

2021

Peanut Variety and Quality Evaluation Results

Quality Data

**Tidewater Agricultural Research and
Extension Center**

Virginia Agricultural Experiment Station



**Virginia
Cooperative
Extension**

Virginia Tech
Virginia State University

PEANUT VARIETY AND QUALITY EVALUATION RESULTS 2021

II. Quality Data

Maria Balota, Ph.D.
Professor Crop Physiology
Virginia Tech – Tidewater AREC

Jeffrey Dunne, Ph.D.
Assistant Professor, Peanut Breeder
North Carolina State University

Dan Anco, Ph.D.
Peanut Extension Specialist
Clemson University

Fitz Cherry
Lab & Research Specialist

TECHNICAL SUPPORT:

F. Bryant, Ag Specialist
Z. Dunlow, Ag Specialist

Virginia Polytechnic Institute and State University
Virginia Agricultural Experiment Station
Tidewater Agricultural Research and Extension Center
Suffolk, Virginia 23437

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- Mr. B. Slye, Assistant Farm Manager, Tidewater AREC
- Mr. P. Browning, VCIA
- Mr. T. Hardiman, VCIA

Other universities

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Growers

- Mr. T. Slade, Martin Co., NC
- Mr. D. McDuffie, Bladen Co., NC

County Agents

- Ms. L. Preisser, Isle of Wight Co., VA
- Mr. S. Reiter, Prince George Co., VA
- Mr. M. Parrish, Dinwiddie Co., VA
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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 5 Virginia-type cultivars that currently are on the market and 20 advanced breeding lines tested in the Peanut Variety and Quality Evaluation (PVQE) small plots in 2021. The small PVQE plots with 25 varieties were tested at five locations in Virginia, North Carolina, and South Carolina: Suffolk, VA, Martin Co., NC, Rocky Mount, NC, Bladen Co., NC, and Blackville, SC. At Suffolk, VA and at Martin Co., NC, two digs were achieved. For the other locations, only one dig was tested. Each genotype was replicated 2 times at each location and digging date. Varieties' names and pedigree are presented in Table 1. A detailed description of the plant material, test locations, weather conditions, and cultural practices is included in the PVQE 2021 Results. I. Agronomic and Grade Data, at https://www.pubs.ext.vt.edu/content/pubs_ext_vt_edu/en/SPES/SPES-382/SPES-382.html.

2021 SMALL PLOT TESTS

Blanching evaluations were determined by a laboratory sample blancher of two, 250 g peanut samples from two dig dates 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 analyses were determined for percentage of splits, whole blanched, not blanched, and partially blanched. Oil profile is reported in tables starting with Table 22.

Small Plot Tests

PLANT MATERIAL AND TEST LOCATIONS

Table 1. Names and pedigree of the genotypes (advanced breeding lines and commercial varieties) evaluated in 2021.

Genotype number	Variety/line	Parentage
1	Bailey II	Bailey / XO7016 (BC2F1 – 04:F01)
2	Emery	N03079FT*2 / Brantley
3	NC-20 ¹	N01015T / N00098ol, X02083 // Sugg
4	Sullivan	Bailey / X03034 (F01)
5	Walton	2000x10-1-B2-3-2-2/97x48-HO3-7-B2-2-b3-B
6	N14001	N02006 // X05012, N02006 / N02064ol
7	N14002	N03079FT // X05024, N03079FT / N02064ol
8	N14007	Phillips / N99121CSm, X00044 /3/ X05036, Phillips / N99121CSm, X00044 // N02064ol
9	N14009	Phillips / N99121CSm, X00044 /3/ X05036, Phillips / N99121CSm, X00044 // N02064ol
10	N14017	N02054ol // N02005 / N02054ol, X03138 /3/ N03084FT
11	N14027	Bailey /4/ X07019, Bailey // X05028, Bailey / N02064ol, X05250 /3/ Bailey
12	N15017	Bailey /4/ X07018, Bailey // X05028, Bailey / N02064ol, X05250 /3/ Bailey
13	N15039	N03079FT*2 / N02054ol, X03153 // N05042F
14	N15041	N03079FT*2 / N02059ol, X03155 // N05044FCSm
15	N15044	N03079FT*2 / N02059ol, X03155 // N05044FCSm
16	N16005	Bailey*2 / Brantley, X03157 // GP-NC WS 16
17	N16012	N08082olJCT /3/ X09008, N08082olJCT // SPT 07-01, NC-V 11 / GP-NC WS 11
18	N16021	N08082olJCT // X09019, N08082olJCT / Florida Fancy
19	N17036	Emery /3/ N11035olSrT, N03079FT*2 / Brantley, X03151 // Sugg
20	N17037	Emery /3/ N11035olSrT, N03079FT*2 / Brantley, X03151 // Sugg
21	N17040	N03079FT*2 / Brantley, N10047ol // N12010ol, Bailey*4 / N02060ol
22	N17041	N03079FT*2 / Brantley, N10047ol // N12010ol, Bailey*4 / N02060ol
23	N17044	Bailey*2 / Brantley, N10053ol // Bailey II, Bailey*4 / N02060ol
24	N17045	Bailey*2 / Brantley, N10053ol /3/ CRSP 1050-110, Florida MDR 98 / Bayo Grande, 0020-20 // FNC94022-1-2-1-1-b3-B , N91026E / PI 576638
25	N17047	Bailey*2 / Brantley, N10053ol /3/ CRSP 1050-110, Florida MDR 98 / Bayo Grande, 0020-20 // FNC94022-1-2-1-1-b3-B , N91026E / PI 576638

¹ 'NC 20' was released in 2020 and was tested in the PVQE as breeding line N14023ol.

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:

$$\text{Iodine Value} = (\% \text{ oleic}) (0.8601) + (\% \text{ linoleic}) (1.7321) + (\% \text{ eicosenoic}) (0.7854)$$

$$\text{Oleic/Linoleic (O/L) ratio} = \% \text{ oleic} / \% \text{ linoleic}$$

$$\% \text{ Total Saturated} = \% \text{ palmitic} + \% \text{ stearic} + \% \text{ arachidic} + \% \text{ behenic} + \% \text{ lignoceric}$$

$$\text{Polyunsaturated/Saturated (P/S) ratio} = \% \text{ polyunsaturated (linoleic)} / \% \text{ total saturated}$$

$$\% \text{ Total Long Chain Saturated} = \% \text{ arachidic} + \% \text{ behenic} + \% \text{ lignoceric}$$

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 2021 PVQE locations and digging dates in Tables 20 through 28. Table 29 shows the content of the fatty acids averaged across all locations in 2021. Two- and three-year averages are included in Tables 30 and 31. Finally, fatty acid composition of 14 cultivars and breeding lines exposed to soil water deficit stress is reported in Tables 32 and 33.

Statistics:

Analysis of Variance was run for the cultivars and breeding lines on individual digging dates and locations, and averaged digging dates, locations, and years. When significant differences between cultivars and lines were detected, means were compared by the Fisher's LSD test and the minimum significant difference was included in the tables. These values were used to compare the varieties.

Blanching Results

Table 2. Laboratory sample blanching of Extra-Large Kernels (ELK) from Tidewater AREC (Suffolk, VA), Dig 1, 2021 (15 September).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6b	4.8ab	0.8ab	1.6ab	95.0a-c	0.0a	1.8bc
Emery	5.6b	4.7b	0.9ab	1.1b	95.1a-c	0.0a	2.2a-c
NC-20	5.7a	4.8ab	0.9a	2.3ab	93.0bc	0.0a	3.2ab
Sullivan	5.6ab	4.8ab	0.8ab	1.7ab	94.3a-c	0.0a	2.4a-c
Walton	5.6ab	4.8ab	0.8ab	2.0ab	92.8bc	0.0a	3.6a
N14001	5.6ab	4.8ab	0.9ab	1.4ab	95.0a-c	0.0a	2.1a-c
N14002	5.6ab	4.8ab	0.8ab	1.5ab	94.4a-c	0.0a	2.5a-c
N14007	5.6ab	4.8ab	0.9ab	2.5a	92.4c	0.0a	3.5ab
N14009	5.6ab	4.8ab	0.9ab	1.7ab	94.8a-c	0.0a	1.9a-c
N14017	5.6ab	4.8ab	0.9ab	1.0b	96.2a	0.0a	1.1c
N14027	5.7a	4.8ab	0.9ab	2.1ab	93.3bc	0.0a	3.0ab
N15017	5.6ab	4.8ab	0.9ab	1.9ab	93.9a-c	0.0a	2.6a-c
N15039	5.6b	4.8ab	0.8ab	1.7ab	93.5a-c	0.0a	3.1ab
N15041	5.7a	4.8ab	0.9a	2.3ab	93.5a-c	0.0a	2.6a-c
N15044	5.6ab	4.9a	0.8b	2.1ab	94.0a-c	0.0a	2.3a-c
N16005	5.7a	4.8ab	0.9ab	1.9ab	93.3bc	0.0a	3.3ab
N16012	5.6ab	4.8ab	0.9ab	1.2ab	95.4ab	0.0a	1.9a-c
N16021	5.6b	4.7b	0.9ab	1.6ab	94.2a-c	0.0a	2.6a-c
N17036	5.7a	4.8ab	0.9a	1.8ab	93.5a-c	0.0a	3.1ab
N17037	5.7a	4.8ab	0.9ab	2.4a	93.5a-c	0.0a	2.5a-c
N17040	5.6b	4.7b	0.9ab	1.8ab	93.9a-c	0.0a	2.7a-c
N17041	5.6b	4.8ab	0.8b	2.1ab	93.7a-c	0.0a	2.6a-c
N17044	5.6ab	4.8ab	0.8ab	1.2ab	95.1a-c	0.0a	2.0a-c
N17045	5.6ab	4.8ab	0.9ab	2.0ab	94.0a-c	0.0a	2.4a-c
N17047	5.6ab	4.8ab	0.9ab	1.4ab	94.4a-c	0.0a	2.6a-c
Mean	5.6	4.8	0.9	1.8	94.1	0.0	2.5
LSD¹	0.1	0.1	0.1	1.3	2.8	0.0	1.9

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

Blanching Results

Table 3. Laboratory sample blanching of Extra-Large Kernels (ELK) from Tidewater AREC (Suffolk, VA), Dig 2, 2021 (4 October).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6ab	4.7a	0.9a	2.3a	92.5b-d	0.0a	3.6a-d
Emery	5.6ab	4.8a	0.8a	1.8a	94.6a-c	0.0a	2.0de
NC-20	5.6ab	4.7a	0.9a	2.5a	91.9d	0.0a	4.0a
Sullivan	5.6ab	4.7a	0.9a	1.9a	93.3a-d	0.0a	3.2a-e
Walton	5.7a	4.9a	0.8a	2.3a	93.0a-d	0.0a	3.1a-e
N14001	5.6ab	4.8	0.8a	2.6a	92.1cd	0.0a	3.7a-c
N14002	5.6ab	4.7a	0.9a	2.3a	93.0a-d	0.0a	3.2a-e
N14007	5.6ab	4.7a	1.0a	1.5a	94.2a-d	0.0a	2.8a-e
N14009	5.6ab	4.7a	0.9a	2.6a	92.5b-d	0.0a	3.4a-e
N14017	5.6ab	4.7a	0.9a	2.1a	92.7a-d	0.0a	3.6a-d
N14027	5.6ab	4.7a	0.9a	2.1a	93.7a-d	0.0a	2.6a-e
N15017	5.6ab	4.7a	0.9a	1.5a	95.1a	0.0a	1.8e
N15039	5.5b	4.7a	0.8a	1.6a	93.3a-d	0.0a	3.5a-d
N15041	5.6ab	4.7a	0.9a	2.5a	92.7a-d	0.0a	3.1a-e
N15044	5.5b	4.7a	0.9a	1.9a	93.3a-d	0.0a	3.2a-e
N16005	5.6ab	4.7a	0.9a	1.7a	94.7ab	0.0a	2.0de
N16012	5.6ab	4.8a	0.8a	1.5a	94.6a-c	0.0a	2.3b-e
N16021	5.6ab	4.8a	0.9a	1.8a	92.8a-d	0.0a	3.8ab
N17036	5.7a	4.8a	0.9a	2.2a	92.8a-d	0.0a	3.4a-e
N17037	5.6ab	4.8a	0.9a	2.0a	93.3a-d	0.0a	3.1a-e
N17040	5.6ab	4.7a	0.9a	2.3a	93.0a-d	0.0a	3.2a-e
N17041	5.7a	4.8a	0.9a	2.3a	92.8a-d	0.0a	3.4a-e
N17044	5.7a	4.8a	0.9a	2.4a	92.4b-d	0.0a	3.7a-c
N17045	5.6ab	4.8a	0.9a	2.0a	92.8a-d	0.0a	3.6a-d
N17047	5.6ab	4.7a	0.9a	1.8a	94.5a-c	0.0a	2.1c-e
Mean	5.6	4.8	0.9	2.1	93.3	0.0	3.1
LSD¹	0.1	0.2	0.13	1.1	2.5	0.0	1.7

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

Blanching Results

Table 4. Laboratory sample blanching of Extra-Large Kernels (ELK). Averages of both digging dates from Tidewater AREC (Suffolk, VA), 2021.

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6bc	4.7ab	0.8a	1.9a-d	93.7a-c	0.0a	2.7ab
Emery	5.6a-c	4.8ab	0.8a	1.4cd	94.8ab	0.0a	2.1b
NC-20	5.6a-c	4.7b	0.9a	2.4ab	92.4c	0.0a	3.6a
Sullivan	5.6a-c	4.8ab	0.8a	1.8a-d	93.8a-c	0.0a	2.8ab
Walton	5.6ab	4.8a	0.8a	2.1a-d	92.9bc	0.0a	3.3ab
N14001	5.6a-c	4.8ab	0.8a	2.0a-d	93.6a-c	0.0a	2.9ab
N14002	5.6a-c	4.8ab	0.9a	1.9a-d	93.7a-c	0.0a	2.8ab
N14007	5.6a-c	4.7b	0.9a	2.0a-d	93.3a-c	0.0a	3.2ab
N14009	5.6a-c	4.7ab	0.9a	2.1a-d	93.7a-c	0.0a	2.6ab
N14017	5.6a-c	4.7ab	0.9a	1.6b-d	94.4ab	0.0a	2.4ab
N14027	5.6ab	4.8ab	0.9a	2.1a-d	93.5a-c	0.0a	2.8ab
N15017	5.6a-c	4.7b	0.9a	1.7a-d	94.5ab	0.0a	2.2b
N15039	5.5c	4.7ab	0.8a	1.7a-d	93.4a-c	0.0a	3.3ab
N15041	5.6a-c	4.7ab	0.9a	2.4a	93.1a-c	0.0a	2.9ab
N15044	5.6bc	4.8ab	0.8a	2.0a-d	93.6a-c	0.0a	2.7ab
N16005	5.6ab	4.8ab	0.9a	1.8a-d	94.0a-c	0.0a	2.6ab
N16012	5.6a-c	4.8ab	0.8a	1.3d	95.0a	0.0a	2.1b
N16021	5.6a-c	4.7ab	0.9a	1.7a-d	93.5a-c	0.0a	3.2ab
N17036	5.7a	4.8ab	0.9a	2.0a-d	93.2a-c	0.0a	3.2ab
N17037	5.6ab	4.8ab	0.9a	2.2a-c	93.4a-c	0.0a	2.8ab
N17040	5.6a-c	4.7b	0.9a	2.0a-d	93.4a-c	0.0a	3.0ab
N17041	5.6a-c	4.8ab	0.8a	2.2a-d	93.2a-c	0.0a	3.0ab
N17044	5.6ab	4.8ab	0.9a	1.8a-d	93.7a-c	0.0a	2.8ab
N17045	5.6a-c	4.8ab	0.9a	2.0a-d	93.4a-c	0.0a	3.0ab
N17047	5.6a-c	4.7ab	0.9a	1.6a-d	94.4ab	0.0a	2.4ab
Mean	5.6	4.8	0.9	1.9	93.7	0.0	2.8
LSD¹	0.1	0.1	0.1	0.8	1.9	0.0	1.3

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

Blanching Results

Table 5. Laboratory sample blanching of Extra-Large Kernels (ELK) from Martin County, NC, Dig 1, 2021 (20 September).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.7a	4.8a	0.9ab	2.4de	92.8a	0.0a	3.3b
Emery	5.7a	4.8a	0.9ab	3.7a-d	90.1a-c	0.0a	4.7ab
NC-20	5.7a	4.8a	0.9ab	2.5c-e	90.8a-c	0.2a	5.1ab
Sullivan	5.7a	4.8a	0.9ab	3.9a-d	90.6a-c	0.0a	3.9ab
Walton	5.7a	4.8a	1.0a	3.2b-e	90.9a-c	0.0a	4.4ab
N14001	5.7a	4.8a	0.9ab	3.5a-e	91.3a-c	0.0a	3.7ab
N14002	5.7a	4.8a	0.9ab	3.5a-e	89.9a-c	0.0a	5.0ab
N14007	5.7a	4.8a	0.9ab	3.5a-e	90.0a-c	0.2a	5.0ab
N14009	5.7a	4.8a	0.9ab	2.0e	92.2ab	0.2a	4.3ab
N14017	5.7a	4.8a	0.9ab	3.4a-e	90.3a-c	0.0a	4.7ab
N14027	5.6a	4.8a	0.8b	4.3ab	89.1bc	0.0a	5.0ab
N15017	5.7a	4.8a	0.9ab	3.3b-e	91.3a-c	0.0a	3.8ab
N15039	5.7a	4.8a	0.9ab	3.1b-e	90.9a-c	0.0a	4.5ab
N15041	5.7a	4.8a	0.9ab	3.0b-e	91.1a-c	0.0a	4.3ab
N15044	5.7a	4.8a	0.9ab	3.4a-e	90.6a-c	0.0a	4.5ab
N16005	5.7a	4.8a	1.0a	3.6a-d	89.1bc	0.0a	5.7a
N16012	5.7a	4.8a	0.9ab	3.9a-d	89.6a-c	0.0a	4.9ab
N16021	5.7a	4.9a	0.8b	4.0a-c	89.3bc	0.0a	5.0ab
N17036	5.6a	4.8a	0.8b	3.3b-e	90.7a-c	0.0a	4.4ab
N17037	5.7a	4.8a	0.9ab	3.7a-d	89.5a-c	0.2a	5.0ab
N17040	5.7a	4.8a	0.9ab	5.0a	88.5c	0.0a	5.0ab
N17041	5.7a	4.8a	0.9ab	4.0a-d	88.9bc	0.0a	5.5ab
N17044	5.7a	4.8a	0.9ab	2.8b-e	91.8ab	0.0a	3.8ab
N17045	5.7a	4.8a	0.9ab	3.8a-d	89.9a-c	0.0a	4.7ab
N17047	5.7a	4.8a	0.9ab	3.5a-e	91.0a-c	0.0a	3.9ab
Mean	5.7	4.8	0.9	3.5	90.4	0.0	4.6
LSD¹	0.1	0.1	0.1	1.6	3.4	0.2	2.3

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

Blanching Results

Table 6. Laboratory sample blanching of Extra-Large Kernels (ELK) from Martin County, NC, Dig 2, 2021 (6 October).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6a	4.8bc	1.0ab	2.2c	92.9a	0.0a	3.4b
Emery	5.8a	4.9a-c	1.0ab	2.1c	92.3ab	0.0a	4.1ab
NC-20	5.8a	4.9a-c	0.9ab	2.6bc	91.6a-d	0.0a	4.3ab
Sullivan	5.8a	4.8c	1.0a	3.5a-c	90.9a-d	0.0a	4.1ab
Walton	5.8a	4.9a-c	1.0ab	2.7bc	90.7a-d	0.0a	5.1ab
N14001	5.8a	4.9a-c	0.9ab	3.2a-c	91.8a-c	0.0a	3.4b
N14002	5.8a	4.9ab	0.9ab	3.3a-c	90.2b-d	0.0a	5.0ab
N14007	5.8a	4.9a-c	0.9ab	4.0ab	89.8cd	0.0a	4.7ab
N14009	5.8a	4.8a-c	0.9ab	3.7a-c	90.3a-d	0.0a	4.4ab
N14017	5.8a	4.9ab	0.9ab	2.9a-c	91.8a-c	0.0a	3.7ab
N14027	5.8a	4.8bc	1.0ab	3.6a-c	90.3a-d	0.0a	4.5ab
N15017	5.7a	4.9a-c	0.9b	3.4a-c	90.1b-d	0.0a	4.9ab
N15039	5.8a	4.9a-c	0.9ab	4.3a	89.5cd	0.0a	4.7ab
N15041	5.8a	4.9ab	0.9ab	3.4a-c	90.5a-d	0.0a	4.5ab
N15044	5.7a	4.9a-c	0.9b	4.0ab	90.0b-d	0.0a	4.4ab
N16005	5.8a	4.9a-c	0.9ab	3.4a-c	91.0a-d	0.0a	4.0ab
N16012	5.8a	4.9ab	0.9b	4.0ab	89.3cd	0.0a	5.1ab
N16021	5.8a	4.9ab	0.9b	4.0ab	90.8a-d	0.0a	3.6ab
N17036	5.8a	4.8bc	1.0ab	3.9ab	89.1d	0.0a	5.5ab
N17037	5.8a	5.0a	0.9b	3.7a-c	89.8cd	0.0a	4.9ab
N17040	5.7a	4.9a-c	0.9b	3.4a-c	89.4cd	0.0a	5.7a
N17041	5.7a	4.8bc	0.9ab	3.3a-c	90.6a-d	0.0a	4.5ab
N17044	5.7a	4.8bc	0.9ab	3.8ab	90.9a-d	0.0a	3.7ab
N17045	5.8a	4.9a-c	0.9ab	3.4a-c	90.9a-d	0.0a	4.2ab
N17047	5.7a	4.8c	1.0ab	3.6a-c	91.1a-d	0.0a	3.8ab
Mean	5.8	4.8	0.9	3.4	90.6	0.0	4.4
LSD¹	0.1	0.1	0.1	1.5	2.5	0.0	2.1

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

Blanching Results

Table 7. Laboratory sample blanching of Extra-Large Kernels (ELK). Averages of both digging dates from Martin County, NC, 2021.

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.7a	4.8b	0.9ab	2.3f	92.8a	0.0a	3.3d
Emery	5.7a	4.8ab	0.9ab	2.9c-f	91.2a-d	0.0a	4.4a-d
NC-20	5.7a	4.8ab	0.9a-c	2.6d-f	91.2a-d	0.1a	4.7a-c
Sullivan	5.7a	4.8b	0.9ab	3.7a-c	90.8b-e	0.0a	4.0a-d
Walton	5.8a	4.8ab	1.0a	2.9b-f	90.8b-e	0.0a	4.7a-c
N14001	5.7a	4.8ab	0.9a-c	3.3a-f	91.5a-c	0.0a	3.6cd
N14002	5.7a	4.8ab	0.9a-c	3.4a-e	90.0b-e	0.0a	5.0ab
N14007	5.7a	4.8ab	0.9a-c	3.7a-c	89.9b-e	0.1a	4.8a-c
N14009	5.7	4.8ab	0.9a-c	2.5ef	91.6ab	0.1a	4.4a-d
N14017	5.7a	4.8ab	0.9a-c	3.2a-f	91.0a-d	0.0a	4.2a-d
N14027	5.7	4.8ab	0.9a-c	3.9ab	89.7b-e	0.0a	4.7a-c
N15017	5.7a	4.8ab	0.9bc	3.3a-f	90.7b-e	0.0a	4.3a-d
N15039	5.7	4.8ab	0.9a-c	3.7a-c	90.2b-e	0.0a	4.6a-d
N15041	5.7a	4.8ab	0.9a-c	3.2a-f	90.8b-e	0.0a	4.4a-d
N15044	5.7	4.8ab	0.9a-c	3.7a-c	90.3b-e	0.0a	4.4a-d
N16005	5.7a	4.8ab	0.9ab	3.5a-d	90.1b-e	0.0a	4.9a-c
N16012	5.7	4.8ab	0.9a-c	3.9ab	89.5de	0.0a	5.0ab
N16021	5.7a	4.9a	0.9c	4.0a	90.1b-e	0.0a	4.3a-d
N17036	5.7a	4.8ab	0.9a-c	3.6a-d	89.9b-e	0.0a	4.9a-c
N17037	5.7a	4.9a	0.9bc	3.7a-c	89.6c-e	0.1a	5.0ab
N17040	5.7	4.8ab	0.9bc	4.2a	88.9e	0.0a	5.3a
N17041	5.7a	4.8ab	0.9a-c	3.6a-c	89.8b-e	0.0a	5.0ab
N17044	5.7a	4.8b	0.9a-c	3.3a-f	91.4a-d	0.0a	3.7b-d
N17045	5.7a	4.8ab	0.9a-c	3.6a-d	90.4b-e	0.0a	4.4a-d
N17047	5.7a	4.8b	0.9ab	3.5a-d	91.0a-d	0.0a	3.9b-d
Mean	5.7	4.8	0.9	3.4	90.5	0.0	4.5
LSD¹	0.1	0.1	0.1	1.0	1.9	0.1	1.4

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

Blanching Results

Table 8. Laboratory sample blanching of Extra-Large Kernels (ELK). Averages from Tidewater AREC (Suffolk, VA) and Martin County, NC, 2021.

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6a	4.8ab	0.9a	2.1a	93.3a	0.0a	3.0a
Emery	5.7a	4.8ab	0.9a	2.2a	93.0a	0.0a	3.2a
NC-20	5.7a	4.8ab	0.9a	2.5a	91.8a	0.0a	4.1a
Sullivan	5.6a	4.8ab	0.9a	2.7a	92.3a	0.0a	3.4a
Walton	5.7a	4.8ab	0.9a	2.5a	91.8a	0.0a	4.0a
N14001	5.7a	4.8ab	0.9a	2.6a	92.5a	0.0a	3.2a
N14002	5.7a	4.8ab	0.9a	2.6a	91.8a	0.0a	3.9a
N14007	5.7a	4.8ab	0.9a	2.8a	91.6a	0.0a	4.0a
N14009	5.6a	4.8ab	0.9a	2.3a	92.6a	0.0a	3.5a
N14017	5.7a	4.8ab	0.9a	2.4a	92.7a	0.0a	3.3a
N14027	5.7a	4.8ab	0.9a	3.0a	91.6a	0.0a	3.8a
N15017	5.6a	4.8ab	0.9a	2.5a	92.6a	0.0a	3.3a
N15039	5.6a	4.8ab	0.9a	2.7a	91.8a	0.0a	4.0a
N15041	5.7a	4.8ab	0.9a	2.8a	92.0a	0.0a	3.6a
N15044	5.6a	4.8ab	0.8a	2.8a	91.9a	0.0a	3.6a
N16005	5.7a	4.8ab	0.9a	2.7a	92.0a	0.0a	3.7a
N16012	5.7a	4.8ab	0.9a	2.6a	92.2a	0.0a	3.5a
N16021	5.6a	4.8ab	0.8a	2.8a	91.8a	0.0a	3.7a
N17036	5.7a	4.8ab	0.9a	2.8a	91.5a	0.0a	4.1a
N17037	5.7a	4.8a	0.9a	3.0a	91.5a	0.0a	3.9a
N17040	5.6a	4.8ab	0.9a	3.1a	91.2a	0.0a	4.1a
N17041	5.6a	4.8ab	0.9a	2.9a	91.5a	0.0a	4.0a
N17044	5.7a	4.8ab	0.9a	2.6a	92.5a	0.0a	3.3a
N17045	5.7a	4.8ab	0.9a	2.8a	91.9a	0.0a	3.7a
N17047	5.6a	4.7b	0.9a	2.6a	92.7a	0.0a	3.1a
Mean	5.7	4.8	0.9	2.7	92.1	0.0	3.6
LSD¹	0.1	0.1	0.1	1.1	2.1	0.0	1.3

¹ Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's 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 (2020- 2021).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6a	4.8ab	0.8a	1.9c	93.6a	0.0c	2.9e
Emery	5.6a	4.8ab	0.9a	1.9bc	93.5ab	0.0c	2.9e
NC-20	5.6a	4.8ab	0.9a	2.5a	91.6cd	0.1ab	4.2b
Sullivan	5.6a	4.8ab	0.8a	2.3a-c	92.5a-d	0.0c	3.5b-e
Walton	5.6a	4.8ab	0.9a	2.3a-c	91.9cd	0.0bc	4.0bc
N14001	5.6a	4.8ab	0.8a	2.4a-c	92.2cd	0.0a-c	3.7b-e
N14002	5.6a	4.8ab	0.8a	2.6a	92.0cd	0.0c	3.8b-d
N14007	5.6a	4.8ab	0.8a	2.7a	90.3e	0.1a	5.2a
N14009	5.6a	4.8ab	0.9a	2.3a-c	92.2cd	0.1a-c	3.8b-d
N14027	5.6a	4.8ab	0.9a	2.7a	91.7cd	0.0a-c	3.9bc
N15017	5.6a	4.8ab	0.8a	2.5ab	92.3cd	0.0bc	3.6b-e
N15039	5.6a	4.8ab	0.8a	2.7a	91.8cd	0.0c	3.8b-d
N15041	5.6a	4.8ab	0.9a	2.4a-c	91.8cd	0.1a-c	4.1b
N15044	5.6a	4.8ab	0.8a	2.6a	91.6d	0.1a-c	4.1b
N16005	5.6a	4.8ab	0.9a	2.5ab	92.2cd	0.0a-c	3.6b-e
N16012	5.6a	4.8ab	0.8a	2.5a	92.3b-d	0.0bc	3.5b-e
N16021	5.6a	4.8ab	0.8a	2.8a	91.8cd	0.0a-c	3.8b-d
N17036	5.6a	4.8ab	0.8a	2.7a	92.0cd	0.1a-c	3.6b-e
N17037	5.6a	4.8a	0.8a	2.6a	92.1cd	0.1ab	3.5b-e
N17040	5.6a	4.8b	0.8a	2.7a	91.8cd	0.0c	3.8b-e
N17041	5.6a	4.8ab	0.8a	2.8a	91.9cd	0.0a-c	3.6c-e
N17044	5.6a	4.8ab	0.8a	2.8a	92.3cd	0.0c	3.3b-e
N17045	5.6a	4.8ab	0.9a	2.5ab	92.2cd	0.0bc	3.6de
N17047	5.6a	4.8ab	0.8a	2.4a-c	92.8a-c	0.0a-c	3.1
Mean	5.6	4.8	0.8	2.5	92.1	0.0	3.7
LSD¹	0.1	0.1	0.1	0.6	1.2	0.7	0.8

¹ Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's 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 (2019- 2021).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.7a	4.8a	0.9a	2.0bc	93.1ab	0.0ab	3.2d
Emery	5.7a	4.8a	0.9a	1.8c	93.9a	0.0ab	2.7d
NC-20	5.7a	4.8a	0.9a	3.1a	90.2d-f	0.1a	5.0ab
Sullivan	5.7a	4.8a	0.9a	2.8ab	91.8b-e	0.0b	3.7b-d
Walton	5.7a	4.8a	0.9a	3.6a	89.8f	0.0b	4.9ab
N14002	5.7a	4.8a	0.9a	3.0ab	90.9c-f	0.0b	4.5a-c
N14027	5.7a	4.8a	0.9a	2.9ab	90.1ef	0.0b	5.3a
N15017	5.7a	4.7a	0.9a	2.9ab	92.2a-c	0.0b	3.3cd
N15039	5.7a	4.8a	0.9a	3.3a	91.4b-f	0.0b	3.8b-d
N15041	5.7a	4.7a	0.9a	3.1a	90.3d-f	0.0ab	4.9ab
N15044	5.7a	4.8a	0.9a	3.0ab	90.3d-f	0.0ab	5.1a
N16005	5.7a	4.8a	0.9a	2.9ab	92.0b-d	0.0b	3.5cd
Mean	5.7	4.8	0.9	2.9	91.3	0.0	4.2
LSD¹	0.1	0.1	0.1	1.0	1.8	0.1	1.3

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

Blanching Results

Table 11. Laboratory sample blanching of Medium Kernels from Tidewater AREC (Suffolk, VA), Dig 1, 2021 (15 September).

Variety	% H ₂ O before roasting	% H ₂ O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6a	4.8a	0.8b	3.3c-g	78.4a	4.3a	12.4c
Emery	5.6a	4.7a	0.9a	3.3c-g	75.8a	2.7b	16.6a-c
NC-20	5.6a	4.7a	0.9ab	4.1a-e	73.9a	3.7ab	16.7a-c
Sullivan	5.6a	4.7a	0.9ab	4.3a-d	75.8a	3.4ab	15.0a-c
Walton	5.6a	4.8a	0.9ab	2.8fg	76.2a	3.1ab	16.3a-c
N14001	5.5a	4.7a	0.8ab	3.9a-f	76.4a	4.2ab	13.8a-c
N14002	5.6a	4.8a	0.9ab	3.7b-f	75.2a	3.7ab	15.8a-c
N14007	5.6a	4.7a	0.9ab	4.1a-e	74.3a	4.0ab	16.1a-c
N14009	5.6a	4.7a	0.9ab	3.1e-g	75.9a	3.7ab	15.7a-c
N14017	5.6a	4.7a	0.9ab	4.6ab	75.4a	3.5ab	15.0a-c
N14027	5.6a	4.8a	0.9ab	3.2e-g	76.3a	3.8ab	15.1a-c
N15017	5.6a	4.8a	0.8ab	4.1a-e	74.9a	3.2ab	16.2a-c
N15039	5.6a	4.7a	0.9ab	4.8a	74.6a	3.8ab	15.3a-c
N15041	5.6a	4.8a	0.8b	2.5g	77.1a	4.3ab	14.5a-c
N15044	5.6a	4.7a	0.9ab	3.9a-f	75.1a	3.4ab	16.1a-c
N16005	5.6a	4.7a	0.9a	3.6b-g	74.3a	2.7b	17.9a
N16012	5.6a	4.7a	0.9ab	4.2a-e	76.6a	3.6ab	14.1a-c
N16021	5.6a	4.7a	0.9a	2.8fg	78.3a	4.4a	12.9bc
N17036	5.6a	4.7a	0.9a	4.0a-e	73.6a	3.7ab	17.2ab
N17037	5.6a	4.7a	0.9ab	3.8a-f	76.3a	3.3ab	15.0a-c
N17040	5.6a	4.7a	0.9a	3.2d-g	77.4a	3.7ab	14.1a-c
N17041	5.6a	4.7a	0.9a	4.4a-c	74.8a	3.4ab	16.0a-c
N17044	5.6a	4.8a	0.8ab	4.5ab	73.6a	3.7ab	16.6a-c
N17045	5.6a	4.7a	0.9a	4.1a-e	75.8a	3.5ab	15.0a-c
N17047	5.5a	4.7a	0.8ab	4.5ab	75.5a	3.6ab	14.8a-c
Mean	5.6	4.7	0.9	3.8	75.7	3.6	15.4
LSD¹	0.1	0.2	0.1	1.1	5.6	1.6	4.6

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

Blanching Results

Table 12. Laboratory sample blanching of Medium Kernels from Tidewater AREC (Suffolk, VA), Dig 2, 2021 (4 October).

Variety	% H ₂ O before roasting	% H ₂ O after roasting	%Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.7ab	4.8ab	0.9a	3.9a-d	77.4ab	3.0de	14.7a
Emery	5.7a	4.8ab	0.9a	3.3c-e	76.7ab	4.3a-d	14.3a
NC-20	5.7ab	4.8ab	0.9ab	4.3a-d	75.9ab	2.8e	15.4a
Sullivan	5.6ab	4.8ab	0.9ab	4.6a-c	74.1ab	4.1a-e	15.7a
Walton	5.6ab	4.8ab	0.9ab	3.8a-e	76.5ab	4.4a-c	13.7a
N14001	5.7ab	4.9a	0.8ab	3.4b-e	75.5ab	3.6a-e	15.8a
N14002	5.6b	4.8ab	0.8b	3.3b-e	73.9ab	4.9a	16.3a
N14007	5.6ab	4.7b	0.9a	3.6b-e	77.2ab	2.9de	14.8a
N14009	5.6ab	4.8ab	0.9ab	4.1a-d	74.2ab	3.7a-e	16.4a
N14017	5.6ab	4.7b	0.9a	4.2a-d	74.3ab	3.7a-e	16.2a
N14027	5.6b	4.8ab	0.8ab	4.0a-d	76.8ab	3.3c-e	14.3a
N15017	5.6b	4.8ab	0.8ab	3.1de	78.9a	3.6a-e	12.8a
N15039	5.6ab	4.8ab	0.8ab	4.7ab	76.7ab	3.3c-e	14.2a
N15041	5.6ab	4.8ab	0.9ab	4.6a-c	74.8ab	3.6a-e	15.4a
N15044	5.6ab	4.7b	0.9a	3.3b-e	78.7a	3.4b-e	13.0a
N16005	5.7a	4.8ab	0.9a	4.3a-d	77.2ab	3.6a-e	13.4a
N16012	5.6ab	4.7b	0.9a	3.6b-e	75.3ab	4.4a-c	15.1a
N16021	5.6ab	4.7b	0.9a	4.0a-d	74.1ab	4.1a-e	16.3a
N17036	5.6ab	4.7b	0.9a	3.8a-e	76.0ab	3.4c-e	15.3a
N17037	5.6ab	4.9a	0.8b	4.2a-d	74.7ab	4.8ab	14.7a
N17040	5.7ab	4.8ab	0.9a	4.2a-d	76.6ab	3.7a-e	13.9a
N17041	5.6ab	4.8ab	0.9ab	3.8a-e	75.4ab	3.5b-e	15.7a
N17044	5.7ab	4.8ab	0.9a	5.1a	75.2ab	3.1c-e	15.2a
N17045	5.6ab	4.8ab	0.9ab	4.2a-d	73.2b	4.4a-c	16.6a
N17047	5.6ab	4.7b	0.9a	2.5e	79.0a	2.9de	14.1a
Mean	5.6	4.8	0.9	3.9	75.9	3.7	14.9
LSD¹	0.1	0.1	0.1	1.4	5.3	1.4	4.2

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

Blanching Results

Table 13. Laboratory sample blanching of Medium Kernels. Averages from both digging dates from Tidewater AREC (Suffolk, VA), 2021.

Variety	% H ₂ O before roasting	% H ₂ O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.6a	4.8a	0.8ab	3.6bc	77.9a	3.6ab	13.5a
Emery	5.6a	4.7a	0.9a	3.3c	76.2a	3.5ab	15.4a
NC-20	5.6a	4.8a	0.9ab	4.2a-c	74.9a	3.2ab	16.0a
Sullivan	5.6a	4.7a	0.9ab	4.4ab	74.9a	3.7ab	15.3a
Walton	5.6a	4.8a	0.9ab	3.3c	76.4a	3.7ab	15.0a
N14001	5.6a	4.8a	0.8b	3.6bc	75.9a	3.9ab	14.8a
N14002	5.6a	4.8a	0.8b	3.5bc	74.5a	4.3a	16.0a
N14007	5.6a	4.7a	0.9ab	3.8a-c	75.7a	3.5ab	15.4a
N14009	5.6a	4.7a	0.9ab	3.6bc	75.1a	3.7ab	16.0a
N14017	5.6a	4.7a	0.9ab	4.4ab	74.8a	3.6ab	15.6a
N14027	5.6a	4.8a	0.8ab	3.6bc	76.5a	3.6ab	14.7a
N15017	5.6a	4.8a	0.8b	3.6bc	76.9a	3.4ab	14.5a
N15039	5.6a	4.8a	0.8ab	4.7a	75.6a	3.6ab	14.7a
N15041	5.6a	4.8a	0.8b	3.6bc	75.9a	3.9ab	14.9a
N15044	5.6a	4.7a	0.9ab	3.6bc	76.9a	3.4ab	14.5a
N16005	5.6a	4.7a	0.9a	3.9a-c	75.7a	3.1b	15.7a
N16012	5.6a	4.7a	0.9ab	3.9a-c	75.9a	4.0ab	14.6a
N16021	5.6a	4.7a	0.9a	3.4c	76.2a	4.3a	14.6a
N17036	5.6a	4.7a	0.9a	3.9a-c	74.8a	3.5ab	16.3a
N17037	5.6a	4.8a	0.8b	4.0a-c	75.5a	4.1ab	14.9a
N17040	5.6a	4.7a	0.9a	3.7bc	77.0a	3.7ab	14.0a
N17041	5.6a	4.7a	0.9ab	4.1a-c	75.1a	3.4ab	15.8a
N17044	5.6a	4.8a	0.9ab	4.8a	74.4a	3.4ab	15.9a
N17045	5.6a	4.7a	0.9ab	4.2a-c	74.5a	3.9ab	15.8a
N17047	5.6a	4.7a	0.9ab	3.5bc	77.2a	3.2ab	14.4a
Mean	5.6	4.7	0.9	3.8	75.8	3.6	15.1
LSD¹	0.1	0.1	0.1	1.0	3.7	1.1	3.0

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

Blanching Results

Table 14. Laboratory sample blanching of Medium Kernels from Martin County, NC, Dig 1, 2021 (20 September).

Variety	% H ₂ O before roasting	% H ₂ O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.8ab	4.9a	0.9a	4.2ab	71.3a	5.2bc	17.8k
Emery	5.8ab	4.9a	0.9a	4.9ab	69.6ab	5.8a-c	18.2jk
NC-20	5.8ab	4.8ab	1.0a	4.9ab	68.7a-c	4.5c	20.5i-k
Sullivan	5.8ab	4.8ab	1.0a	4.8ab	66.6b-f	4.5c	22.6c-i
Walton	5.7ab	4.8ab	1.0a	4.1ab	66.4b-g	6.1ab	21.9e-i
N14001	5.8ab	4.8ab	1.0a	4.2ab	63.8d-h	6.1ab	24.4a-h
N14002	5.8a	4.8ab	1.0a	3.7b	66.1b-g	7.0a	21.3h-j
N14007	5.8ab	4.8ab	1.0a	3.7b	67.5b-d	5.6a-c	21.7f-i
N14009	5.8ab	4.8ab	1.0a	3.9ab	66.6b-f	5.9a-c	22.1d-i
N14017	5.7ab	4.8ab	0.9a	5.1a	66.3b-g	4.8bc	22.3d-i
N14027	5.7ab	4.8ab	1.0a	4.1ab	67.1b-d	5.3bc	22.0e-i
N15017	5.8ab	4.8ab	1.0a	4.9ab	64.3d-h	5.8a-c	23.5a-i
N15039	5.7ab	4.7b	1.0a	4.8ab	61.6h	6.0a-c	26.1ab
N15041	5.7ab	4.8ab	0.9a	4.6ab	64.5d-h	5.0bc	24.5a-g
N15044	5.7b	4.7b	1.0a	4.4ab	65.7c-g	5.0bc	23.4a-i
N16005	5.8ab	4.8ab	1.0a	4.6ab	66.8b-e	5.6a-c	21.4g-i
N16012	5.7ab	4.8ab	1.0a	4.9a	62.8gh	5.6a-c	25.2a-d
N16021	5.7ab	4.8ab	1.0a	4.3ab	65.0c-h	5.1bc	24.1a-h
N17036	5.7ab	4.7b	1.0a	4.3ab	64.8d-h	5.0bc	24.4a-h
N17037	5.7ab	4.8ab	0.9a	4.8ab	63.0f-h	5.8a-c	24.9a-e
N17040	5.7ab	4.8ab	0.9a	4.6ab	62.9f-h	4.6bc	26.4a
N17041	5.8ab	4.8ab	1.0a	5.0a	63.2e-h	4.7bc	25.6a-c
N17044	5.7ab	4.8ab	0.9a	4.4ab	64.4d-h	4.9bc	24.8a-f
N17045	5.8ab	4.7b	1.0a	4.7ab	64.7d-h	6.1ab	23.0b-e
N17047	5.7ab	4.7b	1.0a	4.1ab	64.0d-h	5.7a-c	24.7a-f
Mean	5.7	4.8	1.0	4.5	65.5	5.4	23.1
LSD¹	0.1	0.1	0.1	1.3	3.8	1.6	3.2

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

Blanching Results

Table 15. Laboratory sample blanching of Medium Kernels from Martin County, NC, Dig 2, 2021(6 October).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.8ab	4.8ab	1.0a	3.9a	69.9a	5.0c-e	19.7fg
Emery	5.7ab	4.8ab	1.0ab	4.9a	64.6c-e	4.6de	24.4a-d
NC-20	5.7b	4.8ab	0.9b	4.8a	66.6bc	4.9de	22.1d-g
Sullivan	5.8ab	4.9a	0.9ab	3.8a	63.5d-g	5.9a-e	25.4a-d
Walton	5.8ab	4.8ab	1.0ab	4.8a	63.5d-g	6.4a-d	23.8b-e
N14001	5.8ab	4.8ab	1.0ab	4.9a	61.8e-h	7.2a	23.7b-e
N14002	5.8ab	4.8ab	1.0ab	4.8a	64.0c-f	4.6e	25.2a-d
N14007	5.8ab	4.8ab	1.0a	4.7a	62.8d-h	6.5a-c	24.5a-d
N14009	5.8ab	4.8ab	1.0a	4.0a	64.5c-e	5.8a-e	24.2a-d
N14017	5.7ab	4.7b	1.0a	4.6a	63.1d-h	5.9a-e	24.9a-d
N14027	5.7ab	4.8ab	0.9ab	4.8a	65.0b-d	5.8a-e	22.9c-f
N15017	5.7ab	4.8ab	0.9ab	4.5a	61.7e-h	6.1a-e	26.2a-c
N15039	5.7ab	4.9a	0.9b	4.6a	60.5gh	6.6ab	26.8ab
N15041	5.7ab	4.8ab	1.0ab	4.0a	61.8e-h	6.0a-e	26.8ab
N15044	5.8ab	4.8ab	0.9ab	5.4a	63.5d-g	5.3b-e	24.3a-d
N16005	5.8ab	4.9a	0.9ab	4.9a	62.8d-h	5.8a-e	25.0a-d
N16012	5.7ab	4.7b	1.0a	4.6a	61.1f-h	6.7ab	26.1a-c
N16021	5.8ab	4.8ab	1.0ab	5.1a	68.0ab	4.9de	19.4g
N17036	5.8ab	4.8ab	1.0ab	4.2a	60.3h	6.5a-c	27.5a
N17037	5.8ab	4.9ab	0.9ab	4.3a	62.7d-h	5.9a-e	25.6a-c
N17040	5.8ab	4.8a	1.0ab	5.4a	66.9a-c	5.7a-e	20.5e-g
N17041	5.7ab	4.9a	0.9b	4.9a	62.9d-h	5.7a-e	25.5a-d
N17044	5.8a	4.9a	1.0ab	4.7a	64.7c-e	5.6a-e	23.0c-f
N17045	5.7ab	4.8ab	1.0ab	4.4a	62.7d-h	6.2a-d	25.1a-d
N17047	5.7ab	4.8ab	1.0ab	4.7a	61.5f-h	6.4a-d	25.9a-c
Mean	5.8	4.8	1.0	4.6	63.6	5.8	24.3
LSD²	0.1	0.1	0.1	1.8	3.0	1.6	3.5

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

Blanching Results

Table 16. Laboratory sample blanching of Medium Kernels. Averages from both digging dates from Martin County, NC, 2021.

Variety	% H ₂ O before roasting	% H ₂ O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.8a	4.8a	1.0a	4.0ab	70.6a	5.1cd	18.7f
Emery	5.7a	4.8a	0.9a	4.9ab	67.1bc	5.2b-d	21.3ef
NC-20	5.7a	4.8a	0.9a	4.9ab	67.6ab	4.7d	21.3ef
Sullivan	5.8a	4.8a	0.9a	4.3ab	65.0b-f	5.2b-d	24.0a-e
Walton	5.7a	4.8a	1.0a	4.4ab	64.9b-f	6.2ab	22.8c-e
N14001	5.8a	4.8a	1.0a	4.5ab	62.8f-h	6.6a	24.0a-e
N14002	5.8a	4.8a	1.0a	4.2ab	65.0b-f	5.8a-d	23.2b-e
N14007	5.8a	4.8a	1.0a	4.2ab	65.1b-f	6.1a-c	23.1b-e
N14009	5.8a	4.8a	1.0a	3.9b	65.5b-f	5.9a-c	23.1b-e
N14017	5.7a	4.8a	1.0a	4.8ab	64.7b-g	5.3b-d	23.6a-e
N14027	5.7a	4.8a	0.9a	4.4ab	66.1b-e	5.5a-c	22.4de
N15017	5.7a	4.8a	0.9a	4.7ab	63.0f-h	5.9a-c	24.9a-d
N15039	5.7a	4.8a	0.9a	4.7ab	61.1h	6.3ab	26.4a
N15041	5.7a	4.8a	0.9a	4.3ab	63.1e-h	5.5b-d	25.6a-c
N15044	5.7a	4.7a	0.9a	4.9ab	64.6c-g	5.1b-d	23.8a-e
N16005	5.8a	4.8a	0.9a	4.7ab	64.8b-g	5.7a-c	23.2b-e
N16012	5.7a	4.7a	1.0a	4.7ab	61.9gh	6.1a-c	25.7a-c
N16021	5.7a	4.8a	1.0a	4.7ab	66.5b-d	5.0cd	21.8e
N17036	5.7a	4.8a	1.0a	4.2ab	62.6f-h	5.8a-d	25.9ab
N17037	5.7a	4.8a	0.9a	4.5ab	62.8f-h	5.8a-c	25.3a-d
N17040	5.7a	4.8a	0.9a	5.0a	64.9b-g	5.2b-d	23.5a-e
N17041	5.7a	4.8a	0.9a	4.9ab	63.0f-h	5.2b-d	25.5a-c
N17044	5.8a	4.8a	0.9a	4.5ab	64.6c-g	5.3b-d	23.9a-e
N17045	5.7a	4.7a	1.0a	4.6ab	63.7d-h	6.1a-c	24.0a-e
N17047	5.7a	4.7a	1.0a	4.4ab	62.7f-h	6.0a-c	25.3a-d
Mean	5.7	4.8	1.0	4.5	64.5	5.6	23.7
LSD¹	0.1	0.1	0.1	1.0	3.0	1.1	3.0

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

Blanching Results

Table 17. Laboratory sample blanching of Medium Kernels. Averages from Tidewater AREC (Suffolk, VA) and Martin County, NC, 2021.

Variety	% H ₂ O before roasting	% H ₂ O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.7a	4.8ab	0.9ab	3.8d	74.2a	4.3a	16.1a
Emery	5.7a	4.8a-c	0.9ab	4.1a-d	71.7a	4.3a	18.4a
NC-20	5.7a	4.8a-c	0.9ab	4.5a-d	71.3a	3.9a	18.7a
Sullivan	5.7a	4.8a-c	0.9ab	4.3a-d	70.0a	4.4a	19.6a
Walton	5.7a	4.8a-c	0.9ab	3.9b-d	70.6a	5.0a	18.9a
N14001	5.7a	4.8ab	0.9ab	4.1a-d	69.3a	5.2a	19.4a
N14002	5.7a	4.8ab	0.9ab	3.8cd	69.8a	5.0a	19.6a
N14007	5.7a	4.7a-c	0.9ab	4.0a-d	70.4a	4.8a	19.2a
N14009	5.7a	4.8a-c	0.9ab	3.8d	70.3a	4.8a	19.6a
N14017	5.6a	4.7bc	0.9ab	4.6a-c	69.8a	4.5a	19.6a
N14027	5.6a	4.8a-c	0.9ab	4.0a-d	71.3a	4.5a	18.6a
N15017	5.6a	4.8a-c	0.9ab	4.1a-d	69.9a	4.7a	19.7a
N15039	5.6a	4.8a-c	0.9ab	4.7a	68.3a	4.9a	20.6a
N15041	5.6a	4.8a-c	0.9ab	3.9b-d	69.5a	4.7a	20.3a
N15044	5.6a	4.7c	0.9ab	4.2a-d	70.7a	4.3a	19.2a
N16005	5.7a	4.8a-c	0.9ab	4.3a-d	70.2a	4.4a	19.4a
N16012	5.6a	4.7c	0.9ab	4.3a-d	68.9a	5.0a	20.1a
N16021	5.7a	4.7bc	0.9ab	4.0a-d	71.3a	4.6a	18.2a
N17036	5.7a	4.7bc	0.9a	4.0a-d	68.7a	4.6a	21.1a
N17037	5.7a	4.8a	0.9b	4.2a-d	69.2a	4.9a	20.1a
N17040	5.7a	4.8a-c	0.9ab	4.3a-d	70.9a	4.4a	18.7a
N17041	5.7a	4.8a-c	0.9ab	4.5a-d	69.1a	4.3a	20.7a
N17044	5.7a	4.8a	0.9ab	4.6ab	69.5a	4.3a	19.9a
N17045	5.7a	4.7bc	0.9ab	4.4a-d	69.1a	5.0a	19.9a
N17047	5.6a	4.7c	0.9ab	3.9b-d	60.0a	4.6a	19.8a
Mean	5.7	4.8	0.9	4.3	69.8	4.6	19.4
LSD¹	0.1	0.1	0.1	0.8	6.4	1.3	5.0

¹ Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's 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 (2020- 2021).

Variety	% H ₂ O before roasting	% H ₂ O after roasting	%Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.7a	4.8ab	0.9a	3.3d	78.8a	3.2a	13.2c
Emery	5.7a	4.8ab	0.9a	3.5cd	77.1ab	3.5a	14.4bc
NC-20	5.7a	4.9ab	0.8a	4.1ab	74.3ab	3.3a	16.7ab
Sullivan	5.7a	4.8ab	0.8a	3.6a-d	75.5ab	3.5a	15.8a-c
Walton	5.7a	4.8ab	0.8a	3.6a-d	75.2ab	3.7a	15.8a-c
N14001	5.7a	4.9ab	0.9a	3.6a-d	75.3ab	3.8a	15.5a-c
N14002	5.7a	4.9a	0.9a	3.5b-d	74.5ab	4.0a	16.2a-c
N14007	5.7a	4.8ab	0.9a	3.8a-d	74.2ab	3.7a	16.6ab
N14009	5.7a	4.8ab	0.9a	3.7a-d	74.1b	3.9a	16.6a-c
N14027	5.7a	4.8ab	0.9a	3.6a-d	74.8ab	3.7a	16.3a-c
N15017	5.7a	4.8ab	0.9a	3.8a-d	73.5b	3.8a	17.2ab
N15039	5.7a	4.8ab	0.9a	4.0a-c	74.1b	3.8a	16.6ab
N15041	5.7a	4.8ab	0.9a	3.8a-c	72.7b	4.0a	17.8a
N15044	5.7a	4.8b	0.9a	3.8a-d	74.2b	3.6a	16.7ab
N16005	5.7a	4.8ab	0.9a	3.9a-c	75.3ab	3.4a	15.8a-c
N16012	5.7a	4.8ab	0.9a	4.1a	73.4b	3.9a	16.9ab
N16021	5.7a	4.8ab	0.9a	3.8a-d	74.6ab	3.8a	16.0a-c
N17036	5.7a	4.8ab	0.9a	3.7a-d	73.3b	3.7a	17.6ab
N17037	5.7a	4.8ab	0.8a	3.7a-d	74.9ab	3.8a	16.0a-c
N17040	5.7a	4.8ab	0.9a	3.8a-d	74.0b	3.8a	16.7ab
N17041	5.7a	4.8ab	0.9a	3.8a-d	73.6b	3.8a	17.2ab
N17044	5.7a	4.9ab	0.9a	3.9a-c	74.1b	3.7a	16.7ab
N17045	5.7a	4.8ab	0.9a	3.7a-d	75.1ab	4.0a	15.6a-c
N17047	5.7a	4.8ab	0.9a	3.6a-d	74.5ab	3.7a	16.5a-c
Mean	5.7	4.8	0.9	3.7	74.6	3.7	16.3
LSD¹	0.1	0.1	0.1	0.6	4.6	1.0	3.4

¹ Means sharing the same letter(s) are not statistically different, at P=0.05 based on the Fisher's 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 (2019 - 2021).

Variety	% H2O before roasting	% H2O after roasting	% Blanching loss	% Splits Blanched	% Whole Blanched	% Not Blanched	% Partially Blanched
Bailey II	5.8a	4.8a	0.9a	3.0d	81.3a	2.6a	11.6c
Emery	5.8a	4.8a	0.9a	3.1cd	78.8ab	3.0a	13.4bc
NC-20	5.7a	4.8a	0.9a	3.9a	76.0b	3.0a	15.5ab
Sullivan	5.8a	4.8a	0.9a	3.3b-d	78.5ab	2.9a	13.6bc
Walton	5.7a	4.8a	0.9a	3.7ab	76.6b	3.4a	14.6ab
N14002	5.8a	4.9a	0.9a	3.5a-c	77.0b	3.4a	14.4ab
N14027	5.7a	4.8a	0.9a	3.6ab	76.1b	3.1a	15.5ab
N15017	5.7a	4.8a	0.9a	3.7ab	75.9b	3.3a	15.4ab
N15039	5.7a	4.8a	0.9a	3.9a	76.6b	3.3a	14.7ab
N15041	5.7a	4.8a	0.9	3.6a-c	75.2b	3.3a	16.2a
N15044	5.7a	4.8a	0.9a	3.8ab	75.6b	3.2a	15.8ab
N16005	5.8a	4.8a	0.9a	4.0a	76.6b	3.1a	14.8ab
Mean	5.7	4.8	0.9	3.6	77.0	3.1	14.6
LSD¹	0.1	0.1	0.1	0.5	3.6	0.8	2.6

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

Fatty Acid Results

Table 20. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk, VA), Dig 1, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	5.8 f-h	2.6d-g	80.8a	4.3f	1.2e-h	1.5d-f
Emery	5.9f-h	2.7c-e	79.2ab	5.4ef	1.2e-g	1.6b-g
NC-20	6.1e-g	2.2mn	80.5a	4.6f	1.1n	1.7a-c
Sullivan	6.6cd	2.6c-g	74.5c	9.5cd	1.3c-e	1.5d-j
Walton	6.5c-e	2.8cd	74.1c	9.2cd	1.3bc	1.7ab
N14001	5.8f-h	2.6g-i	81.8a	3.8f	1.2e-k	1.4h-j
N14002	6.1d-f	2.7c-f	80.3a	4.2f	1.3d-f	1.6b-g
N14007	6.8c	2.3k-n	73.9d	10.6cd	1.1j-n	1.5e-i
N14009	5.7f-h	2.5g-j	80.8a	4.5f	1.2e-j	1.6a-f
N14017	5.6gh	2.6d-h	81.8a	3.6f	1.2e-i	1.5d-j
N14027	7.5b	2.4h-i	69.0d	14.7b	1.2g-k	1.4j
N15017	5.9f-h	2.2n	80.9a	4.2f	1.1i-n	1.7a
N15039	6.8c	2.6c-g	73.2c	10.8c	1.3d-g	1.5h-j
N15041	6.8c	2.3j-n	74.5c	9.9cd	1.1j-n	1.6c-h
N15044	7.6ab	2.4j-n	68.4d	15.1b	1.2h-m	1.5f-j
N16005	6.7c	3.1b	76.6bc	7.9de	1.3b	1.1k
N16012	5.9f-h	2.4i-l	80.4a	4.6f	1.2f-k	1.7a-d
N16021	8.1a	2.4j-n	63.8e	19.0a	1.2e-j	1.4j
N17036	5.9f-h	2.8c	80.7a	3.9f	1.3b-d	1.5g-j
N17037	5.9f-h	2.8c	80.5a	4.1f	1.3b-d	1.5e-i
N17040	5.7f-h	2.3k-n	81.0a	4.4f	1.1k-n	1.7a-d
N17041	5.8f-h	2.4j-m	80.7a	4.5f	1.2j-n	1.6a-e
N17044	5.5h	3.6a	80.8a	2.9f	1.6a	1.4ij
N17045	5.8f-h	2.4g-k	81.3a	3.9f	1.2i-n	1.7a-d
N17047	5.8f-h	2.3i-n	81.3a	4.2f	1.1mn	1.7a-c
Mean	6.3	2.6	77.6	7.0	1.2	1.5
LSD²	0.5	0.2	3.6	2.9	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 20. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk, VA) Dig 1, 2021¹, (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.4d-f	1.2fg	78.3g	18.6b-d	13.3f-i	0.3ef	4.8d-f
Emery	2.5c-e	1.5a-e	78.7fg	14.8d	13.8e-h	0.4e	5.2c-e
NC-20	2.2f	1.5ab	78.6fg	17.8cd	13.1g-i	0.3e	4.9d-f
Sullivan	2.6cd	1.5a-c	81.7c-e	8.0ef	14.5b-e	0.7cd	5.3c
Walton	2.9a	1.6a	81.0de	8.1ef	15.0ab	0.6cd	5.7s
N14001	2.3ef	1.1gh	78.1g	21.8bc	13.0hi	0.3ef	4.6f
N14002	2.5c-e	1.3b-f	77.7g	19.0b-d	13.8e-g	0.3ef	5.1c-e
N14007	2.4c-f	1.3c-f	83.1c	7.2e-g	14.0d-f	0.8c	4.9d-f
N14009	2.5cd	1.3fg	78.5g	18.8b-d	13.1g-i	0.3ef	5.0c-f
N14017	2.4d-f	1.2fg	77.8g	23.0b	13.1g-i	0.3ef	4.9d-f
N14027	2.4d-f	1.5a-d	85.9b	4.8fg	14.9bc	1.0b	5.0c-e
N15017	2.4c-f	1.4a-f	78.3g	19.3bc	13.1g-i	0.3ef	4.9c-f
N15039	2.5cd	1.4b-f	82.9cd	6.9e-g	14.5b-e	0.7c	5.1c-e
N15041	2.4d-f	1.4a-f	82.4cd	7.5e-g	14.1c-f	0.7c	4.9d-f
N15044	2.5c-e	1.4a-f	86.2eb	4.5fg	15.0ab	1.0b	5.0c-e
N16005	2.3ef	1.0h	80.4ef	9.8e	14.4b-e	0.5d	4.6f
N16012	2.5cd	1.4b-f	78.5g	17.5cd	13.3f-i	0.3e	5.0c-e
N16021	2.6bc	1.5a-c	88.9a	3.5g	15.8a	1.2a	5.3bc
N17036	2.5cd	1.4b-f	77.4gh	20.9bc	13.9e-g	0.3ef	5.2cd
N17037	2.5cd	1.3fg	77.6g	19.6bc	13.9e-g	0.3ef	5.1c-e
N17040	2.4d-f	1.4b-f	78.7fg	18.3cd	12.9i	0.3ef	4.9d-f
N17041	2.4c-f	1.3c-g	78.6fg	18.1cd	13.0g-i	0.3ef	4.8d-f
N17044	2.8ab	1.3d-g	75.7h	27.9a	14.8b-d	0.2f	5.7ab
N17045	2.4d-f	1.4a-f	78.0g	21.0bc	13.1g-i	0.3ef	4.9d-f
N17047	2.3ef	1.4a-f	78.5g	19.5bc	12.9i	0.3ef	4.8ef
Mean	2.5	1.4	80.1	15.0	13.9	0.5	5.0
LSD²	0.2	0.2	1.9	4.4	0.9	0.2	0.4

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk, VA), Dig 2, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	5.8e-h	2.5c-f	80.8ab	4.9d-f	1.2e-h	1.5g-j
Emery	5.7e-h	2.6cd	80.4a-c	5.0d-f	1.2d-g	1.6b-g
NC-20	5.7e-h	2.2k	82.6ab	3.5ef	1.0l	1.6a-d
Sullivan	5.8e-h	2.6c-e	80.1a-c	5.1d-f	1.2c-e	1.6ab
Walton	6.5b-d	2.6c	73.4d-f	10.8a-c	1.2cd	1.7a
N14001	5.7e-h	2.5c-g	81.1ab	4.7ef	1.1f-i	1.5f-j
N14002	6.0d-g	2.4e-i	81.0ab	4.6ef	1.1f-j	1.5f-j
N14007	7.1ab	2.4f-j	70.6f	13.7a	1.2e-h	1.5f-j
N14009	5.4gh	2.4g-k	82.0a	4.0ef	1.1g-j	1.7a
N14017	5.4h	2.6c-e	83.0a	3.3ef	1.2d-f	1.5e-j
N14027	7.3a	2.3h-k	69.4f	14.7a	1.1f-j	1.5g-j
N15017	6.1c-f	2.3jk	79.5a-c	6.0d-f	1.1h-k	1.6a-c
N15039	6.9ab	2.5c-f	71.1ef	13.2ab	1.2c-e	1.4j
N15041	6.1c-e	2.2k	79.2a-c	6.4d-f	1.1kl	1.6a-e
N15044	7.3a	2.2jk	70.1f	14.4a	1.1i-l	1.5e-j
N16005	6.7a-c	3.0b	75.7c-e	9.2b-d	1.3b	1.2k
N16012	5.6e-h	2.5d-g	81.9ab	4.0ef	1.1f-h	1.5c-g
N16021	6.7a-c	2.3i-k	73.8d-f	10.9a-c	1.1g-j	1.5d-i
N17036	5.7e-h	2.8b	81.9ab	3.6ef	1.3bc	1.4j
N17037	5.7e-h	2.9b	80.8ab	4.3ef	1.3b	1.4h-j
N17040	6.1c-f	2.5d-h	77.7b-d	7.6c-e	1.2d-g	1.6b-f
N17041	5.5f-h	2.3i-k	82.1ab	3.9ef	1.1i-l	1.7a
N17044	5.5gh	2.5a	81.8ab	2.7f	1.5a	1.4ij
N17045	5.6e-h	2.4g-k	82.8a	3.3ef	1.1i-l	1.6a-d
N17047	5.7e-h	2.3i-k	81.9ab	3.9ef	1.1j-l	1.7a
Mean	6.1	2.5	78.6	6.7	1.2	1.5
LSD²	0.6	0.2	5.0	4.3	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 21. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Tidewater AREC (Suffolk, VA), Dig 2, 2021¹ (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.2f-i	1.2a-e	79.1e-h	17.3d-g	12.8d-g	0.4e-h	4.6e-i
Emery	2.2g-i	1.4ab	79.0e-h	17.1d-g	13.1c-f	0.4e-h	4.8c-e
NC-20	2.0j	1.3a-d	78.4f-h	23.4a-d	12.3g	0.3gh	4.3hi
Sullivan	2.3b-e	1.3a-e	79.1e-h	15.7e-g	13.1c-e	0.4e-h	4.8b-e
Walton	2.5a	1.3a-d	83.1b-d	6.9ij	14.2ab	0.8a-d	5.0ab
N14001	2.2f-i	1.2d-f	79.1e-h	17.3d-g	12.7e-g	0.4f-h	4.5f-i
N14002	2.1f-i	1.2b-f	78.8e-h	17.9c-g	12.9d-g	0.4f-h	4.5f-i
N14007	2.4ab	1.2c-f	85.7ab	5.5j	14.2ab	1.0a	4.7c-f
N14009	2.3b-g	1.3a-e	78.7f-h	20.7b-f	12.4e-g	0.3f-h	4.6c-g
N14017	2.2f-i	1.0fg	78.3f-h	25.0a-c	12.3g	0.3gh	4.3i
N14027	2.3b-g	1.4a	86.3a	5.2j	14.4a	1.0a	4.8bc
N15017	2.2e-i	1.3a-e	80.0d-g	14.e-h ⁵	12.9d-g	0.5e-h	4.6d-h
N15039	2.3b-d	1.3a-e	85.1ab	5.5j	14.3a	0.9ab	4.8b-e
N15041	2.1ij	1.3a-d	80.5c-g	12.7g-i	12.8d-g	0.5d-g	4.5f-i
N15044	2.2d-i	1.2d-f	86.4a	5.0j	14.0ab	1.0a	4.5f-i
N16005	2.1g-i	0.9g	81.9c-e	8.3h-j	14.0ab	0.7b-e	4.3hi
N16012	2.2c-h	1.1e-g	78.6f-h	20.5b-f	12.5e-g	0.3f-h	4.5f-i
N16021	2.3bc	1.3a-d	83.5a-c	7.0ij	13.8a-c	0.8a-c	4.8d-h
N17036	2.2f-i	1.1d-f	77.8gh	23.3a-d	13.1c-e	0.3gh	4.6d-h
N17037	2.3b-e	1.2b-f	78.0gh	19.5b-g	13.5b-d	0.3f-h	4.8bc
N17040	2.3b-f	1.1e-g	81.3c-f	13.9f-i	13.1c-e	0.6c-f	4.5f-i
N17041	2.2f-i	1.2a-e	78.8e-h	20.8b-f	12.3g	0.3f-h	4.5f-i
N17044	2.5a	1.2b-f	76.2h	30.2a	14.1ab	0.2h	5.2a
N17045	2.1h-j	1.2a-e	78.2f-h	25.0ab	12.3fg	0.3gh	4.4g-i
N17047	2.2f-i	1.4a-c	78.4f-h	21.1b-e	12.6e-g	0.3f-h	4.6c-g
Mean	2.2	1.2	80.4	16.0	13.2	0.5	4.6
LSD²	0.1	0.2	3.2	7.1	0.8	0.3	0.2

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Averages of all Digs from Tidewater AREC (Suffolk, VA), 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	5.8e-g	2.6fg	80.8a	4.6f-h	1.2e-h	1.5c-f
Emery	5.8e-g	2.7ef	79.8a-c	5.2f-h	1.2d-g	1.6c-g
NC-20	5.9e-g	2.2m	81.6a	4.1gh	1.1m	1.7a-c
Sullivan	6.2de	2.6ef	77.3b-d	7.3d-f	1.2c-e	1.6c-e
Walton	6.5cd	2.7de	73.8ef	10.0cd	1.3b-d	1.7ab
N14001	5.7e-g	2.6f-h	81.5a	4.3gh	1.2e-j	1.5hi
N14002	6.0d-f	2.5f-h	80.7ab	4.4gh	1.2e-i	1.6d-g
N14007	6.9bc	2.4i-l	72.2fg	12.2a-c	1.1g-l	1.5g-i
N14009	5.5g	2.4h-j	81.4a	4.2gh	1.2f-k	1.6a-d
N14017	5.5g	2.6ef	82.4a	3.5gh	1.2e-g	1.5e-h
N14027	7.4ab	2.4i-k	69.2gh	14.7ab	1.2g-k	1.4i
N15017	6.0ef	2.2lm	80.2ab	5.1f-h	1.1j-m	1.7ab
N15039	6.8c	2.6e-m	72.2fg	12.0bc	1.2c-f	1.4i
N15041	6.5cd	2.3k-m	76.8c-e	8.2de	1.1k-m	1.6c-f
N15044	7.5a	2.3j-m	69.2gh	14.8ab	1.1h-m	1.5f-i
N16005	6.7c	3.0b	76.2de	8.5de	1.3b	1.1j
N16012	5.7e-g	2.5g-i	81.2a	4.3gh	1.2e-k	1.6c-e
N16021	7.4a	2.3i-m	68.8h	14.9a	1.2g-k	1.5hi
N17036	5.8e-g	2.8cd	81.3a	3.7gh	1.3bc	1.5hi
N17037	5.8e-g	2.9bc	80.7ab	4.2gh	1.3b	1.5hi
N17040	5.9e-g	2.4i-k	79.4a-d	6.0e-g	1.1g-l	1.6b-d
N17041	5.6fg	2.4i-l	81.5a	4.2gh	1.1i-m	1.7a-c
N17044	5.5g	3.5a	81.3a	2.8h	1.6a	1.4i
N17045	5.7fg	2.4i-k	82.1a	3.6gh	1.1i-m	1.6a-d
N17047	5.7e-g	2.3k-m	81.6a	4.0gh	1.1lm	1.7a
Mean	6.2	2.5	78.1	6.8	1.2	1.5
LSD²	0.5	0.1	3.4	2.8	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 22. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Average of all Digs from Tidewater AREC (Suffolk, VA), 2021¹ (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.3c-f	1.2c-f	78.7f-h	17.9d-g	13.1f-j	0.4g-i	4.7c-f
Emery	2.3c-e	1.4ab	78.9f-h	16.0gh	13.4d-j	0.4f-h	5.0c-e
NC-20	2.1f	1.4ab	78.5f-h	20.6b-e	12.7h-j	0.3g-i	4.6ef
Sullivan	2.4b-d	1.4a-d	80.4d-f	11.8hi	13.8b-f	0.5d-f	5.0a-d
Walton	2.7a	1.4a	82.1cd	7.5j-l	14.6ab	0.7cd	5.4ab
N14001	2.2ef	1.1e-g	78.6f-h	19.6c-g	12.8h-j	0.3g-i	4.5f
N14002	2.3c-f	1.3a-f	78.3gh	18.4d-g	13.4e-j	0.3g-i	4.8c-f
N14007	2.4c-e	1.3b-f	84.4ab	6.3j-l	14.1a-e	0.9ab	4.8c-f
N14009	2.4c-e	1.3b-f	78.6f-h	19.8b-g	12.8h-j	0.3g-i	4.8c-f
N14017	2.3d-f	1.1fg	78.0gh	23.9b	12.7ij	0.3hi	4.6ef
N14027	2.3c-e	1.5a	86.1a	5.0kl	14.7a	1.0ab	4.9c-e
N15017	2.3c-f	1.3a-d	79.1f-h	16.9e-g	13.0f-j	0.4f-h	4.8c-f
N15039	2.4c-e	1.3a-e	84.0bc	6.2j-l	14.4a-c	0.8bc	4.9c-e
N15041	2.2ef	1.4a-d	81.4de	10.ijl	13.5d-i	0.6de	4.7c-f
N15044	2.3c-e	1.3a-f	86.3a	4.8l	14.5ab	1.0a	4.8c-f
N16005	2.2ef	1.0g	81.2de	9.0i-k	14.2a-d	0.6de	4.5f
N16012	2.3c-e	1.2d-f	78.5f-h	19.0c-g	12.9g-j	0.3g-i	4.7c-f
N16021	2.5a-c	1.4a-c	86.2a	5.2kl	14.8a	1.0ab	5.1a-c
N17036	2.3c-e	1.2c-f	77.6hi	22.1b-d	13.5d-h	0.3hi	4.9c-f
N17037	2.4b-d	1.2d-f	77.8hi	19.5c-g	13.7c-g	0.3g-i	5.0b-e
N17040	2.3c-e	1.2d-f	80.0e-g	16.1fg	13.0g-j	0.5e-g	4.7c-f
N17041	2.3c-f	1.2c-f	78.7f-h	19.4c-g	12.6j	0.3g-i	4.7c-f
N17044	2.6ab	1.2c-f	75.9i	29.1a	14.5a-c	0.2i	5.4a
N17045	2.2ef	1.3a-e	78.1gh	23.0bc	12.7h-j	0.3hi	4.6d-f
N17047	2.2d-f	1.4a-d	78.5f-h	20.3b-f	12.7h-j	0.3g-i	4.7c-f
Mean	2.3	1.3	80.2	15.5	13.5	0.5	4.8
LSD²	0.2	0.2	2.0	4.2	0.8	0.2	0.4

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 1, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	6.1gh	2.5b-f	80.8a	4.6c	1.1de	1.4fg
Emery	6.4fg	2.4d-i	78.4ab	6.3de	1.2b-e	1.6c-e
NC-20	6.2f-h	2.1k	81.5a	4.5e	1.0f	1.5c-f
Sullivan	6.6e-g	2.4d-i	77.4a-d	7.1de	1.2b-e	1.6b-d
Walton	6.7d-f	2.7a-c	74.9b-e	8.8b-d	1.3ab	1.6c-f
N14001	6.3f-h	2.3f-k	79.5ab	5.6de	1.1de	1.6c-e
N14002	6.8c-f	2.4d-i	77.3a-d	7.1de	1.2c-e	1.6c-f
N14007	7.1c-e	2.3g-k	72.8de	11.2bc	1.1de	1.5c-f
N14009	5.7h	2.3f-k	81.5a	4.1e	1.1de	1.6a-d
N14017	6.0gh	2.4d-h	80.5a	4.3e	1.2c-e	1.6c-e
N14027	8.0a	2.4f-k	65.9g	17.3a	1.1de	1.4fg
N15017	6.8c-f	2.3f-k	77.7a-d	6.6de	1.2c-e	1.7a-c
N15039	7.2cd	2.6a-d	71.3ef	12.3b	1.2a-c	1.4g
N15041	7.4bc	2.3h-k	73.0c-e	11.2bc	1.1d-f	1.5d-g
N15044	8.2a	2.2i-k	66.4fg	16.6a	1.1de	1.5d-g
N16005	6.7c-f	2.7ab	76.6a-d	7.8c-e	1.3a	1.3h
N16012	6.6d-g	2.3h-k	77.0a-d	7.2de	1.1de	1.7a-c
N16021	8.0ab	2.4e-j	66.5fg	16.4a	1.2b-e	1.5e-g
N17036	6.4fg	2.6a-e	80.0a	4.6c	1.2a-d	1.5c-f
N17037	6.6d-g	2.5c-f	78.1ab	6.4de	1.2b-e	1.5c-f
N17040	6.5fg	2.2i-k	78.6ab	5.9de	1.1d-f	1.7ab
N17041	6.2f-h	2.2h-k	79.4ab	5.3de	1.1de	1.8a
N17044	6.3f-h	2.7a	78.8ab	5.4de	1.3a	1.6c-f
N17045	6.4fg	2.3h-k	79.3ab	5.4de	1.1d-f	1.7a-c
N17047	6.6e-h	2.2jk	77.8a-c	6.6de	1.1ef	1.7a
Mean	6.7	2.4	76.4	7.9	1.2	1.6
LSD²	0.6	0.2	4.9	4.0	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 23. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 1, 2021¹, (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.3a	1.1a	78.7ef	17.5a-d	13.1h-j	0.4ef	4.5de
Emery	2.4a	1.3a	79.6ef	12.5b-g	13.7e-i	0.5ef	4.9a-d
NC-20	2.0b	1.1a	79.1ef	18.3a-c	12.5j	0.4ef	4.2e
Sullivan	2.5a	1.3a	80.1ef	11.0e-g	13.9d-i	0.5ef	4.9a-d
Walton	2.6a	1.5a	80.8c-e	8.6f-h	14.8a-e	0.6c-e	5.4a
N14001	2.4a	1.3a	79.3ef	14.4a-f	13.4g-j	0.4ef	4.8b-d
N14002	2.4a	1.2a	80.1ef	11.0d-g	14.0d-h	0.5ef	4.8a-d
N14007	2.5a	1.4a	83.2b-d	6.5gh	14.5b-f	0.8cd	5.1a-d
N14009	2.4a	1.3a	78.4ef	19.9a	12.8ij	0.3f	4.8b-d
N14017	2.5a	1.5a	80.0f	18.8ab	13.6f-i	0.3f	5.1a-c
N14027	2.5a	1.4a	87.8a	3.8h	15.4a-c	1.1a	5.0a-d
N15017	2.6a	1.3a	79.6ef	11.7d-g	14.0d-h	0.5ef	5.0a-d
N15039	2.6a	1.4a	83.7b	6.8gh	15.0a-d	0.8bc	5.1a-c
N15041	2.4a	1.1a	83.4bc	6.5gh	14.3d-g	0.8c	4.6c-e
N15044	2.6a	1.4a	87.0a	4.0h	15.5ab	1.1a	5.1a-c
N16005	2.4a	1.2a	80.4d-f	11.6d-g	14.3c-g	0.5d-f	4.8a-d
N16012	2.7a	1.5a	80.0ef	11.8c-g	14.2d-h	0.5ef	5.3ab
N16021	2.7a	1.5a	86.7a	4.0h	15.7a	1.0ab	5.3ab
N17036	2.5a	1.2a	78.0ef	17.4a-e	13.8e-i	0.3f	4.8a-d
N17037	2.5a	1.2a	79.5ef	13.3b-f	13.9d-i	0.5ef	4.8a-d
N17040	2.6a	1.4a	79.1ef	14.0a-f	13.8e-i	0.4ef	5.1a-c
N17041	2.6a	1.5a	78.8ef	15.2a-e	13.6f-i	0.4ef	5.2a-c
N17044	2.6a	1.3a	78.4ef	15.4a-e	14.2d-h	0.4ef	5.2ab
N17045	2.5a	1.4a	78.8ef	15.0a-f	13.7f-i	0.4ef	5.0a-d
N17047	2.6a	1.4a	79.7ef	12.8b-f	13.8e-i	0.5ef	5.1a-d
Mean	2.5	1.3	80.8	12.1	14.1	0.6	5.0
LSD²	0.3	0.3	2.8	6.6	1.1	0.2	0.6

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 2, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	6.1f-i	2.6c-f	80.3a	4.7g-i	1.2c-g	1.5f-i
Emery	6.0f-i	2.6c-g	79.6ab	5.5f-i	1.2d-h	1.6e-h
NC-20	6.2e-h	2.3hi	80.4a	4.8g-i	1.1hi	1.7a-d
Sullivan	6.4ef	2.4f-i	77.0b-d	7.7d-f	1.2f-i	1.6d-g
Walton	6.3e-g	2.8bc	76.4cd	7.3e-g	1.3b-d	1.8a
N14001	6.0f-i	2.4e-i	80.3a	5.1f-i	1.1g-i	1.6e-h
N14002	6.6de	2.8bc	76.9b-d	7.1e-h	1.3bc	1.6e-i
N14007	7.1c	2.4e-i	72.3e	11.8c	1.2f-i	1.5hi
N14009	5.7i	2.5d-h	81.3a	4.1i	1.2e-h	1.6d-f
N14017	5.8hi	2.7b-d	80.5a	4.3i	1.2b-f	1.7cd
N14027	7.5b	2.4f-i	68.7f	15.0b	1.2f-i	1.5hi
N15017	6.2e-h	2.4e-i	79.7ab	5.1f-i	1.2f-i	1.7b-d
N15039	7.5b	2.7b-e	68.4f	15.1b	1.2b-e	1.4jk
N15041	7.0cd	2.3hi	74.5de	10.1cd	1.1hi	1.5g-i
N15044	8.1a	2.3hi	65.1g	18.0a	1.1g-l	1.5ji
N16005	7.0c	2.9b	74.9de	9.1de	1.3b	1.3k
N16012	6.2e-h	2.4g-i	79.9ab	5.1f-i	1.1g-i	1.6de
N16021	8.3a	2.2i	62.4g	20.4a	1.1g-i	1.5hi
N17036	6.2e-h	2.5d-h	79.9ab	4.8g-i	1.2b-f	1.6d-g
N17037	6.1f-i	2.7b-d	81.0a	4.0i	1.2b-f	1.5hi
N17040	6.1e-i	2.4e-i	79.3a-c	5.5f-i	1.1g-i	1.7a-d
N17041	6.0g-i	2.4f-i	80.8a	4.5hi	1.1g-i	1.6d-f
N17044	6.1f-i	3.4a	78.9a-c	4.7g-i	1.5a	1.5hi
N17045	6.3e-g	2.2i	80.0ab	5.0g-i	1.1i	1.8a-c
N17047	6.1f-i	2.3hi	80.2a	4.8g-i	1.1hi	1.8b-e
Mean	6.5	2.5	76.7	7.7	1.2	1.6
LSD²	0.4	0.3	3.1	2.6	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 24. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Martin County, NC Dig 2, 2021¹, (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.3d-j	1.2d-f	78.4g-i	17.3a	13.5f-i	0.4gh	4.7g-k
Emery	2.3e-j	1.3b-e	79.2f-h	14.6a-d	13.3f-i	0.4f-h	4.8d-k
NC-20	2.2j	1.2c-f	78.8g-i	17.1a	13.1g-i	0.4gh	4.5jk
Sullivan	2.4c-h	1.3b-e	80.8d-f	10.1d-f	13.7f-h	0.6ef	4.9d-i
Walton	2.7a	1.5a	79.7e-g	10.6c-e	14.5cd	0.5e-g	5.4ab
N14001	2.3h-j	1.2ef	79.2e-h	15.8a-d	13.0i	0.4gh	4.6jk
N14002	2.5bc	1.3b-e	79.6e-h	11.2b-e	14.4cd	0.5e-g	5.1cd
N14007	2.4c-g	1.3b-f	84.9c	6.5e-g	14.3c-e	0.8c	4.8d-j
N14009	2.4c-i	1.2f	78.3g-i	19.9a	12.9i	0.3h	4.7g-k
N14017	2.5bc	1.3bc	77.9g-i	19.0a	13.6f-i	0.3h	5.0c-e
N14027	2.4c-g	1.3a-c	86.2b	4.7fg	14.9bc	1.0b	4.9c-h
N15017	2.4c-h	1.3b-e	78.7g-i	15.6a-d	13.5f-i	0.4gh	4.8d-j
N15039	2.5c-e	1.3b-f	86.0b	4.6fg	15.2ab	1.0b	5.0c-g
N15041	2.2ij	1.3b-f	82.7cd	7.4e-g	13.9d-f	0.7cd	4.6i-k
N15044	2.4c-f	1.3b-f	88.5a	3.6g	15.3ab	1.2a	4.9c-h
N16005	2.3d-j	1.2ef	81.2de	8.3e-g	14.7bc	0.6de	4.8d-k
N16012	2.4c-h	1.2c-f	78.9f-i	15.8a-d	13.3f-i	0.4gh	4.7g-k
N16021	2.6ab	1.4ab	90.1a	3.1g	15.7a	1.3a	5.1bc
N17036	2.5c	1.3b-d	78.2g-i	17.1ab	13.7e-g	0.3gh	5.0c-f
N17037	2.3g-i	1.3c-f	77.7hi	20.4a	13.6f-i	0.3h	4.8e-k
N17040	2.5cd	1.3b-e	79.1f-i	15.1a-d	13.5f-i	0.4f-h	4.9c-i
N17041	2.3f-i	1.3c-f	78.6g-i	18.1a	13.0hi	0.3gh	4.7h-k
N17044	2.7a	1.3b-f	77.1i	19.5a	14.9bc	0.3h	5.4a
N17045	2.4c-i	1.3bc	78.9f-l	16.2a-c	13.3f-i	0.4gh	4.8g-k
N17047	2.4c-h	1.3b-e	78.7g-l	16.6ab	13.2g-i	0.4gh	4.9d-k
Mean	2.4	1.3	80.7	13.1	13.9	.5	4.9
LSD²	0.1	0.1	2.0	6.0	0.7	0.2	0.3

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Average of Digs from Martin County, NC, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	6.1g-j	2.6c-f	80.6ab	4.6j	1.2d-g	1.5i-l
Emery	6.2f-i	2.5d-h	79.0a-c	5.9g-j	1.2d-g	1.6e-h
NC-20	6.2f-i	2.2i	81.0ab	4.6j	1.1i	1.6c-f
Sullivan	6.5e-g	2.4e-i	77.2cd	7.4f-h	1.2d-g	1.6d-g
Walton	6.5d-f	2.8bc	75.7de	8.0fg	1.3bc	1.7a-d
N14001	6.1g-j	2.4g-i	79.9ab	5.4h-j	1.1f-h	1.6e-i
N14002	6.7de	2.6b-e	77.1cd	7.1f-i	1.2b-d	1.6f-i
N14007	7.1bc	2.4g-i	72.6f	11.5cd	1.1d-h	1.5g-k
N14009	5.7j	2.4e-i	81.4a	4.1j	1.1d-h	1.6b-f
N14017	5.9ij	2.6c-e	80.5ab	4.3j	1.2c-f	1.6b-f
N14027	7.8a	2.4f-i	67.3gh	16.1b	1.2d-h	1.5kl
N15017	6.5d-g	2.4f-i	78.7bc	5.9g-j	1.2d-h	1.7a-d
N15039	7.4b	2.6b-d	69.8g	13.7c	1.2bc	1.4l
N15041	7.2bc	2.3i	73.7ef	10.7de	1.1g-i	1.5g-k
N15044	8.1a	2.3i	65.8hi	17.3ab	1.1f-h	1.5j-l
N16005	6.9cd	2.8b	75.8de	8.5ef	1.3b	1.3m
N16012	6.4e-h	2.3hi	78.5bc	6.2g-j	1.1e-h	1.7b-e
N16021	8.2a	2.3hi	64.4i	18.4a	1.2d-h	1.5j-l
N17036	6.3e-i	2.6c-g	79.9ab	4.7j	1.2b-d	1.6e-h
N17037	6.3h-j	2.6c-e	79.6a-c	5.2h-j	1.2c-e	1.5h-k
N17040	6.3e-h	2.3hi	79.0a-c	5.7h-j	1.1g-i	1.7ab
N17041	6.1e-h	2.3hi	80.1ab	4.9j	1.1g-i	1.7a-d
N17044	6.2f-i	3.1a	78.9a-c	5.0ij	1.4a	1.5g-k
N17045	6.3e-h	2.3i	79.6a-c	5.2h-j	1.1hi	1.7a-c
N17047	6.4e-h	2.3i	79.0a-c	5.7h-j	1.1hi	1.8a
Mean	6.6	2.5	76.6	7.8	1.2	1.6
LSD²	0.4	0.2	2.7	2.2	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 25. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Average of Digs from Martin County, NC, 2021¹ (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.3g	1.2h	78.5g-i	17.4a-d	13.3h-k	0.3h	4.6gh
Emery	2.4c-g	1.3a-g	79.4d-i	13.6d-h	13.5g-i	0.4e-h	4.9d-g
NC-20	2.1h	1.2gh	78.9e-i	17.7a-c	12.8k	0.4h	4.3h
Sullivan	2.4c-g	1.3c-h	80.5de	10.5f-i	13.8f-h	0.5d-f	4.9d-g
Walton	2.7a	1.5a	80.3d-f	9.6h-k	14.7c-e	0.5de	5.4a
N14001	2.3e-g	1.2d-h	79.2d-i	15.1b-d	13.2i-k	0.4f-h	4.7fg
N14002	2.5c-g	1.3c-g	79.9d-g	11.1e-h	14.2ef	0.5d-g	4.9c-f
N14007	2.4c-g	1.3a-g	83.5bc	6.5j-l	14.4e	0.8bc	4.9c-f
N14009	2.4c-g	1.2e-h	78.4g-i	19.9a	12.9jk	0.3h	4.7e-g
N14017	2.5a-d	1.4a-c	77.9i	18.9ab	13.6g-i	0.3h	5.1a-d
N14027	2.5c-f	1.4a-f	87.0a	4.2l	15.1a-c	1.1a	5.0c-f
N15017	2.4c-g	1.3b-h	79.2e-i	13.7c-g	13.8f-i	0.4e-h	4.9d-g
N15039	2.5b-e	1.3a-g	84.9b	5.7kl	15.1b-d	0.9b	5.0b-e
N15041	2.3fg	1.2f-h	83.1c	7.0i-l	14.1e-g	0.8c	4.6gh
N15044	2.5a-c	1.3a-g	87.7a	3.8l	15.4ab	1.1a	5.0c-f
N16005	2.3d-g	1.2gh	80.8d	9.9g-j	14.5de	0.6d	4.8d-g
N16012	2.5a-d	1.4a-e	79.4d-h	13.8c-g	13.7f-i	0.4d-h	5.0c-e
N16021	2.6ab	1.4ab	88.4a	3.6i	15.7a	1.2a	5.2a-c
N17036	2.5b-f	1.3c-h	78.1hi	17.2a-d	13.8f-h	0.3h	4.9c-f
N17037	2.4c-g	1.2e-h	78.6g-i	16.9a-d	13.7f-i	0.4gh	4.8d-g
N17040	2.5a-c	1.4a-e	79.1e-i	14.5c-f	13.6f-i	0.4e-h	5.0c-e
N17041	2.4c-g	1.4a-e	78.7f-i	16.6a-d	13.3h-k	0.4gh	4.9d-g
N17044	2.6ab	1.3b-h	77.8i	17.5a-d	14.6c-e	0.3h	5.3ab
N17045	2.4c-g	1.4a-d	78.8f-i	15.6b-d	13.5g-j	0.4gh	4.9d-g
N17047	2.4c-g	1.4a-d	79.2d-i	14.7c-e	13.5g-i	0.4e-h	4.9d-g
Mean	2.4	1.3	80.7	12.6	14.0	.5	4.9
LSD²	0.2	0.2	1.6	4.0	0.6	0.1	0.3

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Rocky Mount, NC, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	5.9fg	2.6cd	80.6a-c	4.2f-h	1.2cd	1.5hg
Emery	5.9e-g	2.4e-h	80.0a-c	5.0e-h	1.1f	1.5b-g
NC-20	5.9e-g	2.2i	82.0a	3.4gh	1.1g	1.6a-d
Sullivan	6.4b-f	2.5d-g	76.3c-e	8.3c-e	1.2d-f	1.5g-f
Walton	6.6bc	2.7bc	74.1d-f	9.2cd	1.2bc	1.6a-d
N14001	5.8g	2.4e-h	80.3a-c	4.8e-h	1.1f	1.5c-g
N14002	6.1d-g	2.5d-g	81.4ab	3.5gh	1.2d-f	1.5b-g
N14007	6.8b	2.3g-i	73.7ef	10.3bc	1.1d-f	1.5fg
N14009	5.6g	2.5d-g	81.2ab	3.8f-h	1.2d-f	1.6a
N14017	5.7g	2.5d-g	80.6a-c	4.8e-h	1.2d-f	1.6a-f
N14027	7.5a	2.4e-h	69.8fg	13.8ab	1.2d-f	1.4i
N15017	6.5b-d	2.3hi	77.3b-e	7.0c-g	1.1f	1.6a-c
N15039	6.8b	2.5d-f	73.0ef	10.8bc	1.2c-e	1.4hi
N15041	6.5b-e	2.4e-h	77.2b-e	7.5c-f	1.1f	1.5d-g
N15044	7.8a	2.4e-h	67.5g	15.8a	1.2d-f	1.4i
N16005	6.5b-d	2.8b	78.2a-d	6.4d-h	1.3b	1.3j
N16012	5.9e-g	2.4e-h	80.8ab	4.2f-h	1.2d-f	1.6a-g
N16021	7.7a	2.6c-e	67.6g	15.4a	1.2bc	1.4ij
N17036	5.9g	2.8b	81.4ab	3.3gh	1.3b	1.4hi
N17037	5.9g	2.7bc	81.2ab	3.5gh	1.3bc	1.5fg
N17040	5.8g	2.5d-g	80.5a-c	4.7e-h	1.1f	1.6a-e
N17041	5.9fg	2.5d-g	80.6a-c	4.7e-h	1.1ef	1.6a-g
N17044	5.6g	3.3a	81.4ab	2.6h	1.5a	1.4hi
N17045	6.1c-g	2.4f-i	79.9a-c	4.8e-h	1.1f	1.6ab
N17047	5.8g	2.3g-i	81.4ab	3.8f-h	1.1f	1.6a
Mean	6.3	2.5	77.9	6.6	1.2	1.5
LSD²	0.6	0.2	4.5	4.0	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 26. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Rocky Mount, NC, 2021¹ (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.4c-e	1.7a-c	77.7f-h	19.8b-d	13.8e-j	0.3f-i	5.3b-f
Emery	2.3d-f	1.7a-c	78.7d-h	16.6d-f	13.4f-j	0.4d-i	5.1c-f
NC-20	2.1f	1.6a-c	77.6f-h	24.2b	13.0j	0.3g-i	4.9d-f
Sullivan	2.4c-e	1.5b-d	81.1cd	9.5g-i	13.9e-h	0.6c-e	5.0c-f
Walton	2.6a	2.0a	81.0c-e	8.1g-i	15.1a-c	0.6cd	5.8a
N14001	2.4b-e	1.6a-c	78.6d-h	17.2c-f	13.3f-j	0.4e-i	5.2b-f
N14002	2.4c-e	1.6b-d	77.2gh	23.7bc	13.6f-j	0.3bc	5.1c-f
N14007	2.5a-c	1.7a-c	82.4bc	7.4g-i	14.5c-e	0.7g-i	5.3a-d
N14009	2.5a-c	1.6a-c	77.8f-h	21.2b-d	13.3g-j	0.3g-i	5.3b-f
N14017	2.3c-e	1.4cd	78.8d-g	16.9c-f	13.1ij	0.4d-i	4.9d-f
N14027	2.4c-e	1.5b-d	85.1ab	5.4hi	15.0a-c	0.9ab	5.0c-f
N15017	2.5a-c	1.7a-c	79.9c-g	12.2fg	14.1d-g	0.5c-g	5.3a-e
N15039	2.5ab	1.8ab	82.6bc	7.5g-i	14.8b-d	0.7bc	5.5a-c
N15041	2.3ef	1.5b-d	80.6c-f	11.3f-h	13.8e-i	0.5c-f	4.9d-f
N15044	2.4b-d	1.7a-c	86.4a	4.3i	15.4ab	1.0a	5.2b-f
N16005	2.3c-e	1.2d	79.3d-g	12.6e-g	14.1d-f	0.4d-h	4.8ef
N16012	2.4b-e	1.5b-d	78.0e-h	19.1b-e	13.4f-j	0.3f-i	5.1c-f
N16021	2.6a	1.6a-c	85.8a	4.5i	15.7a	1.0a	5.5a-c
N17036	2.3c-e	1.6bc	76.9gh	24.8ab	13.8e-i	0.2hi	5.2b-f
N17037	2.4b-e	1.5b-d	77.1gh	23.2b-d	13.8e-j	0.3g-i	5.2b-f
N17040	2.3de	1.5b-d	78.6d-h	18.0b-f	13.2h-j	0.4e-i	4.9d-f
N17041	2.3d-f	1.4cd	78.7d-h	17.1c-f	13.1h-j	0.4e-i	4.8f
N17044	2.6a	1.6a-c	75.7h	31.0a	14.5c-e	0.2i	5.7ab
N17045	2.4c-e	1.7a-c	78.4d-h	17.1c-f	13.6f-j	0.4e-i	5.2b-f
N17047	2.3d-f	1.7a-c	77.8f-h	22.2b-d	13.3h-j	0.3g-i	5.1c-f
Mean	2.4	1.6	79.7	15.8	13.9	0.5	5.2
LSD²	0.2	0.4	3.1	6.8	0.8	0.3	0.5

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Bladen County, NC, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	5.8e-h	2.6cd	82.1ab	3.7d-f	1.2cd	1.4b-e
Emery	5.7f-i	2.5d-f	82.5ab	3.6d-f	1.1f-j	1.4b-f
NC-20	5.9d-f	2.2j	83.0a	3.3ef	1.0l	1.5ab
Sullivan	6.2d	2.4e-g	79.4bc	6.0cd	1.1d-h	1.5a-d
Walton	6.7c	2.4e-g	74.2d	10.3b	1.1c-g	1.5a
N14001	5.7f-i	2.4e-i	83.0a	3.3ef	1.1h-i	1.4d-h
N14002	6.2de	2.6cd	80.9ab	4.5de	1.1c-g	1.4b-e
N14007	6.8c	2.2j	75.0d	10.3b	1.1j-l	1.4c-g
N14009	5.6i	2.4e-h	82.1ab	4.1de	1.1e-i	1.5ab
N14017	5.5g-i	2.5h-j	83.2a	2.9ef	1.1c-e	1.4b-f
N14027	7.7a	2.3f-j	68.8e	15.4a	1.1e-i	1.3hi
N15017	6.2d	2.2h-j	81.2ab	4.4de	1.1i-l	1.5a
N15039	6.7c	2.5de	74.8d	10.2b	1.1c-f	1.3i
N15041	6.7c	2.2ij	77.7c	8.0c	1.0lk	1.3f-i
N15044	7.5ab	2.2ij	71.1e	13.7a	1.0lk	1.3g-i
N16005	7.2b	2.8b	74.3d	10.6b	1.2b	1.1j
N16012	5.8e-i	2.4e-j	82.6ab	3.4d-f	1.1g-k	1.5ab
N16021	7.4ab	2.3g-j	70.7e	13.7a	1.1d-h	1.4e-h
N17036	6.0d-f	2.8b	82.8a	2.9ef	1.2bc	1.3hi
N17037	5.8e-h	2.7bc	82.8a	2.9ef	1.2bc	1.3hi
N17040	5.7f-i	2.3g-j	83.2a	3.2ef	1.0lk	1.5a-c
N17041	5.7f-i	2.2h-j	82.6a	3.6d-f	1.0lk	1.5ab
N17044	5.5hi	3.4a	82.9a	1.9f	1.4a	1.3hi
N17045	5.9d-g	2.3g-j	82.3ab	3.7d-f	1.0lk	1.5a
N17047	5.7f-i	2.3g-j	83.1a	3.1ef	1.0lk	1.5a
Mean	6.2	2.4	79.5	6.1	1.1	1.4
LSD²	0.3	0.2	2.6	2.2	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 27. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Bladen County, NC, 2021¹ (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.1b-e	1.2ab	78.1d-f	22.9b-e	12.8e-h	0.3e	4.5c-e
Emery	2.0e-h	1.2ab	78.3d-f	23.6b-e	12.5hi	0.3e	4.3c-f
NC-20	1.9h	1.2ab	78.3d-f	24.9b-d	12.2i	0.3ef	4.1f
Sullivan	2.1b-e	1.3ab	79.8d	13.3fg	13.1ef	0.5d	4.5cd
Walton	2.3a	1.4a	82.9bc	7.2gh	14.0bc	0.7bc	4.8ab
N14001	2.0f-h	1.1a-c	78.2d-f	25.8bc	12.3i	0.3ef	4.2ef
N14002	2.1b-e	1.2ab	78.4d-f	18.1ef	13.2de	0.3de	4.5c-e
N14007	2.1bc	1.1bc	83.5b	7.4gh	13.3de	0.8b	4.3c-f
N14009	2.2b	1.1bc	78.9de	22.4c-e	12.3i	0.3de	4.4c-f
N14017	2.1b-e	1.2ab	77.7ef	29.3b	12.5g-i	0.2ef	4.5c-e
N14027	2.1b-d	1.3ab	86.8a	4.5h	14.5a	1.1a	4.5cd
N15017	2.0c-f	1.3ab	78.7d-f	18.4d-f	12.8e-h	0.3de	4.4c-f
N15039	2.1b-f	1.2ab	83.0bc	7.6gh	13.7cd	0.7bc	4.4c-f
N15041	1.9gh	1.1bc	81.7c	9.9gh	13.0ef	0.6c	4.1f
N15044	2.0e-g	1.2a-c	85.9a	5.2h	13.9bc	1.0a	4.2d-f
N16005	2.0f-h	0.9c	83.1bc	7.4gh	14.1a-c	0.7bc	4.1f
N16012	2.1b-e	1.2ab	78.1d-f	23.4b-e	12.6f-i	0.3ef	4.4c-f
N16021	2.3a	1.1a-c	85.6a	5.2h	14.2ab	1.0a	4.5bc
N17036	2.1b-f	0.9c	77.4ef	28.3bc	12.9e-h	0.2ef	4.2ef
N17037	2.0d-f	1.2ab	77.3fg	28.5bc	13.0e-g	0.2ef	4.4c-f
N17040	2.1b-f	1.1bc	78.3d-f	25.6bc	12.1i	0.3ef	4.2d-f
N17041	2.0c-f	1.2ab	78.6d-f	22.8b-e	12.2i	0.3e	4.3c-f
N17044	2.3a	1.2ab	75.7g	42.9a	13.8bc	0.1f	4.9a
N17045	2.0e-g	1.3ab	78.4d-f	22.0c-e	12.5g-i	0.3e	4.3c-f
N17047	2.0e-g	1.2a-c	78.1ef	27.2bc	12.2i	0.3ef	4.2ef
Mean	2.1	1.2	80.0	19.0	13.0	0.5	4.4
LSD²	0.1	0.2	1.6	6.5	0.5	0.1	0.3

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Blackville, SC, 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	6.0h-l	2.6f-j	80.4a-d	5.2e-h	1.2f-l	1.3g-i
Emery	5.9h-l	2.8d-h	81.5a-c	3.8f-h	1.2e-h	1.4f-i
NC-20	6.3e-j	2.5h-j	81.0a-c	4.2f-h	1.1i-l	1.5a-d
Sullivan	6.3e-h	2.6f-j	78.6c-f	6.2d-f	1.2e-i	1.5b-f
Walton	6.6de	2.9c-e	74.5gh	9.3bc	1.3cd	1.5a-e
N14001	6.0h-l	2.8c-g	81.6a-c	3.8f-h	1.2d-g	1.4f-i
N14002	6.4d-g	2.8c-g	79.3a-e	5.1e-h	1.2d-g	1.4d-g
N14007	7.5a	2.5g-j	70.5i	13.7a	1.1g-l	1.3i
N14009	5.5m	2.6e-j	82.5a	3.2gh	1.2e-j	1.5b-e
N14017	5.8k-m	2.8d-h	82.3a	3.3gh	1.2e-i	1.4f-i
N14027	7.5a	2.6h-j	69.8i	14.0a	1.2e-k	1.3g-i
N15017	6.8cd	2.9c-f	75.5fg	8.5cd	1.3c-e	1.4e-h
N15039	6.5d-f	2.8d-g	77.2d-g	7.7c-e	1.2d-f	1.3i
N15041	7.1bc	2.5g-j	75.4f-h	9.3bc	1.1kl	1.3g-i
N15044	7.4ab	2.6g-j	72.1hi	12.0ab	1.2f-l	1.4f-i
N16005	6.7cd	3.1bc	77.0e-g	7.4c-e	1.3bc	1.1j
N16012	6.3e-i	2.6f-j	78.7b-f	5.9d-g	1.2e-h	1.6a
N16021	6.2f-k	2.7e-i	79.7a-e	5.3g-f	1.2e-h	1.4e-h
N17036	6.1g-l	3.2b	80.5a-d	3.6f-h	1.4b	1.4c-g
N17037	6.0h-l	3.0b-d	81.1a-c	3.5f-h	1.3bc	1.4e-h
N17040	6.0h-l	2.6f-j	81.6a-c	3.9f-h	1.1f-l	1.4b-f
N17041	5.9j-m	2.5g-j	82.0ab	3.6f-h	1.1h-l	1.5a-e
N17044	5.7lm	3.6a	81.7a-c	2.5h	1.5a	1.3hi
N17045	6.0h-l	2.4j	81.9a-c	3.7f-h	1.1l	1.5a-c
N17047	5.9i-m	2.4ij	81.7a-c	3.9f-h	1.1j-l	1.5ab
Mean	6.3	2.7	78.7	6.1	1.2	1.4
LSD²	0.4	0.3	3.4	2.8	0.1	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 28. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated from Blackville, SC, 2021¹, (cont.).

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.1j	1.2a-f	79.2e-g	15.4d-f	13.0h-k	0.4e-i	4.4hi
Emery	2.2h-j	1.2a-f	77.8g-i	21.3b-d	13.3f-k	0.3g-j	4.6d-i
NC-20	2.2f-j	1.3a-d	78.2f-i	19.2c-e	13.3f-k	0.3g-j	4.6e-i
Sullivan	2.3c-h	1.3a-c	79.5d-g	13.5e-g	13.8d-i	0.4d-g	4.8a-g
Walton	2.5a	1.3a	81.3cd	8.1g-i	14.7ab	0.6c	5.2a
N14001	2.2e-j	1.0fg	77.8g-i	21.7bc	13.3f-k	0.3g-j	4.5g-i
N14002	2.4a-d	1.3a-d	78.2f-i	15.7d-f	14.2a-e	0.4f-i	4.9a-f
N14007	2.4b-g	1.0fg	85.3a	5.4hi	14.6a-d	0.9a	4.5f-i
N14009	2.3d-i	1.2a-f	77.6g-i	26.0b	12.8k	0.2ij	4.7c-i
N14017	2.2e-j	1.0g	77.6g-i	25.5b	13.0i-k	0.3ij	4.4hi
N14027	2.3d-h	1.3a-d	85.3a	5.1i	14.9a	0.9a	4.8b-h
N15017	2.4a-e	1.3a-d	80.8c-e	9.1g-i	14.6a-c	0.6cd	5.0a-d
N15039	2.2e-j	1.1e-g	80.8c-e	10.3f-i	13.8c-h	0.6c-e	4.5g-i
N15041	2.1ij	1.1c-g	82.1bc	8.2g-i	13.9b-f	0.7bc	4.3i
N15044	2.2e-j	1.3a-d	83.8ab	6.0hi	14.6a-c	0.8ab	4.7c-i
N16005	2.2g-j	1.1d-g	79.9d-f	11.2f-h	14.4a-e	0.5c-f	4.6d-i
N16012	2.5a-c	1.3ab	79.1e-g	13.7e-g	13.9c-g	0.4d-h	5.0a-c
N16021	2.3d-h	1.3a-d	78.7f-h	15.5d-f	13.7e-j	0.4f-i	4.8b-h
N17036	2.5ab	1.3a-d	76.6ij	22.2bc	14.5a-d	0.3ij	5.2ab
N17037	2.4b-f	1.2a-e	77.0h-j	22.9bc	14.0b-f	0.3ij	4.9a-e
N17040	2.2h-j	1.2a-f	78.1f-i	20.9b-d	13.1g-k	0.3g-j	4.5g-i
N17041	2.2d-j	1.1b-g	78.0f-i	22.8bc	12.9jk	0.3h-j	4.5g-i
N17044	2.5a-c	1.2a-f	75.6j	33.1a	14.5a-e	0.2j	5.2a
N17045	2.2h-j	1.3a-d	78.0f-i	23.2bc	12.9jk	0.3g-j	4.5g-i
N17047	2.2h-j	1.3a-d	78.2f-i	21.1b-d	12.9jk	0.3g-j	4.6d-i
Mean	2.3	1.2	79.4	16.7	13.8	0.4	4.7
LSD²	0.2	0.2	2.0	5.9	0.8	0.2	0.4

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated averaged across all locations, 2021.¹

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	5.9g-i	2.6e	81.0a-d	4.5e-h	1.2e-g	1.5fg
Emery	5.9g-i	2.6de	80.3a-d	4.9e-h	1.2d-f	1.5d-f
NC-20	6.1e-g	2.3i	81.5ab	4.2f-h	1.1l	1.6a-c
Sullivan	6.3d-f	2.5ef	77.8e	6.9d	1.2d-f	1.6b-e
Walton	6.6cd	2.7cd	74.6fg	9.3c	1.3bc	1.6ab
N14001	5.9g-i	2.5ef	81.2a-c	4.4e-h	1.2e-i	1.5fg
N14002	6.3de	2.6de	79.3c-e	5.4d-f	1.2de	1.5c-f
N14007	7.1b	2.4g-i	72.5h	11.9b	1.1g-j	1.5fg
N14009	5.6j	2.5fg	81.7ab	4.0f-h	1.2e-i	1.6a-d
N14017	5.7ij	2.6de	81.9a	3.6gh	1.2de	1.5c-f
N14027	7.6a	2.4f-h	68.6i	15.2a	1.2e-i	1.4gh
N15017	6.3de	2.4f-i	79.1de	5.8de	1.1f-i	1.6ab
N15039	6.9b	2.6de	72.7gh	11.5b	1.2cd	1.4h
N15041	6.8b	2.3hi	75.7f	9.2c	1.1j-l	1.5e-g
N15044	7.7a	2.3hi	68.9i	15.0a	1.1h-k	1.4f-h
N16005	6.8bc	2.9b	75.9f	8.7c	1.3b	1.2i
N16012	6.1e-g	2.4f-h	79.8b-e	5.2e-g	1.2e-i	1.6ab
N16021	7.4a	2.4f-i	69.5i	14.3a	1.2e-h	1.4f-h
N17036	6.0f-h	2.8bc	81.0a-d	3.9f-h	1.3bc	1.5fg
N17037	6.0f-h	2.8c	80.7a-d	4.2f-h	1.3bc	1.5fg
N17040	6.0gh	2.4f-i	80.2a-d	5.1e-h	1.1h-k	1.6a-d
N17041	5.8g-j	2.4g-i	81.3ab	4.2e-h	1.1i-k	1.6ab
N17044	5.7h-j	3.4a	80.8a-d	3.4h	1.5a	1.4hg
N17045	6.0gh	2.3g-i	81.3a-c	4.2f-h	1.1j-l	1.6ab
N17047	6.0gh	2.3hi	81.0a-d	4.4e-h	1.1kl	1.7a
Mean	6.3	2.5	77.9	6.9	1.2	1.5
LSD²	0.3	0.1	1.8	1.5	0.04	0.1

^{0.11} Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 29. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated averaged across all locations, 2021¹. (cont.)

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.2f-h	1.2gh	78.6f-h	18.5c-g	13.1g-j	0.3e-g	4.6d-g
Emery	2.3e-g	1.3a-e	78.8fg	17.3e-h	13.3f-i	0.4e-g	4.8b-e
NC-20	2.1h	1.3b-g	78.5f-h	20.1b-e	12.8j	0.3f-h	4.4g
Sullivan	2.4c-e	1.3a-d	80.2de	11.9ij	13.7d-f	0.5d	4.9bc
Walton	2.6a	1.4a	81.5c	8.2k	14.5a-c	0.6c	5.3a
N14001	2.2f-h	1.2hi	78.6f-h	19.4c-f	12.9h-j	0.3e-g	4.5e-g
N14002	2.3c-f	1.3b-g	78.8fg	15.4gh	13.8de	0.4ef	4.8b-d
N14007	2.4c-e	1.2d-h	84.1b	6.4kl	14.1cd	0.8b	4.7c-f
N14009	2.3d-f	1.2e-h	78.4f-h	21.2b-d	12.8j	0.3gh	4.7c-f
N14017	2.3d-g	1.2f-h	77.9gh	23.3b	13.0h-j	0.3a	4.7c-f
N14027	2.3c-f	1.4ab	86.4a	4.6l	14.8a	1.0de	4.9bc
N15017	2.3d-f	1.3b-f	79.3ef	14. hi7	13.5e-g	0.4de	4.8b-d
N15039	2.3c-f	1.3c-h	83.6b	6.9kl	14.4a-c	0.8b	4.8bc
N15041	2.2gh	1.2d-h	82.1c	8.7jk	13.7d-f	0.7c	4.5fg
N15044	2.3d-f	1.3b-g	86.3a	4.7l	14.7ab	1.0a	4.7c-f
N16005	2.2f-h	1.1i	81.2cd	9.4jk	14.3bc	0.6c	4.6d-g
N16012	2.4b-d	1.3b-g	78.9fg	16.4f-h	13.4e-h	0.4ef	4.9bc
N16021	2.5a-c	1.4a-c	85.6a	6.3kl	14.8a	0.9a	5.0b
N17036	2.4c-e	1.2gh	77.6hi	21.5bc	13.7ef	0.3gh	4.8bc
N17037	2.3c-f	1.2d-h	77.8gh	20.7b-e	13.6ef	0.3f-h	4.8bc
N17040	2.3d-f	1.2c-h	79.1ef	17.9d-h	13.1g-j	0.4ef	4.7c-f
N17041	2.3d-g	1.3b-g	78.5f-h	19.6c-f	12.9ij	0.3f-h	4.7c-g
N17044	2.6ab	1.2d-h	76.4i	28.1a	14.4a-c	0.2h	5.3a
N17045	2.2e-g	1.3a-e	78.4f-h	20.4b-e	13.0h-j	0.3f-h	4.6c-g
N17047	2.3e-g	1.3a-d	78.6f-h	19.7c-f	13.0h-j	0.3e-g	4.7c-g
Mean	2.3	1.3	80.2	15.3	13.7	0.5	4.8
LSD	0.1	0.1	1.1	3.1	0.4	0.1	0.3

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Two-year averages across all locations, (2020 – 2021)¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey_II	5.9j	2.4ef	80.7a-c	4.9hi	1.1f-h	1.6e
Emery	6.0g-j	2.5e	79.7b-e	5.6g-i	1.1ef	1.5e
NC-20	6.0g-j	2.2j	81.4a	4.3ij	1.0l	1.7bc
Sullivan	6.2fg	2.4f-h	78.4ef	6.7fg	1.1e-g	1.6cd
Walton	6.2f-h	2.5de	76.9fg	7.6ef	1.2c-e	1.7a
N14001	5.9ij	2.4e-g	80.9a-c	4.8i	1.1f-h	1.5e-g
N14002	6.3f	2.5e	79.4c-e	5.5g-i	1.1ef	1.6de
N14007	7.3ab	2.3h-j	70.3ij	14.1a	1.1g-k	1.5g
N14009	5.6l	2.3g-i	81.5a	4.3ij	1.1g-i	1.7bc
N14027	7.4a	2.3h-j	70.1j	14.1a	1.1g-j	1.5g
N15017	6.3f	2.3h-j	79.0de	6.1gh	1.1f-i	1.7bc
N15039	6.7de	2.5e	74.2h	10.5c	1.2de	1.5fg
N15041	6.7e	2.2j	76.6g	8.5de	1.0kl	1.6e
N15044	7.3ab	2.2ij	71.1ij	13.2ab	1.1i-l	1.5e-g
N16005	6.9cd	2.8b	74.9h	9.6cd	1.2b	1.2h
N16012	6.0h-j	2.4f-h	80.3a-d	5.0h-i	1.1e-g	1.6cd
N16021	7.1bc	2.3h-j	71.7i	12.5b	1.1e-g	1.5ef
N17036	6.1f-i	2.6c	79.7b-e	5.3hi	1.2bc	1.5e
N17037	6.0ij	2.6cd	80.5a-c	4.7i	1.2cd	1.5e-g
N17040	6.0ij	2.3h-j	80.2a-d	5.3hi	1.1h-k	1.7bc
N17041	5.9jk	2.3h-j	80.9a-c	4.8i	1.1i-l	1.7bc
N17044	5.7jk	3.2a	81.2ab	3.4j	1.4a	1.5e-g
N17045	6.1ij	2.2ij	80.4a-d	5.1hi	1.1j-l	1.7bc
N17047	6.0ij	2.2ij	81.0ab	4.5ij	1.1j-l	1.7ab
Mean	6.3	2.4	78.0	7.1	1.1	1.6
LSD²	0.2	0.1	1.6	1.4	0.04	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 30. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Two-year averages across all locations, (2019 – 2021¹, (cont.)

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.1g-i	1.2cd	79.1gh	17.3c-e	12.8h-k	0.4gh	4.5f-h
Emery	2.2d-h	1.3bc	79.5f-h	16.0ef	13.1f-i	0.4gh	4.6c-f
NC-20	2.0j	1.3bc	78.9gh	19.3bc	12.6k	0.3h	4.4h
Sullivan	2.2c-f	1.3bc	80.4ef	12.5gh	13.2f-h	0.5ef	4.7b-f
Walton	2.4a	1.4a	80.7e	11.0hi	13.7c-e	0.6e	5.0a
N14001	2.1h-j	1.2de	79.1gh	18.2b-d	12.8i-k	0.4h	4.4gh
N14002	2.2c-g	1.3bc	79.2gh	15.7ef	13.4ef	0.4gh	4.7b-f
N14007	2.3b-d	1.3b-d	86.0a	5.7m	14.2ab	1.0a	4.6c-f
N14009	2.2c-f	1.2b-d	78.8gh	19.7b	12.5k	0.3h	4.6c-g
N14027	2.2c-h	1.3b	86.0a	5.4m	14.3a	1.0a	4.6c-f
N15017	2.2c-g	1.3b	79.8e-g	14.0fg	13.3fg	0.5fg	4.7b-f
N15039	2.3c-e	1.3bc	83.0c	7.9j-l	13.9b-d	0.7c	4.7b-d
N15041	2.1ij	1.3bc	82.9d	9.6ij	13.3fg	0.6d	4.4gh
N15044	2.2d-h	1.3bc	85.3ab	5.9lm	14.1a-c	0.9ab	4.6d-h
N16005	2.2e-i	1.1e	82.1cd	8.5jk	14.2ab	0.7cd	4.5d-h
N16012	2.3b-d	1.3bc	79.0gh	16.8de	13.0g-j	0.4gh	4.7b-e
N16021	2.4ab	1.3b	84.5b	6.9k-m	14.3ab	0.9b	4.8b
N17036	2.3bc	1.2b-d	78.9gh	19.1bc	13.5d-f	0.4gh	4.8bc
N17037	2.2c-f	1.2cd	78.6h	18.7b-d	13.2fg	0.4h	4.7b-f
N17040	2.2c-h	1.3b-d	79.5f-h	16.6de	12.8i-k	0.4gh	4.5d-h
N17041	2.2d-h	1.3b-d	79.2gh	17.7b-e	12.6jk	0.4gh	4.5d-h
N17044	2.5a	1.2b-d	76.8i	26.3a	14.0a-c	0.2i	5.1a
N17045	2.2f-i	1.3bc	79.3gh	17.2c-e	12.8i-k	0.4gh	4.5e-h
N17047	2.2e-i	1.3b	78.9gh	18.6b-d	12.7jk	0.4h	4.5d-h
Mean	2.2	1.3	80.6	14.4	13.3	0.5	4.6
LSD²	0.1	0.1	1.1	2.2	0.4	0.1	0.2

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.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 Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Three-year averages across all locations, (2019 – 2021)¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	6.2de	2.5b	77.7c-e	7.4d-f	1.2cd	1.6de
Emery	5.9g	2.5b	80.0ab	5.2gh	1.2bc	1.6de
NC-20	6.0fg	2.2d	81.1a	4.4h	1.1e	1.7b
Sullivan	6.1ef	2.4c	78.4cd	6.6ef	1.2cd	1.7bc
Walton	6.0fg	2.5b	77.8cd	6.6ef	1.2b	1.8a
N14002	6.5bc	2.5b	77.0de	7.6c-e	1.2bc	1.6de
N14027	7.0a	2.3d	73.2gh	11.3a	1.1e	1.6de
N15017	6.2de	2.3cd	78.8bc	6.1fg	1.1d	1.7b
N15039	6.4cd	2.5b	76.2ef	8.6b-d	1.2bc	1.5e
N15041	6.7b	2.2d	76.2ef	8.7bc	1.1e	1.6cd
N15044	7.0a	2.2d	73.0h	11.5a	1.1e	1.6cd
N16005	6.9a	2.8a	74.7fg	9.6b	1.3a	1.3f
Mean	6.4	2.4	77.0	7.8	1.2	1.6
LSD²	0.2	0.1	1.5	1.3	0.04	0.1

¹ Refer to page 3 for an explanation of the computations of these characters.² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 31. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Three-year averages across all locations, (2019 – 2021)¹, (cont.)

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.3b-d	1.3d	80.8cd	13.8c	13.4ed	0.5cd	4.7b-e
Emery	2.3b-d	1.3b-d	79.1f	16.8b	13.2ed	0.4ef	4.8b-d
NC-20	2.2e	1.3b-d	78.8f	19.0a	12.8f	0.3f	4.6e
Sullivan	2.3bc	1.4ab	80.1de	12.7cd	13.4ed	0.5d	4.9b
Walton	2.6a	1.5a	79.7ef	13.8c	13.8bc	0.5de	5.3a
N14002	2.4b	1.3cd	80.5de	12.8cd	13.9b	0.5cd	4.9bc
N14027	2.3c-e	1.3b-d	83.8a	8.7f	13.9b	0.8a	4.7c-e
N15017	2.3bc	1.4bc	79.7ef	14.3c	13.4ed	0.5de	4.9bc
N15039	2.3b-d	1.3cd	81.6bc	11.2de	13.7b-d	0.6bc	4.8b-d
N15041	2.2de	1.3b-d	81.8b	9.3ef	13.5c-e	0.6b	4.6de
N15044	2.3b-d	1.3b-d	83.9a	7.3f	14.0b	0.8a	4.7b-e
N16005	2.3cd	1.1e	81.9b	8.4f	14.4a	0.7b	4.7c-e
Mean	2.3	1.3	81.0	12.3	13.6	0.6	4.8
LSD²	0.1	0.1	1.0	2.0	0.4	0.1	0.2

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

² Minimum significant difference at P=0.05, based on the Fisher LSD test.

³ Lower iodine value indicates longer shelf life.

⁴ Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 32. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Rain Shelter Trial, Suffolk, VA 2021¹.

Variety	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	6.0bc	2.6bc	80.7a	4.7b	1.2b-d	1.4c-e
N14001	6.0bc	2.5cd	82.2a	3.4bc	1.2c-e	1.5c-e
N14002	6.3b	2.4de	80.7a	4.6bc	1.1de	1.5cd
N16012	5.8c	2.4de	82.6a	3.6bc	1.1e	1.4c-e
N16021	7.3a	2.5cd	71.0b	12.7a	1.2b-d	1.4c-e
N17036	5.9bc	2.7b	82.0a	3.0bc	1.3b	1.4c-e
N17037	6.2bc	2.7b	81.3a	3.8bc	1.2bc	1.4e
N17040	5.7c	2.3ef	82.4a	3.5bc	1.1e	1.6ab
N17041	5.9bc	2.3ef	82.2a	3.6bc	1.1e	1.5bc
N17044	5.7c	3.2a	82.4a	2.4c	1.4a	1.4de
N17045	6.0bc	2.2f	81.4a	4.2bc	1.1e	1.7a
N17047	6.1bc	2.3ef	82.1a	3.4bc	1.1e	1.6ab
Mean	6.1	2.5	80.9	4.4	1.2	1.5
LSD²	0.5	0.2	2.7	2.3	0.1	0.1

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

² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 32. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Rain Shelter Trial, Suffolk, VA 2021¹, (cont.)

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.2cd	1.2ab	78.7b	20.1b	13.2b-e	0.4b	4.6a-c
N14001	2.2cd	1.1ab	77.7bc	24.6ab	13.0c-e	0.3bc	4.5bc
N14002	2.2cd	1.1ab	78.5b	17.9b	13.2b-d	0.3b	4.5bc
N16012	2.1d	1.0a	78.4b	23.2ab	12.4e	0.3bc	4.2c
N16021	2.5a	1.4a	84.2a	5.6b	14.9a	0.9a	5.0a
N17036	2.3bc	1.3a	76.9bc	27.0ab	13.5bc	0.2bc	4.9ab
N17037	2.3b-d	1.1ab	77.7bc	22.6sb	13.5bc	0.3bc	4.6a-c
N17040	2.2b-d	1.2ab	78.1b	23.7ab	12.6de	0.3bc	4.6a-c
N17041	2.2cd	1.2ab	78.2b	22.7ab	12.6de	0.3bc	4.5bc
N17044	2.4ab	1.2ab	76.2c	34.5a	13.8b	0.2c	5.0a
N17045	2.2b-d	1.3ab	78.6b	20.9b	12.7c-e	0.3bc	4.6a-c
N17047	2.2cd	1.2ab	77.8bc	24.3ab	12.9c-e	0.3bc	4.5bc
Mean	2.3	1.2	78.4	22.3	13.2	0.3	4.6
LSD²	0.2	0.3	1.9	1.2	0.8	0.2	0.5

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

² Minimum significant difference at P=0.05, based on the Fisher LSD test.

³ Lower iodine value indicates longer shelf life.

⁴ Higher O/L ratio indicates longer shelf life.

Fatty Acid Results

Table 33. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Rain Shelter Trial, Suffolk, VA (2020-2021)¹ Two-year averages

	Palmitic C16:0	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Arachidic C20:0	Eicosenoic C20:1
Bailey II	5.9bc	2.2a	80.4a	5.4b	1.1a	1.7a
N14001	5.9bc	2.3a	81.0a	4.9b	1.1a	1.6a
N14002	6.4b	2.1a	78.3a	6.9b	1.0a	1.8a
N16012	5.9c	2.1a	80.2a	5.8b	1.0a	1.7a
N16021	6.9a	2.2a	72.3b	11.9a	1.1a	1.8a
N17036	5.9bc	2.4a	81.0a	4.3b	1.2a	1.7a
N17037	6.0bc	2.3a	80.2a	5.1b	1.1a	1.5a
N17045	6.1bc	1.9a	78.4a	7.1b	1.0a	2.0a
N17047	6.4bc	2.0a	78.2a	7.0b	1.0a	1.9a
Mean	6.2	2.2	78.9	6.5	1.1	1.7
LSD	0.5	0.5	4.7	4.3	0.2	0.5

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

² Minimum significant difference at P=0.05, based on the Fisher's LSD test.

Fatty Acid Results

Table 33. Fatty Acid Composition, Iodine Values, Oleic/Linoleic (O/L) Ratio, % Total Saturated, Polyunsaturated/Saturated (P/S) Ratio, and % Total Long Chain Saturated. Rain Shelter Trial, Suffolk, VA (2020-2021)¹ Two-year averages (cont.)

Variety	Behenic C22:0	Lignoceric C24:0	Iodine Value ³	O/L ratio ⁴	% Total Saturated	P/S ratio	% Total Long Chain Saturated
Bailey II	2.1bc	1.2b	79.8b	16.9ab	12.6b	0.4b	4.4c
N14001	2.0c	1.1b	79.5b	18.7a	12.4b	0.4b	4.2c
N14002	2.2a-c	1.2b	80.8ab	13.4ab	12.9b	0.5ab	4.5bc
N16012	2.1bc	1.1b	80.4b	16.5ab	12.3b	0.5b	4.3c
N16021	2.5ab	1.4a	84.1a	6.1b	14.0a	0.8a	5.0a
N17036	2.2a-c	1.3ab	78.4b	20.8a	13.0b	0.3b	4.7a-c
N17037	2.5a	1.3ab	78.9b	18.0a	13.2ab	0.4b	4.9ab
N17045	2.2a-c	1.3ab	81.3ab	14.2ab	12.5b	0.6ab	4.5bc
N17047	2.3a-c	1.3ab	80.9ab	16.4ab	12.9b	0.5ab	4.6a-c
Mean	2.2	1.2	80.5	15.7	12.9	0.6	4.6
LSD	0.4	0.2	3.8	11.1	1.0	0.3	0.5

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

² Minimum significant difference at P=0.05, based on the Fisher LSD test.

³ Lower iodine value indicates longer shelf life.

⁴ Higher O/L ratio indicates longer shelf life.