

**EVALUATION OF FALL RED RASPBERRY CULTIVARS****for SOUTHERN OHIO, 1999**

Brad R. Bergesford Extension Agent, Horticulture; Dick Funt Extension Small Fruit Specialist; Thom Harker Research Assistant, Horticulture; Christie Welch Research Assistant, Horticulture; Lynn Miller Research Asssitant, Horticulture; Wayne Lewis Farm Manager, Piketon Research & Extension Center; Dee Bapst Summer Assistant; Kristy Moore Summer Assistant; Philip Roberts Summer Assistant; and Andrew Blanford Summer Assistant.

The Ohio State University Piketon Research and Extension Center

The Ohio State University Extension Enterprise Center

1864 Shyville Road, Piketon, Ohio 45661-9749

(740) 289-3727, bergesford.1@osu.edu , [www.ag.ohio-state.edu/~prec](http://www.ag.ohio-state.edu/~prec)

This Fall red Raspberry cultivar trial has compared 3 cultivars using 8 replications of each cultivar since varieties Heritage and Ruby were planted in June of 1995 and Autumn Bliss was planted in May of 1996. Objectives are to evaluate potential cultivars of Red Raspberry for their suitability in a southern Ohio growing season. The plots are located at the Ohio State University Piketon Research & extension Center in Piketon, Ohio. Data was analyzed by SAS statistical software.

**METHODS:**

**Planting:** Plants were field planted on June 1995 (Heritage and Ruby) and May 1996 (Autumn Bliss) by hand.

**Spacing:** Rows are 10 feet apart, with plants set on raised beds 2 feet spacing between each plant in the row. The beds have drip tube irrigation with 10 plants per plot (2' x 20') provides a plant density of approximately 2,178 plants per acre.

**Soil Type: Doles Silt Loam**

**Fertilizer:** Fertilizer applications are made annually according to soil test recommendations. Fertigated 20 lbs. actual Nitrogen per acre using ammonium nitrate on 8/11/99.

On 11/24/99, 130 pounds of 0-46-0 was applied per acre. On December 1 1.2 tons of ag lime was applied per acre.

**Weed Control: March 6, 1999 Princep 4L and Surflan were applied at a rate of 3.5 quarts/acre and 5 quarts/acre respectively. No other herbicides were applied. In mid-summer, weeds were removed with a lawn mower and weed eater.**

**Pest Management: .64 oz fl. Oz. Sevimol per gallon H2O was applied with a 3 point tractor mounted Air Blast sprayer. Electrified fence is installed around the perimeter of the field to reduce deer damage to the plants.**

**Irrigation:** Trickle irrigated on 6/23, 7/7, 7/9, 7/13, 7/20, 8/6, 8/12, 8/13, and 9/10.

**Harvests: Fruit was harvested on 8/12, 8/17, 8/23, 8/30, 9/10, 9/22, and 9/30.**

-

**RESULTS:**

There was average fruit set and yield throughout the harvest season. Harvest yield and quality attributes were collected and observed. The cultivar Heritage had the largest total production per acre for the season at 1,547.2 pounds per acre with an

average berry weight of 1.5089 grams. The cultivar Autumn Bliss had the largest average berry weight for the season at 1.6363 grams. With field trials similar to this, Red raspberry crops can fit into the production scheme for Southern Ohio growers. The growing season and average daily heat units seem adequate to produce high quality red raspberry crop.

Red Raspberry evaluations and field trials will continue at the Ohio State University Piketon Research & Extension Center in 2000. Growers are invited to visit the many fruit and vegetable trials that are being performed for personal observations throughout the season.

**Table 1. Yields and Quality comparisons from replicated Red Raspberry cultivar trials in southern Ohio: Ohio State University Piketon Research & Extension Center, Piketon, Ohio 1999**

| FALL RED RASPBERRY 1999 |           |                    |
|-------------------------|-----------|--------------------|
| Cultivar                | Lbs./acre | Ave. Fruit Wt. (g) |
| Heritage                | 1547.2    | 1.5089             |
| Autumn Bliss            | 463.2     | 1.6363             |
| Ruby                    | 254.5     | 1.0887             |
| LSD                     | 523.56    | 0.4615             |

**Table 2. Spray and Irrigation Data for Red Raspberry cultivar trials in southern Ohio: Ohio State University Extension Piketon Research & Extension Center, Piketon, Ohio 1999**

| DATE   | RED RASPBERRIES |  |
|--------|-----------------|--|
| 23-Jun | irrigated       | 3 hours                                  |
| 7-Jul  | irrigated       | 4 hours                                  |
| 9-Jul  | irrigated       | accidentally left on<br>over the weekend |
| 13-Jul | sprayed         | Sevimol @ .64oz/gal h20                  |
| 20-Jul | irrigated       | 3 hours                                  |
| 6-Aug  | irrigated       | 4 hours                                  |
| 12-Aug | fertigated      | 20#/acre<br>N                            |
| 13-Aug | irrigated       | 3 hours                                  |
| 10-Sep | irrigated       | 3 hours                                  |

|        |                                     |                         |
|--------|-------------------------------------|-------------------------|
| 24-Nov | fertilized                          | 35# 0-46-0 for the plot |
| 1-Dec  | applied 600 # ag. Lime for the plot |                         |

**Table 3. Rainfall amounts and average high and low temperatures for the 1999 season: Ohio State University Extension Piketon Research & Extension Center, Piketon, Ohio 1999**

| 1999 Weather Summary @ Piketon, Ohio |                |          |                 |              |                     |                      |
|--------------------------------------|----------------|----------|-----------------|--------------|---------------------|----------------------|
|                                      | Ave. High Temp | Avg Temp | Normal Ave Temp | Avg Low Temp | Total Precipitation | Normal Precipitation |
| January                              | 45             | 34.6     | 30.8            | 24.3         | 4.7                 | 3.1                  |
| February                             | 49.1           | 37.6     | 33.4            | 27.3         | 3.34                | 2.1                  |
| March                                | 50.4           | 38.7     | 41.9            | 26.1         | 1.85                | 4.5                  |
| April                                | 68.7           | 56.4     | 52.6            | 44.2         | 2.11                | 3.2                  |
| May                                  | 78.6           | 63.9     | 61.7            | 48.4         | 1.37                | 4.5                  |
| June                                 | 85.1           | 72.5     | 72.4            | 59.9         | 1.15                | 3.9                  |
| July                                 | 92.5           | 79.1     | 75.9            | 66.4         | 3.82                | 4                    |
| August                               | 84.8           | 71.7     | 74.1            | 59.7         | 5.42                | 2.7                  |
| September                            | 78             | 62.2     | 65.1            | 47.1         | 0.87                | 1.9                  |
| October                              | 68.5           | 53.3     | 54.2            | 40.4         | 2.44                | 1.9                  |
| November                             | 60.5           | 47.3     | 42.6            | 35.1         | 2.22                | 3                    |
| December                             | 46             | 35.9     | 36.2            | 26.1         | 3.1                 | 2.1                  |
| 1999                                 | 67.1           | 54.3     | 53.4            | 42.1         | 32.4                | 37.1                 |

[BACK](#) | [HOME](#)