.34 c	2.96 b-d
N10046ol	1.19 c-e	0.43 b-d	80.72 c	13.54 bc	12.42 d	0.50 c	2.54 cd
N10047ol	1.21 c-e	0.40 b-d	79.33 c	19.37 ab	12.12 d	0.36 c	2.48 cd
N10053ol	1.29 c-e	0.56 b-d	78.83 c	24.40 a	11.80 d	0.30 c	2.76 cd
N10066olSmT	2.14 a	0.94 a	74.13 d	17.74 ab	18.21 a	0.29 c	4.25 a
N10078olJC	1.27 c-e	0.43 b-d	79.60 c	17.32 ab	12.28 d	0.40 c	2.59 cd
N10080olJCL	1.36 c-e	0.52 b-d	80.11 c	18.61 ab	11.77 d	0.42 c	2.78 cd
N10082olJC	1.22 c-e	0.47 b-d	79.68 c	18.28 ab	11.96 d	0.38 c	2.60 cd
SPT 10-05	1.44 c-e	0.44 b-d	78.61 c	14.04 b	14.32 b-d	0.40 c	2.85 b-d
SPT 10-11ol	1.42 c-e	0.60 bc	78.68 c	20.74 ab	12.55 cd	0.33 c	2.98 b-d
SPT 10-14	1.99 ab	0.66 b	84.95 b	4.85 cd	15.65 a-c	0.91 b	3.70 ab
Mean	**1.35**	**0.50**	**83.38**	**13.55**	**13.85**	**0.71**	**2.78**
LSD $_{0.05}$[2]	**0.47**	**0.27**	**3.97**	**9.19**	**3.14**	**0.27**	**0.89**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 28. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Blackville, SC, 2012[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC V-11	12.84 ab	2.39 f	54.01 g	27.40 ab	0.84 e-g	0.99 l-o
Gregory	11.20 b-e	2.76 c-f	58.72 f	23.28 cd	1.02 c-e	1.04 j-n
VA 98R	12.49 a-c	2.52 d-f	54.24 fg	27.42 ab	0.86 e-g	0.94 m-o
Perry	12.13 a-d	2.80 c-f	55.11 fg	26.56 ab	0.95 c-g	0.88 o
Phillips	12.62 a-c	2.44 ef	53.73 g	27.97 a	0.84 e-g	0.91 no
Bailey	12.04 a-d	2.51 d-f	55.47 fg	26.06 a-c	0.90 c-g	0.99 l-o
Florida Fancy	9.59 e-h	2.72 d-f	74.53 d	9.40 f	0.93 c-g	1.13 h-l
N08070olJC	7.94 g-l	2.28 f	79.98 a-c	6.27 gh	0.82 fg	1.25 d-h
N08071olJC	8.33 g-l	2.20 f	80.04 a-c	5.95 g-i	0.78 g	1.26 d-h
N08075olCT	7.34 kl	2.49 d-f	81.99 ab	4.30 h-j	0.91 c-g	1.33 c-e
N08081olJC	7.51 kl	2.59 d-f	82.33 a	4.02 h-j	0.90 c-g	1.16 g-k
N08082olJCT	8.22 g-l	2.62 d-f	79.77 a-c	5.08 g-j	0.90 c-g	1.24 e-i
N08085olJCT	7.68 j-l	2.63 d-f	80.84 ab	4.87 g-j	0.96 c-g	1.33 c-e
N08087olJCT	7.59 j-l	2.59 d-f	81.11 ab	5.04 g-j	0.91 c-g	1.19 e-j
N09037ol	7.59 j-l	2.37 f	81.80 ab	3.94 h-j	0.90 c-g	1.32 c-f
N09053olCSm	9.57 e-i	3.57 b-e	78.41 a-d	3.67 h-j	1.06 bc	1.31 c-g
N10046ol	7.06 l	2.81 c-f	82.71 a	3.63 h-j	0.99 c-f	1.17 f-k
N010047ol	7.48 kl	2.49 d-f	82.43 a	4.01 h-j	0.87 d-g	1.21 e-i
N10053ol	8.37 g-l	2.28 f	78.47 a-d	7.26 fg	0.84 e-g	1.25 d-h
N10066olSmT	7.96 g-l	2.63 d-f	80.38 ab	5.32 g-j	0.89 c-g	1.21 e-i
N10078olJC	7.62 j-l	2.49 d-f	80.13 a-c	6.19 gh	0.85 e-g	1.25 d-h
N010080olJCL	7.12 l	2.41 f	81.34 ab	4.83 g-j	0.96 c-g	1.40 b-d
SPT 10-05	10.76 c-f	3.61 b-d	75.55 cd	5.55 g-j	1.05 b-d	1.29 d-g
SPT 10-11ol	9.22 f-k	3.88 bc	78.64 a-d	3.27 ij	1.01 c-e	1.59 a
SPT 10-14	10.49 d-f	2.40 f	68.85 e	14.16 e	0.90 c-g	1.24 e-i
GA Greener	12.91 ab	2.74 d-f	57.41 fg	22.34 d	0.98 c-f	1.11 h-l
GA 07W	13.23 a	2.70 d-f	55.52 fg	24.65 b-d	0.93 c-g	1.02 k-o
GA 10 T	12.62 a-c	2.20 f	55.02 g	27.15 ab	0.84 e-g	1.19 e-j
GA 11 J	7.82 h-l	4.34 ab	79.79 a-c	3.64 h-j	1.36 a	1.09 i-m
Spain	9.80 e-g	5.04 a	77.58 b-d	3.03 j	1.23 ab	1.00 l-o
Ga 06 G	12.19 a-d	2.63 d-f	55.06 fg	25.76 a-c	1.00 c-f	1.05 j-n
Florunner 107	9.47 e-j	3.12 c-f	79.57 a-c	3.18 ij	1.00 c-f	1.49 ab
Florida 07	8.58 g-l	2.26 f	79.98 a-c	5.14 g-j	0.84 e-g	1.46 a-c
ChampsBaileyMix	12.21 a-d	2.50 d-f	55.87 fg	25.97 a-c	0.89 c-g	0.94 m-o
Mean	**9.70**	**2.77**	**71.55**	**12.01**	**0.94**	**1.18**
LSD $_{0.05}$[2]	**1.90**	**1.14**	**4.65**	**2.83**	**0.19**	**0.15**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 28. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Blackville, SC, 2012[1] (cont.).

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC V-11	1.16 c-e	0.38 c	94.69 ab	1.99 i	17.61 ab	1.56 ab	2.38 d-f
Gregory	1.52 a-e	0.47 a-c	91.63 a-c	2.56 i	16.97 a-d	1.37 bc	3.01 a-f
VA 98R	1.16 b-e	0.37 c	94.88 ab	1.99 i	17.40 a-c	1.58 a	2.40 c-f
Perry	1.22 a-e	0.36 c	94.10 ab	2.08 i	17.46 a-c	1.53 ab	2.53 a-f
Phillips	1.15 c-e	0.35 c	95.38 a	1.92 i	17.39 a-c	1.61 a	2.33 ef
Bailey	1.27 a-e	0.78 a-c	93.62 ab	2.16 i	17.49 a-c	1.50 a-c	2.94 a-f
Florida Fancy	1.30 a-e	0.41 bc	81.27 de	7.94 hi	14.95 b-f	0.63 f	2.64 a-f
N08070olJC	1.07 e	0.39 bc	80.64 e	16.03 d-g	12.50 f	0.50 f-h	2.28 ef
N08071olJC	1.05 e	0.36 c	80.14 e	14.74 f-h	12.75 f	0.47 f-i	2.18 f
N08075olCT	1.21 a-e	0.43 bc	79.01 e-g	19.82 b-g	12.38 f	0.35 g-k	2.56 a-f
N08081olJC	1.11 c-e	0.39 c	78.68 e-h	22.35 a-e	12.49 f	0.32 h-k	2.40 c-f
N08082olJCT	1.24 a-e	0.95 a	78.37 e-i	17.34 c-g	13.92 c-f	0.37 g-k	3.09 a-f
N08085olJCT	1.27 a-e	0.44 bc	79.01 e-g	17.03 d-g	12.97 ef	0.38 g-k	2.66 a-f
N08087olJCT	1.47 b-e	0.40 bc	79.42 ef	18.69 b-g	12.66 f	0.39 g-j	2.48 b-f
N09037ol	1.27 a-e	0.81 a-c	78.22 e-i	20.88 a-g	12.94 ef	0.31 h-k	2.98 a-f
N09053olCSm	1.76 a	0.65 a-c	74.83 h-j	21.57 a-f	16.61 a-e	0.25 jk	3.47 a-c
N10046ol	1.21 a-e	0.43 bc	78.34 e-i	23.13 a-d	12.49 f	0.29 i-k	2.62 a-f
N010047ol	1.14 c-e	0.37 c	78.80 e-h	21.39 a-f	12.35 f	0.32 h-k	2.38 d-f
N10053ol	1.09 de	0.40 bc	81.03 de	16.05 d-g	13.03 ef	0.54 fg	2.33 ef
N10066olSmT	1.18 b-e	0.43 bc	79.31 ef	15.82 e-g	13.08 ef	0.41 g-j	2.50 a-f
N10078olJC	1.12 c-e	0.35 c	80.63 e	14.02 gh	12.43 f	0.49 f-h	2.32 ef
N010080olJCL	1.46 a-e	0.48 a-c	79.42 ef	20.95 a-g	12.44 f	0.37 g-k	2.90 a-f
SPT 10-05	1.66 a-c	0.53 a-c	75.60 f-j	15.05 f-h	17.62 ab	0.35 g-k	3.24 a-f
SPT 10-11ol	1.72 ab	0.68 a-c	74.54 ij	24.44 a-c	16.50 a-e	0.23 jk	3.41 a-d
SPT 10-14	1.56 a-e	0.41 bc	84.73 d	4.95 i	15.75 a-f	0.90 e	2.86 a-f
GA Greener	1.63 a-d	0.89 ab	88.94 c	2.58 i	19.14 a	1.18 d	3.50 ab
GA 07W	1.52 a-e	0.46 a-c	91.23 bc	2.32 i	18.83 a	1.32 cd	2.90 a-f
GA 10 T	1.56 a-e	0.43 bc	94.41 ab	2.00 i	17.65 ab	1.54 ab	2.83 a-f
GA 11 J	1.59 a-e	0.37 c	75.79 f-j	25.00 ab	15.48 a-f	0.23 jk	3.32 a-e
Spain	1.77 a	0.57 a-c	72.75 j	26.97 a	18.40 ab	0.19 k	3.56 a
Ga 06 G	1.75 a	0.58 a-c	92.80 a-c	2.14 i	18.14 ab	1.42 a-c	3.33 a-e
Florunner 107	1.60 a-e	0.58 a-c	75.12 g-j	25.40 ab	15.76 a-f	0.19 jk	3.17 a-f
Florida 07	1.32 a-e	0.43 bc	78.84 e-g	17.04 d-g	13.43 d-f	0.38 g-j	2.59 a-f
ChampsBaileyMix	1.26 a-e	0.38 c	93.76 ab	2.15 i	17.23 a-c	1.51 a-c	2.50 a-f
Mean	**1.36**	**0.49**	**83.27**	**13.35**	**15.26**	**0.74**	**2.79**
LSD $_{0.05}$[2]	**0.56**	**0.50**	**3.99**	**7.12**	**3.68**	**0.19**	**1.08**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 29. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated averaged across all locations, 2012.[1]

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	11.31 ab	2.20 f-h	51.26 i	30.44 a	0.96 b	1.16 g
Gregory	10.18 cd	2.66 a-d	56.36 g	26.09 c	1.09 b	1.10 g
VA 98R	11.44 a	2.44 a-h	52.96 hi	28.97 ab	0.95 b	1.06 g
Perry	10.80 a-c	2.59 a-e	53.96 gh	27.95 bc	1.08 b	1.09 g
Phillips	10.54 b-d	2.38 b-h	54.12 gh	28.12 bc	1.66 a	1.16 g
Bailey	10.74 a-c	2.32 c-h	53.78 hi	28.50 ab	0.99 b	1.13 g
Florida Fancy	7.19 f-h	2.50 a-g	78.98 b-e	5.88 ef	1.09 b	1.54 b-f
N08070olJC	7.02 f-h	2.12 gh	79.59 a-e	6.53 e	0.89 b	1.56 b-f
N08071olJC	7.15 f-h	2.11 h	80.21 a-d	5.82 ef	0.88 b	1.58 b-f
N08075olCT	6.60 f-h	2.28 e-h	80.89 a-c	5.21 ef	0.97 b	1.61 b-e
N08081olJC	6.89 f-h	2.47 a-h	79.76 a-e	6.10 ef	1.01 b	1.44 ef
N08082olJCT	7.01 f-h	2.49 a-h	79.66 a-e	5.95 ef	1.01 b	1.46 d-f
N08085olJCT	7.06 f-h	2.48 a-h	78.62 c-e	6.61 e	1.04 b	1.64 a-c
N08087olJCT	6.45 gh	2.48 a-h	81.53 ab	4.65 ef	1.03 b	1.44 ef
N09037ol	6.70 f-h	2.29 d-h	80.71 a-d	5.25 ef	0.98 b	1.55 b-f
N09053olCSm	7.28 fg	2.60 a-e	80.31 a-d	4.60 ef	1.02 b	1.63 a-d
N10046ol	6.46 gh	2.56 a-f	81.63 a	4.59 ef	1.04 b	1.42 f
N10047ol	6.49 f-h	2.38 b-h	80.06 a	4.23 f	0.99 b	1.47 c-f
N10053ol	6.77 f-h	2.17 gh	81.20 ab	4.91 ef	0.93 b	1.66 ab
N10066olSmT	7.38 f	2.75 ab	78.30 de	6.50 e	1.01 b	1.46 d-f
N10078olJC	6.38 h	2.30 c-h	81.66 a	4.84 ef	0.96 b	1.51 b-f
N10080olJCL	6.55 f-h	2.26 e-h	80.91 a-c	5.40 ef	0.95 b	1.55 b-f
N10082olJC	6.32 h	2.32 c-h	80.44 a-d	5.71 ef	1.03 b	1.54 b-f
SPT 10-05	8.67 e	2.79 a	77.37 e	5.39 ef	1.07 b	1.65 ab
SPT 10-11ol	7.17 f-h	2.68 a-c	78.63 c-e	6.02 ef	1.03 b	1.78 a
SPT 10-14	9.65 d	2.68 a-c	64.98 f	16.56 d	1.10 b	1.52 b-f
Mean	**7.95**	**2.43**	**73.40**	**11.24**	**1.02**	**1.45**
LSD $_{0.05}$[2]	**0.89**	**0.38**	**2.57**	**2.15**	**0.33**	**0.17**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 29. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated averaged across all locations, 2012[1]. (cont.)

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	1.78 b-d	0.88 ab	97.73 a	1.73 g	17.13 a	1.78 a	3.62 b-d
Gregory	1.77 cd	0.74 ab	94.53 c	2.19 g	16.45 ab	1.59 b	3.61 b-d
VA 98R	1.55 d	0.65 b	96.56 ab	1.84 g	17.01 a	1.71 ab	3.14 d
Perry	1.77 b-d	0.76 ab	95.69 bc	1.96 g	17.00 a	1.64 ab	3.60 b-d
Phillips	1.86 b-d	0.79 ab	96.16 a-c	2.10 g	17.22 a	1.64 b	4.30 ab
Bailey	1.72 cd	0.82 ab	96.52 ab	1.93 g	16.58 ab	1.72 ab	3.53 b-d
Florida Fancy	1.96 bc	0.86 ab	79.32 ef	15.44 d-f	13.61 cd	0.43 d-f	3.91 a-d
N08070olJC	1.50 d	0.79 ab	80.99 e	14.57 f	12.32 ef	0.52 d	3.18 d
N08071olJC	1.49 d	0.76 ab	80.31 e	16.37 c-f	12.39 ef	0.46 d-f	3.13 d
N08075olCT	1.62 cd	0.82 ab	79.87 ef	16.89 b-f	12.29 f	0.42 d-f	3.41 cd
N08081olJC	1.59 cd	0.75 ab	80.29 ef	17.96 a-e	12.70 c-f	0.45 d-f	3.35 cd
N08082olJCT	1.59 cd	0.84 ab	79.96 ef	14.92 ef	12.94 c-f	0.46 d-f	3.43 cd
N08085olJCT	1.75 cd	0.81 ab	80.35 e	15.16 d-f	13.14 c-f	0.48 de	3.60 b-d
N08087olJCT	1.63 cd	0.79 ab	79.32 ef	20.04 ab	12.37 ef	0.37 ef	3.45 cd
N09037ol	1.66 cd	0.87 ab	79.72 ef	16.79 c-f	12.50 d-f	0.42 d-f	3.51 b-d
N09053olCSm	1.75 cd	0.82 ab	78.32 fg	18.20 a-d	13.47 c-e	0.36 ef	3.59 b-d
N10046ol	1.57 d	0.74 ab	79.27 ef	19.05 a-c	12.37 ef	0.37 ef	3.35 cd
N10047ol	1.62 cd	0.76 ab	79.05 e-g	20.13 a	12.25 f	0.35 f	3.37 cd
N10053ol	1.57 d	0.79 ab	79.64 ef	19.13 a-c	12.23 f	0.39 d-f	3.29 d
N10066olSmT	1.74 cd	0.87 ab	79.74 ef	15.82 d-f	13.74 c	0.47 d-f	3.62 b-d
N10078olJC	1.60 cd	0.75 ab	79.81 ef	18.09 a-d	11.98 f	0.40 d-f	3.30 d
N10080olJCL	1.63 cd	0.75 ab	80.17 ef	17.89 a-e	12.14 f	0.44 d-f	3.33 cd
N10082olJC	1.78 b-d	0.87 ab	80.28 ef	16.10 c-f	12.32 ef	0.45 d-f	3.68 b-d
SPT 10-05	2.16 b	0.91 ab	77.18 g	15.77 d-f	15.59 b	0.36 ef	4.13 a-c
SPT 10-11ol	1.80 b-d	0.91 ab	79.44 ef	16.02 c-f	13.58 cd	0.46 d-f	3.73 b-d
SPT 10-14	2.56 a	0.94 a	85.78 d	4.39 g	16.93 a	1.02 c	4.60 a
Mean	**1.73**	**0.81**	**83.73**	**13.07**	**13.94**	**0.74**	**3.56**
LSD $_{0.05}$[2]	**0.39**	**0.30**	**1.98**	**3.16**	**1.17**	**0.13**	**0.82**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 30. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Two-year averages across all locations, (2011 – 2012)[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	11.51 a	2.32 fg	51.30 e	30.48 a	0.94 b	1.11 e
Gregory	10.45 c	2.70 a	55.59 c	26.75 c	1.07 b	1.10 e
VA 98R	11.59 a	2.58 a-c	52.90 de	28.71 b	0.96 b	1.08 e
Perry	11.27 ab	2.69 a	52.97 d	28.58 b	1.06 b	1.07 e
Phillips	10.92 bc	2.49 c-e	52.93 d	28.99 b	0.36 a	1.12 e
Bailey	10.86 bc	2.42 d-f	53.65 d	28.58 b	0.99 b	1.13 e
Florida Fancy	7.33 d	2.67 ab	79.29 b	5.70 de	1.08 b	1.47 b-d
N08070olJC	7.03 de	2.19 g	80.00 ab	6.13 d	0.89 b	1.57 ab
N08075olCT	6.68 e	2.36 ef	80.95 a	5.03 de	0.97 b	0.62 a
N08081olJC	7.05 de	2.53 b-d	80.29 ab	5.57 de	0.99 b	1.41 d
N08082olJCT	6.89 de	2.57 a-d	80.45 ab	5.30 de	1.02 b	1.46 b-d
N08085olJCT	7.08 de	2.52 b-d	79.92 ab	5.54 de	1.01 b	1.61 a
N08087olJCT	6.74 e	2.50 c-e	81.29 a	4.84 de	0.99 b	1.43 cd
N09037ol	6.81 de	2.29 fg	81.06 a	5.09 de	0.94 b	1.54 a-c
N09053olCSm	7.20 de	2.56 a-d	80.78 ab	4.56 e	0.99 b	1.60 a
Mean	**8.63**	**2.49**	**69.53**	**14.68**	**1.01**	**1.35**
LSD $_{0.05}$[2]	**0.54**	**0.15**	**1.61**	**1.40**	**0.24**	**0.11**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 30. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Two-year averages across all locations, (2011 – 2012)[1]. (cont.)

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	1.61 a-c	0.75 a	97.79 a	1.72 f	17.10 ab	1.78 a	3.26 b
Gregory	1.66 a-c	0.67 a	95.02 c	2.10 f	16.55 b	1.62 c	3.40 ab
VA 98R	1.54 a-c	0.67 a	96.08 bc	1.87 f	17.31 a	1.67 bc	3.15 b
Perry	1.69 a-c	0.69 a	95.90 bc	1.88 f	17.38 a	1.65 bc	3.43 ab
Phillips	1.78 a	0.74 a	96.62 ab	1.93 f	17.29 a	1.68 bc	3.88 a
Bailey	1.65 a-c	0.73 a	96.53 b	1.91 f	16.65 b	1.72 ab	3.37 ab
Florida Fancy	1.76 ab	0.71 a	79.23 e	15.48 de	13.54 c	0.42 de	3.54 ab
N08070olJC	1.46 c	0.73 a	80.65 d	14.64 e	12.30 f	0.49 d	3.09 b
N08075olCT	1.60 a-c	0.80 a	79.61 de	17.38 a-d	12.40 ef	0.41 e	3.36 ab
N08081olJC	1.49 c	0.68 a	79.80 de	17.94 a-c	12.74 d-f	0.42 de	3.16 b
N08082olJCT	1.55 a-c	0.76 a	79.52 de	16.57 cd	12.79 d-f	0.42 de	3.33 ab
N08085olJCT	1.60 a-c	0.72 a	79.61 de	17.49 a-c	12.93 de	0.41 de	3.33 ab
N08087olJCT	1.50 bc	0.70 a	79.42 e	19.01 a	12.44 ef	0.38 e	3.20 b
N09037ol	1.53 a-c	0.75 a	79.74 de	16.96 b-d	12.32 f	0.41 de	3.22 b
N09053olCSm	1.59 a-c	0.73 a	78.62 e	18.52 ab	13.07 cd	0.36 e	3.31 b
Mean	**1.60**	**0.72**	**86.30**	**11.01**	**14.45**	**0.92**	**3.33**
LSD $_{0.05}$[2]	**0.26**	**0.20**	**1.20**	**1.93**	**0.56**	**0.09**	**0.56**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 31. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Three-year averages across all locations, (2010 – 2012)[1].

Variety or Line	Palmitic C16:0	Stearic C18:0	Oleic C18:0	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
NC-V 11	11.27 a	2.38 fg	51.69 d	29.87 a	1.00 b	1.12 d
Gregory	10.29 c	2.75 a	55.36 b	26.65 c	1.14 b	1.13 d
VA 98R	11.30 a	2.63 bc	53.15 cd	28.27 b	1.03 b	1.09 d
Perry	10.95 ab	2.72 ab	52.99 cd	28.39 b	1.13 b	1.09 d
Phillips	10.71 bc	2.58 cd	52.96 cd	28.70 ab	1.35 a	1.12 d
Bailey	10.65 bc	2.50 de	53.48 c	28.46 b	1.06 b	1.13 d
Florida Fancy	7.15 d	2.74 ab	79.02 a	5.61 d	1.16 ab	1.48 bc
N08070olJC	6.99 de	2.27 g	79.39 a	6.33 d	0.96 b	1.56 ab
N08075olCT	6.64 e	2.45 ef	80.21 a	5.39 d	1.04 b	1.60 a
N08081olJC	7.00 de	2.62 bc	79.41 a	5.99 d	1.07 b	1.41 c
N08082olJCT	6.82 de	2.64 a-c	79.95 a	5.44 d	1.09 b	1.46 c
N08085olJCT	7.06 de	2.57 cd	79.03 a	6.10 d	1.07 b	1.57 a
N08087olJCT	6.70 de	2.57 cd	80.51 a	5.15 d	1.07 b	1.44 c
Mean	**8.74**	**2.57**	**67.42**	**16.23**	**1.09**	**1.32**
LSD $_{0.05}$[2]	**0.45**	**0.12**	**1.52**	**1.32**	**0.20**	**0.85**

[1] Refer to page 3 for an explanation of the computations of these characters.

[2] Least significant difference at 5% probability level.

Fatty Acid Results

Table 31. Fatty Acid Composition, Iodine Values, Oleic/Linoleic O/L Ratio, % Total Polysaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Three-year averages across all locations, (2010 – 2012)[1]. (cont.)

Variety or Line	Behenic C22:0	Lignoceric C24:0	Iodine[3] Value	O/L[4] Ratio	% Total Saturated	P/S Ratio	% Total Long Chain Saturated
NC-V 11	1.78 a-d	0.90 a	97.08 a	1.77 d	17.31 ab	1.73 a	3.66 ab
Gregory	1.86 a-d	0.83 a	94.66 c	2.10 d	16.90 b	1.59 c	3.82 ab
VA 98R	1.73 a-d	0.81 a	95.54 bc	1.91 d	17.49 a	1.63 bc	3.56 b
Perry	1.89 a-c	0.85 a	95.61 bc	1.90 d	17.53 a	1.62 bc	3.86 ab
Phillips	1.95 ab	0.88 a	96.15 ab	1.93 d	17.47 a	1.65 a-c	4.18 a
Bailey	1.84 a-d	0.86 a	96.19 ab	1.91 d	16.93 b	1.69 ab	3.77 ab
Florida Fancy	1.97 a	0.87 a	78.85 e	15.77 bc	13.88 c	0.40 e	4.00 ab
N08070olJC	1.64 d	0.87 a	80.46 d	14.22 c	12.73 e	0.49 d	3.47 b
N08075olCT	1.76 a-d	0.92 a	79.57 de	16.31 ab	12.81 e	0.42 de	3.72 ab
N08081olJC	1.69 cd	0.81 a	79.79 de	16.66 ab	13.19 de	0.44 de	3.57 b
N08082olJCT	1.73 a-d	0.88 a	79.33 e	16.41 ab	13.15 de	0.41 de	3.70 ab
N08085olJCT	1.76 a-d	0.84 a	79.77 de	16.73 ab	13.30 d	0.44 de	3.67 ab
N08087olJCT	1.71 b-d	0.84 a	79.30 e	18.05 a	12.90 de	0.39 e	3.62 b
Mean	**1.79**	**0.86**	**87.14**	**9.63**	**15.05**	**1.00**	**3.74**
LSD $_{0.05}$[2]	**0.25**	**0.19**	**1.09**	**1.79**	**0.47**	**0.08**	**0.55**

[1] Refer to page 3 for an explanation of the computations of these characters.
[2] Least significant difference at 5% probability level.
[3] Lower iodine value indicates longer shelf life.
[4] Higher O/L ratio indicates longer shelf life.

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