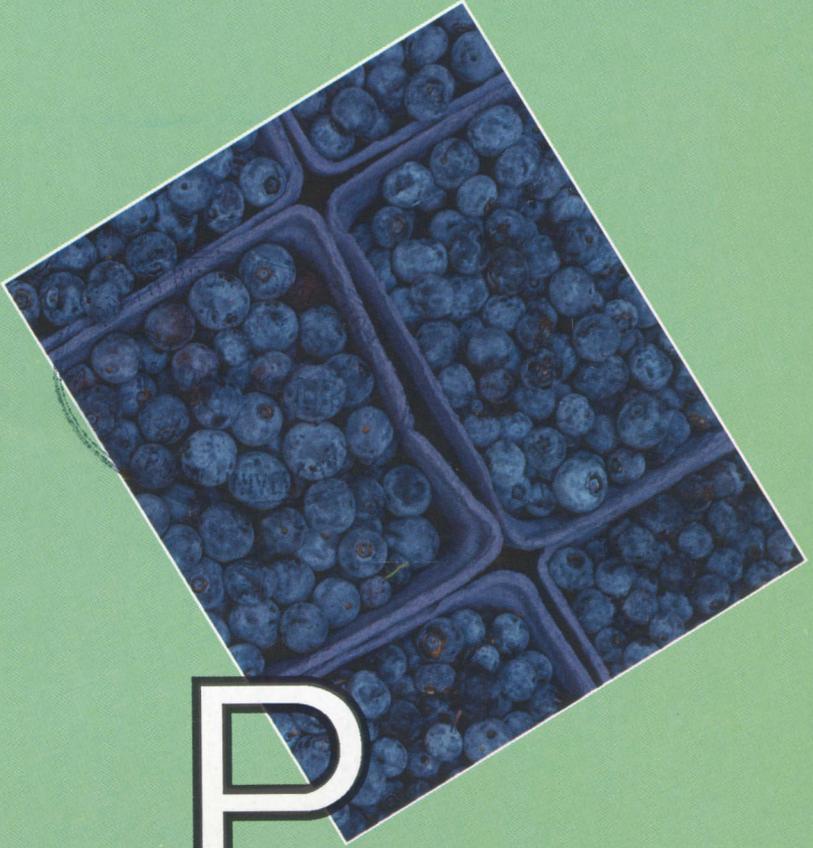


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# **P**erformance of **R**abbiteye **B**lueberry **C**ultivars in **S**outh Alabama



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**Alabama Agricultural Experiment Station**  
**Auburn University Auburn University, Alabama**  
**Lowell T. Frobish, Director**

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*Information contained herein is available to all without regard to race, color, sex, or national origin.*

# Performance of Rabbiteye Blueberry Cultivars in South Alabama

W.A. DOZIER, JR., J.W. KNOWLES, A.W. CAYLOR,  
A.A. POWELL, R. AKRIDGE, and J.A. McGUIRE<sup>1</sup>

**R**ABBITEYE BLUEBERRY (*Vaccinium ashei* Reid) is native to the Southeastern States. In recent years, interest has developed in commercial blueberry production and marketing in Alabama, as well as in Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, and South Carolina (1,2,3,4,6,7,8,10,15). There has been a large increase in commercial acreage in each of these states, along with the development of marketing organizations.

Rabbiteye blueberries are vigorous, tall growing, highly productive, long lived, and have insect and disease resistance (5,9,10). Plants perform best on a well-drained, medium-textured soil with a pH of 4.5-5.2. Since frost injury can be a problem, plantings do best when established on an elevated site with good air drainage. Frost injury can occur from the time the flower buds swell in the spring until after fruit set (11). Spiers (11) reported as flower bud development advanced in the spring the flowers became more sensitive to cold damage. He reported Climax, Woodard, Southland, and Delite cultivars had earlier flower bud development in the spring than other cultivars in the study and therefore incurred more cold damage from late spring frost.

Establishment of a blueberry planting is expensive; however, the productive life has exceeded fifty or more years in some states. The success of the planting is dependent upon the cultivars established and their relative positions in the planting. Two or more cultivars must be included in each planting because rabbiteye blueberries are self sterile and require cross pollination (5,9,10). Rabbiteye blueber-

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<sup>1</sup>Respectively, Professor, former Research Associate, and Research Associate of Horticulture; Extension Horticulturist; Superintendent of Brewton Experiment Field; and Head of Research Data Analysis.

ries are productive, however yield varies greatly with cultivars. Commercial yields generally range from 1,500 to 15,000 pounds per acre (10,14). Great variations exist among cultivars in fruit quality, size, and concentrated period of fruit ripening (7,10,12,14). Many new cultivars have been released in recent years and their performance in Alabama had not been evaluated until the study reported here was conducted.

## DESCRIPTION OF STUDY

An experimental planting of 10 cultivars of rabbiteye blueberry and 1 cultivar of highbush blueberry was established in March 1980 at the Brewton Experiment Field, Brewton, Alabama. A randomized complete block design was used with blocks of three plants per cultivar in each of the four blocks. The planting was established on a 6-foot x 12-foot spacing with 605 plants per acre.

Descriptions of cultivars evaluated in this study are listed in reported approximate order of ripening (5,9). Most cultivar ripening dates will overlap with each other.

Climax plants have an upright growth habit. The earliest ripening cultivar, Climax produces large sized and medium blue fruit with a small stem scar. Fruit quality of Climax is rated good. The fruit ripening of Climax is concentrated over a short period of time, which makes it ideal for machine harvest. Climax is a major cultivar used in commercial plantings today.

Premier plants produce vigorous upright growth. Premier is an early ripening cultivar that produces large berries with good quality. This cultivar consistently produces high fruit yields. Premier has promise as a good cultivar for commercial use.

Woodard plants have a short, spreading growth habit. Woodard is early ripening and produces large light blue berries that contain small seeds. The berries have excellent quality when fully ripe, but are tart when not ripe. Berries are too soft and bushes too spreading for optimum commercial harvest.

Homebelle plants have a vigorous upright growth habit. Homebelle ripens from early to midseason and produces medium size berries that turn dark blue when ripe and have a deep, dry stem scar. Fruit are soft with small soft seeds and fair to good quality.

Garden Blue plants have a vigorous, upright growth habit. Garden Blue ripens early to midseason and produces small, light blue berries. Fruit quality is good.

Briteblue plants are moderately vigorous with a spreading growth habit. Briteblue ripens early to midseason, at about the same time as Tifblue. The berries are large, firm, and light blue. Fruit quality is good. Briteblue produces berries in clusters, which makes harvest easier. Mature berries remain on the plants for a long time, which makes it suitable for you-pick operations. However, adequate plant growth has been lacking in many commercial plantings.

Tifblue plants have a vigorous, upright growth habit. Tifblue is the major blueberry cultivar planted in commercial and home plantings in the Southeastern United States. Berries are light blue, medium to large, have small seeds and a small, dry scar, and ripen in early to midseason. Fruit quality is good.

Menditoo plants have a small growth habit. Menditoo produces small, dark blue berries that ripen in midseason to late season. Berries are soft with fair flavor.

Southland plants have a compact, upright growth habit. The berries are medium to large with a small, dry scar. They ripen mid to late season and have good quality.

Powderblue plants have an upright, vigorous growth habit similar to Tifblue. Powderblue produces a good quality, medium to large berry with a small, dry scar. It ripens mid to late season.

Delite plants have a moderately vigorous, upright growth habit. Delite produces large, firm light blue berries that are sometimes reddish blue when ripe. Fruit quality is excellent. This variety has sustained unacceptable levels of cold damage in some commercial plantings.

The soil was a Benndale (Typic Paleudalts) sandy loam with a pH of 4.7 which tested very high in phosphorus and high in potassium prior to planting. Two-year-old bare root plants were used to establish the planting. The planting hole was dug and the soil removed was amended with equal volumes of peat moss prior to planting. After planting, the rows were mulched with pine bark. The mulch was applied down the row 3 feet wide and 4 to 6 inches deep.

Harrison was one of the 11 original cultivars planted, but all the plants of Harrison were dead after the 1982 growing season. This cultivar was not replaced, and Briteblue was planted in its place in May 1983. Since Briteblue plants were younger than others in the test, yield data of Briteblue are not presented from the study. A drip irrigation system was established in May 1983 with a 1-gallon-per-hour emitter per plant. Plants that died during the first 2 years were replanted the following dormant season to maintain the competitive ef-

fect of adjacent plants. Recommended practices for fertility and weed control were followed.

Fruit were harvested once per week by hand picking from the time the first berries were ripe until all fruit were harvested from each plant. Yield data from each plot were projected to pounds per acre produced. Average weight (grams per berry), the number of berries per pound, fruit length and width in centimeters, percent soluble solids, and potential gross income per acre were calculated. These data were then analyzed by analysis of variance procedures (16), and differences among the cultivars were determined by Duncan's multiple range test at  $\alpha = .05$ . This study was conducted to determine yield, fruit size and quality, ripening season and sequence, and concentration of fruit maturity of 10 cultivars of rabbiteye blueberry.

## RESULTS

Collection of yield data began in the fourth growing season after planting, table 1. Tifblue, Premier, and Powderblue were the highest yielding cultivars in each of the 6 years (1983-88) that yield data were collected and had the highest cumulative and average yields. In the second (1984) and third (1985) fruiting seasons, yields of some other cultivars were high but did not equal the three highest yielding cultivars. Yields reported in table 1 are similar to yields reported for corresponding cultivars from other states (1,7,10,13). However, yields for Powderblue and Premier have not been reported from similar evaluations.

Yields were reduced in the 1986, 1987, and 1988 fruiting seasons due to late spring frost which occurred during bloom. In 1986, damaging low temperatures of 26°F and 28°F occurred on March 22 and

TABLE 1. YIELD OF RABBITEYE BLUEBERRY AS AFFECTED BY CULTIVAR<sup>1</sup>

Cultivar	Yield per acre, by year						6-year av. yield
	1983	1984	1985	1986	1987	1988	
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
Tifblue.....	1,193	6,782	11,073	5,947	10,764	13,724	8,247 A <sup>2</sup>
Woodard.....	757	4,321	8,566	2,976	2,796	6,735	4,359 C
Southland.....	673	2,555	5,590	2,236	4,991	7,695	3,956 CD
Climax.....	665	2,196	6,214	1,385	838	5,842	2,857 D
Garden Blue.....	534	3,982	8,501	3,902	8,751	8,091	5,627 B
Delite.....	504	2,992	4,669	1,290	1,961	9,748	3,527 CD
Homebelle.....	297	3,475	8,219	3,800	1,712	6,368	3,979 CD
Menditoo.....	497	1,988	4,881	4,455	2,305	10,312	4,073 C
Premier.....	1,209	5,818	10,317	6,345	11,054	12,122	7,811 A
Powderblue.....	707	4,086	9,515	6,927	8,604	15,105	7,491 A

<sup>1</sup>Acre yields calculated with 605 plants per acre on a 6-foot x 12-foot spacing.

<sup>2</sup>Mean separation within columns by Duncan's multiple range test, 5 percent level.

23, respectively. In 1987, damaging low temperatures of 30, 26, 30, 32, 28, 25, and 26°F occurred on March 31 through April 6, respectively. In 1988, damaging low temperatures of 21, 22, 25, and 26°F occurred on March 15-20, respectively. Climax and Woodard were near full bloom at this date, and all other cultivars ranged from 10 percent to 50 percent full bloom. Yields of some cultivars were reduced by frost injury more than others each season. However, yields of Tifblue, Premier, and Powderblue were affected the least, table 1.

Yields of Climax, Woodard, and Delite, three widely recommended and planted cultivars, were greatly reduced by the late frost each season. Frost injury was greater on Delite and Climax than on other cultivars in the test. The flower buds of Climax were further advanced at the occurrence of the damaging low temperatures. Flower buds of Delite appeared to be more cold tender at the same stage of development than flower buds of other cultivars. This is reflected in the low cumulative yield of these cultivars, table 1.

The date of the first picking and number of weekly pickings required to harvest all fruit are presented in table 2. The ripening sequence for the cultivars varied between seasons. It should be noted that crop load, which is often a function of the severity of frost damage and the availability of soil moisture, greatly affects time of fruit ripening. The smaller the crop load and the more adequate the supply of soil moisture from either rainfall or irrigation, the earlier the berries ripen. However, the time of ripening can be altered if all the early fruit buds are killed leaving only those fruit buds which produce the latter ripening portion of the crop. Differences in ripening sequence in a given season were not as clear cut in this study as in previous reports, nor did the cultivars ripen in reported (5,9) order of ripening each season. Woodard and Climax were the earliest ripening cultivars for four of the six harvest seasons. The average ripening dates of Woodard and Climax were 9 days earlier than Menditoo, the latest ripening cultivar, and 4-5 days earlier than the other cultivars. In 1984 and 1987 all cultivars matured at the same time, except in 1984 Menditoo ripened 10 days later than the other cultivars.

Little difference occurred among cultivars in number of weeks required to harvest the fruit. The average number of weeks required to harvest the crop was lowest for Climax. However, this resulted from the light crops in 1986, 1987, and 1988 following frost injury. Similar variations in ripening season have been reported in other states (7,10,13). In Mississippi (13), Climax and Woodard were the earliest ripening cultivars, however, Tifblue was reported to ripen

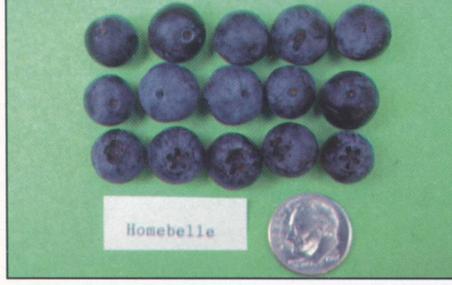
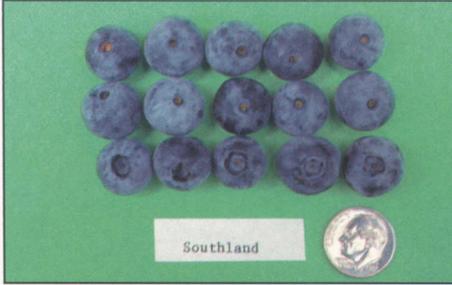


TABLE 2. EFFECT OF CULTIVAR OF RABBITEYE BLUEBERRY ON FIRST HARVEST DATE AND NUMBER OF WEEKLY HARVESTS REQUIRED

Cultivar	Result, by year												Av. date of first harvest	Av. No. yearly harvests
	1983		1984		1985		1986		1987		1988			
	First harvest	No. harvests												
Tifblue . . . . .	6-16	(6)	6-8	(5)	6-10	(5)	6-16	(4)	6-15	(5)	6-13	(5)	6-13	5.0
Woodard . . . . .	6-10	(6)	6-8	(5)	6-3	(10)	6-9	(5)	6-15	(4)	6-7	(5)	6-9	5.8
Southland . . . . .	6-16	(5)	6-8	(5)	6-10	(8)	6-16	(4)	6-15	(6)	6-13	(5)	6-13	5.5
Climax . . . . .	6-10	(5)	6-8	(5)	6-3	(6)	6-9	(3)	6-15	(2)	6-7	(4)	6-9	4.2
Garden Blue . . . . .	6-24	(4)	6-8	(5)	6-10	(6)	6-16	(4)	6-15	(5)	6-13	(4)	6-14	4.7
Delite . . . . .	6-16	(5)	6-8	(5)	6-10	(6)	6-16	(3)	6-15	(5)	6-13	(5)	6-13	4.8
Homebelle . . . . .	6-24	(4)	6-8	(6)	6-10	(8)	6-16	(4)	6-15	(5)	6-7	(5)	6-13	5.3
Menditoo . . . . .	6-24	(5)	6-18	(5)	6-17	(8)	6-16	(5)	6-15	(6)	6-20	(5)	6-18	5.7
Premier . . . . .	6-24	(4)	6-8	(6)	6-8	(7)	6-16	(4)	6-15	(5)	6-13	(5)	6-14	5.2
Powderblue . . . . .	6-24	(4)	6-8	(6)	6-8	(8)	6-16	(4)	6-15	(5)	6-13	(5)	6-14	5.3
Briteblue . . . . .											6-13	(5)		

TABLE 3. EFFECT OF CULTIVAR ON AVERAGE WEIGHT PER BERRY AND NUMBER OF BERRIES PER POUND

Cultivar	Weight per berry, by year						Average	Berries per lb.
	1983	1984	1985	1986	1987	1988		
	Grams	Grams	Grams	Grams	Grams	Grams	Grams	No.
Tifblue.....	1.27	1.36	1.23	1.14	1.34	1.26	1.27	DE <sup>1</sup> 361 EF <sup>1</sup>
Woodard.....	1.09	1.18	1.20	1.17	1.31	1.21	1.19	EF 383 DE
Southland.....	1.45	1.27	1.08	1.03	1.24	1.09	1.15	F 404 CD
Climax.....	1.08	1.20	1.35	1.32	1.42	1.54	1.32	CD 352 FG
Garden Blue....	.91	.95	.97	.75	.88	.91	.88	H 522 A
Delite.....	1.63	1.38	1.37	1.25	1.35	1.76	1.46	A 318 H
Homebelle.....	.91	1.13	1.03	1.07	1.07	1.15	1.06	G 433 B
Menditoo.....	1.09	1.23	1.09	1.06	1.20	1.05	1.12	FG 408 C
Premier.....	1.09	1.25	1.21	1.08	1.28	1.29	1.20	EF 382 DE
Powderblue....	1.45	1.54	1.25	1.20	1.42	1.39	1.37	BC 336 GH
Briteblue.....			1.27	1.28	1.47	1.62	1.44	AB 322 H

<sup>1</sup>Mean separation within columns by Duncan's multiple range test, 5 percent level.

before Woodard at three locations in Arkansas over a 7-year period (10).

Fruit weight, size, shape, and percent soluble solids data are presented in tables 3 and 4 for the 6-year period. Delite and Briteblue berries were larger and fewer fruit were required to make a pound. This was probably due to a lower fruit set per plant. The average weight of Climax fruit was increased due to low yields in 1986, 1987, and 1988. However, Climax fruit size was not as large as fruit of many other cultivars in 1983 and 1984. Fruit size of Powderblue was the largest of the higher yielding cultivars.

Percent soluble solids varied each season for all cultivars, table 4. The soluble solids were highest in 1988 and lowest in 1985. However, there was little difference in percent soluble solids between the higher yielding cultivars within the same year. The 3-year average soluble solids content was highest in the fruit of Garden Blue and lowest in fruit of Delite. The fruit of Garden Blue were the smallest, requiring more fruit to make a pound, and Delite produced the largest fruit, tables 3 and 4. The percent soluble solids decreased with increasing fruit size.

The potential gross income on a per acre basis is presented in table 5 and appendix tables 2-6. The yearly potential income gross was derived from the yield data in table 1 and the actual weekly wholesale price received by the growers at the Escambia County Blueberry Growers Association, appendix table 1. The wholesale prices received by the growers were highest at the beginning of the harvest season and declined as the harvest season progressed, appendix table 1. In 1988, the price did not change during the season and was higher

TABLE 4. EFFECT OF CULTIVAR OF RABBITEYE BLUEBERRY ON FRUIT LENGTH, WIDTH, AND PERCENT SOLUBLE SOLIDS

Cultivar	1986 <sup>1</sup>			1987 <sup>2</sup>			1988 <sup>3</sup>			3-year average		
	Width	Length	Sol. solids	Width	Length	Sol. solids	Width	Length	Sol. solids	Width	Length	Sol. solids
	<i>Cm</i>	<i>Cm</i>	<i>Pct.</i>	<i>Cm</i>	<i>Cm</i>	<i>Pct.</i>	<i>Cm</i>	<i>Cm</i>	<i>Pct.</i>	<i>Cm</i>	<i>Cm</i>	<i>Pct.</i>
Tifblue . . . . .	1.23	1.41	13.5	1.35	1.34	10.8	1.34	1.11	15.8	1.31 BC <sup>4</sup>	1.29 BCD	13.4 C
Woodard . . . . .	1.19	1.48	13.0	1.36	1.36	10.3	1.38	1.08	16.2	1.31 BC	1.31 BC	13.2 C
Southland . . . . .	1.20	1.42	12.9	1.37	1.37	11.1	1.37	1.13	15.5	1.32 BC	1.29 BCD	13.2 C
Climax . . . . .	1.23	1.50	15.5	1.32	1.34	12.0	1.49	1.14	17.6	1.35 ABC	1.33 ABC	15.0 B
Garden Blue . . . . .	1.16	1.25	16.1	1.20	1.19	12.7	1.18	1.07	18.5	1.18 E	1.17 E	15.8 A
Delite . . . . .	1.32	1.43	12.0	1.40	1.38	10.9	1.44	1.30	14.0	1.39 A	1.37 A	12.3 D
Homebelle . . . . .	1.14	1.32	14.4	1.31	1.30	13.0	1.27	1.12	17.6	1.24 D	1.25 D	15.0 B
Menditoo . . . . .	1.26	1.40	14.0	1.39	1.37	12.3	1.24	1.11	17.8	1.29 BCD	1.29 BCD	14.7 B
Premier . . . . .	1.21	1.40	13.6	1.32	1.32	11.1	1.31	1.11	16.1	1.28 CD	1.28 CD	13.6 C
Powderblue . . . . .	1.30	1.43	13.8	1.43	1.41	11.0	1.28	1.17	15.3	1.34 ABC	1.34 AB	13.4 C
Briteblue . . . . .	1.20	1.47	13.3	1.40	1.40	11.3	1.46	1.21	13.8	1.35 AB	1.36 A	12.8 CD

<sup>1</sup>Average of data taken June 16 and 23, 1986.

<sup>2</sup>Average of data taken June 15 and 24, 1987.

<sup>3</sup>Data taken June 20, 1988.

<sup>4</sup>Mean separation within columns by Duncan's multiple range test, 5 percent level.

TABLE 5. EFFECT OF CULTIVAR AND YEAR ON POTENTIAL GROSS INCOME PER ACRE

Cultivar	Yearly per acre income <sup>1</sup>						Cumulative income, 1983-88	6-year average income
	1983	1984	1985	1986	1987	1988		
	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>
Tifblue.....	1,126	5,459	10,525	5,173	9,431	13,692	45,406	7,568 A <sup>2</sup>
Woodard.....	761	3,632	8,314	2,514	2,443	6,735	24,399	4,067 C
Southland.....	666	2,132	5,192	1,964	4,362	7,692	22,008	3,668 CD
Climax.....	697	1,912	6,580	1,261	720	5,842	17,012	2,835 D
Garden Blue...	496	3,164	8,141	3,338	7,747	8,090	30,976	5,163 B
Delite.....	478	2,327	4,110	1,126	1,727	9,728	19,496	3,249 CD
Homebelle....	293	2,746	7,382	3,364	1,495	8,282	23,562	3,927 CD
Menditoo.....	443	1,415	3,829	3,735	2,023	10,275	21,270	3,620 C
Premier.....	1,136	4,614	9,699	5,539	9,704	12,092	42,784	7,131 A
Powderblue....	660	3,195	8,481	5,971	7,573	15,076	40,956	6,826 A

<sup>1</sup>Derived from actual yield times actual price per week each season (appendix tables 1-7).

<sup>2</sup>Mean separation within columns by Duncan's multiple range test, 5 percent level.

than in other years. There was a potential due to early season prices for greater income from early ripening cultivars, such as Climax and Woodard. Higher yields of the slightly later maturing cultivars resulted in greater gross income per acre than the early ripening cultivars even though they sold for lower prices most years, table 5. The average gross income for the 6 fruiting years was \$7,568, \$7,131, and \$6,826 per acre for Tifblue, Premier, and Powderblue, respectively, compared to \$2,835, \$4,067, and \$3,249, respectively, for Climax, Woodard, and Delite.

At least two cultivars must be included in a planting to ensure pollination. From yields and fruit quality data derived from this study, it appears Tifblue, Premier, and Powderblue would offer the most potential for sustained yields and income. The commonly planted cultivars Woodard, Climax, and Delite produced some of the lowest yields and income on a per acre basis. The low yields and returns of these cultivars resulted in part from greater frost injury than some of the other cultivars suffered during the bloom period in 1986, 1987, and 1988. At present, Woodard and Delite are not recommended in Alabama for large commercial plantings that involve packing and shipping of berries. Climax remains the leading companion cultivar with Tifblue in commercial plantings. However, it has been clearly established in Alabama that late spring freezes greatly reduce yields of Climax. Therefore, if this cultivar is used in plantings to meet the need for an early cultivar, growers must be willing to provide freeze protection during years of unfavorable weather or they will suffer considerable economic loss.

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## APPENDIX

APPENDIX TABLE 1. WEEKLY BLUEBERRY PRICES RECEIVED BY GROWERS AT THE ESCAMBIA COUNTY BLUEBERRY GROWERS ASSOCIATION, 1983-88

Price per pound, by week and year											
Week	1983	Week	1984	Week	1985	Week	1986	Week	1987	Week	1988
6/20	\$1.08	6/12	\$0.90	6/12	\$1.13	6/17	\$0.92	6/18	\$0.86	6/09	\$1.00
6/21	1.04	6/20	.83	6/19	.83	6/23	.83	6/25	.92	6/15	.98
6/28	1.04	6/28	.75	6/27	.81	6/30	.83	7/02	.92	6/20	1.00
6/29	.96	7/02	.65	7/03	.79	7/07	.79	7/08	.76	6/23	1.00
7/05	1.02	7/10	.71	7/10	.76					6/27	1.00
7/06	.86	7/17	.67	7/16	.67					6/30	1.00
7/07	.75	7/18	.63							7/05	1.00
7/11	.75									7/08	1.00
7/12	.75									7/12	.98
7/13	.73									7/14	.98
7/14	.75									7/20	.98
7/18	.90										
7/19	.83										
7/20	.83										
7/25	.41										
7/26	.83										

APPENDIX TABLE 2. POTENTIAL TOTAL GROSS INCOME PER ACRE<sup>1</sup> FROM BLUEBERRY CULTIVAR TRIAL, 1983

Cultivar	Weekly gross income							Yearly gross income
	6/10	6/16	6/24	6/30	7/5	7/11	7/19	
	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>
Tifblue . . . . .		21.78	195.05	257.49	430.93	220.07	1.51	1,126.83
Woodard . . . . .	17.97	155.99	301.23	127.78	108.74	46.50	3.40	761.61
Southland . . . . .		65.34	272.65	98.78	164.55	65.04		666.36
Climax . . . . .	131.76	255.96	212.36	34.56	52.02	10.50		697.16
Garden Blue . . . . .		3.26	91.20	113.25	168.15	107.76	12.48	496.10
Delite . . . . .		11.35	122.72	103.09	151.92	87.37	2.27	478.72
Homebelle . . . . .		8.16	110.02	68.22	84.24	20.25	2.62	293.51
Menditoo . . . . .			17.81	59.52	200.04	138.39	27.97	443.73
Premier . . . . .			158.60	259.17	483.64	232.35	2.26	1,136.02
Powderblue . . . . .			95.34	153.91	263.28	143.67	4.53	660.73

<sup>1</sup>Yield (pounds) per acre x price per harvest date.

APPENDIX TABLE 3. POTENTIAL TOTAL GROSS INCOME PER ACRE<sup>1</sup> FROM BLUEBERRY CULTIVAR TRIAL, 1984

Cultivar	Weekly gross income					Yearly gross income
	6/08	6/18	6/25	7/02	7/09	
	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>
Tifblue . . . . .	150.57	2,507.94	1,443.62	1,116.13	241.18	5,459.44
Woodard . . . . .	453.86	1,959.48	706.74	434.52	77.87	3,632.47
Southland . . . . .	116.15	1,239.56	436.87	279.20	60.28	2,132.06
Climax . . . . .	556.74	987.30	249.00	105.62	14.08	1,912.74
Garden Blue . . . . .	202.76	1,353.06	664.08	708.83	235.95	3,164.68
Delite . . . . .	43.55	739.77	760.08	591.29	192.68	2,327.37
Homebelle . . . . .	44.68	1,109.16	769.12	669.34	153.98	2,746.28
Menditoo . . . . .	1.36	192.33	318.86	490.57	412.24	1,415.36
Premier . . . . .	51.72	2,054.96	1,141.90	1,043.37	322.58	4,614.53
Powderblue . . . . .	209.60	1,185.19	700.50	745.16	355.22	3,195.67

<sup>1</sup>Yield (pounds) per acre x price per harvest date.

APPENDIX TABLE 4. POTENTIAL TOTAL GROSS INCOME PER ACRE<sup>1</sup> FROM BLUEBERRY CULTIVAR TRIAL, 1985

Cultivar	Weekly gross income										Yearly gross income	
	6/03	6/10	6/17	6/24	7/01	7/08	7/15	7/22	7/29	8/05		
	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	
Tifblue . . . . .		796.65	4,456.72	3,110.01	1,885.68	276.50						10,525.56
Woodard . . . . .	612.46	1,741.33	2,518.77	1,569.53	1,159.92	429.76	197.60	52.93	26.80	5.36		8,314.46
Southland . . . . .		647.49	1,633.98	1,524.71	865.89	385.52	134.52					5,192.11
Climax . . . . .	1,897.60	1,878.29	1,625.84	804.69	320.92	53.56						6,580.90
Garden Blue . . . . .		1,389.90	2,918.79	1,940.54	1,465.29	413.17	13.68					8,141.37
Delite . . . . .		119.78	1,011.35	1,127.14	1,249.02	500.07	103.36					4,110.72
Homebelle . . . . .		414.71	2,121.01	2,136.42	1,778.76	650.17	213.56	32.83	35.51			7,382.97
Menditoo . . . . .			292.67	519.58	856.17	751.29	658.16	426.12	304.85	20.77		3,829.61
Premier . . . . .	86.52	829.42	3,713.18	2,954.80	1,650.78	515.08	36.48					9,699.74
Powderblue . . . . .		627.15	2,108.58	2,459.29	1,917.27	985.92	313.88	46.23	22.78			8,481.10

<sup>1</sup>Yield (pounds) per acre x price per harvest date.

APPENDIX TABLE 5. POTENTIAL TOTAL GROSS INCOME PER ACRE<sup>1</sup> FROM BLUEBERRY CULTIVAR TRIAL, 1986

Cultivar	Weekly gross income							Yearly gross income
	6/09	6/16	6/23	6/30	7/07	7/14	7/21	
	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>
Tifblue . . . . .		2,504.24	1,814.38	704.67	150.10			5,173.39
Woodard . . . . .		538.20	1,396.89	409.19	136.67	33.97		2,514.92
Southland . . . . .		1,140.80	545.31	237.38	41.40			1,964.90
Climax . . . . .	586.96	562.12	87.98	24.90				1,261.96
Garden Blue . . . . .		1,217.16	995.17	769.41	357.08			3,338.82
Delite . . . . .		569.48	380.97	161.01	15.01			1,126.48
Homebelle . . . . .		2,177.64	804.27	322.04	60.83			3,364.78
Menditoo . . . . .		872.16	882.29	1,064.89	660.44	180.12	75.84	3,735.74
Premier . . . . .		2,928.36	1,628.46	752.42	248.06	7.11	2.37	5,539.78
Powderblue . . . . .		2,451.80	1,922.28	1,254.96	304.15	26.86	11.06	5,971.11

<sup>1</sup>Yield (pounds) per acre x price per harvest date.

APPENDIX TABLE 6. POTENTIAL TOTAL GROSS INCOME PER ACRE<sup>1</sup> FROM BLUEBERRY CULTIVAR TRIAL, 1987

Cultivar	Weekly gross income						Yearly gross income
	6/15	6/24	6/29	7/07	7/13	7/20	
	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>
Tifblue . . . . .	3,281.76	3,129.54	1,518.00	1,388.28	114.00		9,431.58
Woodard . . . . .	985.56	859.14	363.40	235.52			2,443.62
Southland . . . . .	1,111.98	1,499.84	759.00	770.04	134.52	87.40	4,362.78
Climax . . . . .	568.46	152.22					720.68
Garden Blue . . . . .	996.74	2,186.12	1,693.72	2,483.08	387.60		7,747.26
Delite . . . . .	300.14	743.04	396.52	272.32	15.96		1,727.98
Homebelle . . . . .	331.10	774.86	239.20	140.76	9.88		1,495.80
Menditoo . . . . .	143.62	611.46	456.32	599.84	148.20	63.84	2,023.28
Premier . . . . .	2,635.90	3,247.36	1,763.64	1,803.20	254.60		9,704.70
Powderblue . . . . .	1,278.82	2,856.06	1,505.12	1,678.08	255.36		7,573.44

<sup>1</sup>Yield (pounds) per acre x price per harvest date.

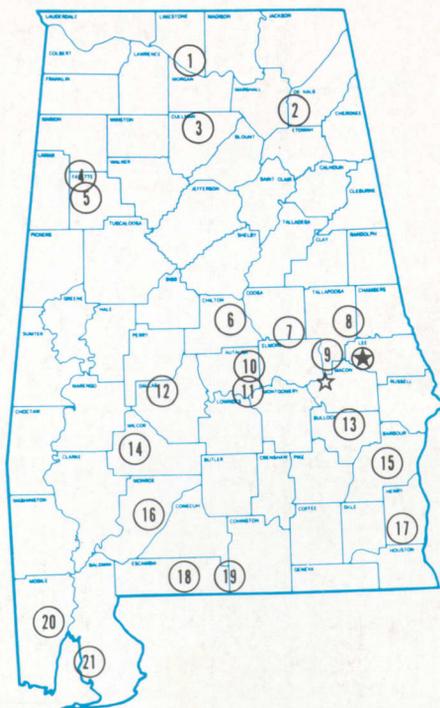
APPENDIX TABLE 7. POTENTIAL TOTAL GROSS INCOME PER ACRE<sup>1</sup> FROM BLUEBERRY CULTIVAR TRIAL, 1988

Cultivar	Weekly gross income							Yearly gross income
	6/07	6/13	6/20	6/27	7/05	7/12	7/18	
	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>
Tifblue .....		884.00	4,789.00	3,696.00	2,797.00	1,172.08	354.76	13,692.84
Woodard .....	1,236.00	2,353.00	2,472.00	499.00	175.00			6,735.00
Southland .....	545.00	1,498.00	3,106.00	1,222.00	1,210.00	111.72		7,692.72
Climax .....	3,345.00	1,547.00	783.00	167.00				5,842.00
Garden Blue .....		1,199.00	3,759.00	2,191.00	939.00	2.94		8,090.94
Delite .....		1,316.00	2,611.00	2,645.00	2,190.00	717.36	248.92	9,728.28
Homebelle .....	128.00	1,786.00	2,652.00	1,268.00	534.00			8,282.00
Menditoo .....	233.00	1,278.00	2,034.00	2,945.00	2,013.00	1,772.82		10,275.82
Premier .....		855.00	3,971.00	3,049.00	2,754.00	1,052.52	410.62	12,092.14
Powderblue .....	1,290.00	4,264.00	3,032.00	3,770.00	1,299.00	1,421.00		15,076.00

<sup>1</sup>Yield (pounds) per acre x price per harvest date.

# Alabama's Agricultural Experiment Station System AUBURN UNIVERSITY

With an agricultural research unit in every major soil area, Auburn University serves the needs of field crop, livestock, forestry, and horticultural producers in each region in Alabama. Every citizen of the State has a stake in this research program, since any advantage from new and more economical ways of producing and handling farm products directly benefits the consuming public.



## Research Unit Identification

- ★ Main Agricultural Experiment Station, Auburn.
- ☆ E. V. Smith Research Center, Shorter.

1. Tennessee Valley Substation, Belle Mina.
2. Sand Mountain Substation, Crossville.
3. North Alabama Horticulture Substation, Cullman.
4. Upper Coastal Plain Substation, Winfield.
5. Forestry Unit, Fayette County.
6. Chilton Area Horticulture Substation, Clanton.
7. Forestry Unit, Coosa County.
8. Piedmont Substation, Camp Hill.
9. Plant Breeding Unit, Tallassee.
10. Forestry Unit, Autauga County.
11. Prattville Experiment Field, Prattville.
12. Black Belt Substation, Marion Junction.
13. The Turnipseed-Ikenberry Place, Union Springs.
14. Lower Coastal Plain Substation, Camden.
15. Forestry Unit, Barbour County.
16. Monroeville Experiment Field, Monroeville.
17. Wiregrass Substation, Headland.
18. Brewton Experiment Field, Brewton.
19. Solon Dixon Forestry Education Center,  
Covington and Escambia counties.
20. Ornamental Horticulture Substation, Spring Hill.
21. Gulf Coast Substation, Fairhope.