

Heat Stress Tomato Trial 2020 Results

Summary

- The most common number of tomatoes that a person took was three.
- Twenty-nine different people participated.
- 147 tomato plants were given out.
- Response rate was 89.7% in May and June, 86.2 % in August and 82.8% in September.

Survival & Health

- Varieties “Atkinson”, “Big Beef” and “Thessaloniki” had 100% survival of the reporting plants until August.
- The survival numbers around September are fairly similar, though “Purple Calabash” started to crash a month earlier than the others.
- Health ratings were oddly better in June than in May.
- The plant that kept its health rating consistently above 2.50 was “Purple Calabash”. This variety crashed early, but the plants that remained were healthy
- “Big Beef” was also consistently healthy but had poor survival in September.
- “Bella Rosa” and “Tasti-lee”, both determinate tomatoes, had trouble in June and were the lowest in survival in August.

Tomato Production

- Flowering was highest in June for most varieties.
- “Atkinson” and “Thessaloniki” were slow to start flowering. “Atkinson” eventually caught up, but “Thessaloniki” remained sluggish through the entire experiment.
- The highest average production was from “Celebrity”, “Valley Girl”, “Bella Rosa” and “Big Beef”.
- “Tasti-lee” is a hybrid, but it’s production was the lowest. Its standard deviation was low too, so people consistently got low numbers of tomatoes from this variety.
- “Cherokee Purple” had uncommon flowering and sets, though most participants reported it as surviving and fairly healthy. It could probably benefit from being planted earlier.
- “Big Beef” had high production in the 2019 trial, but in both 2019 & 2020 there have been issues with the number of survey responses this variety has gotten.
- The variety most likely to give you at least one tomato was “Big Beef”, but reporting for it was consistently under the ten plant minimum. Next was “Bella Rosa”, with 93% of the people growing this plant reporting one tomato.
- The plant least likely to get you at tomato was “Cherokee Purple” and “Thessaloniki”.

Popularity

- The tomato with the most positive comments was Celebrity. As that everyone got a “Celebrity” tomato plant as a control, this is artificially inflated.
- “Purple Calabash”, “Bella Rosa” and “Valley Girl” got the most positive comments.

- The most negative comments were given to “Big Beef” and “Cherokee Purple”.
- As that there were less than ten reports for “Big Beef”, it’s interesting that it was that disliked, though it nearly had as many positive comments.
- “Cherokee Purple” received the same number of positive comments as negatives.

Changes for Next Year

- Varieties “Tasti-lee” and “Thessaloniki” will not be returning. Dependent on space, one or two new varieties will be taking their place.
- Dependent on space conditions, tomatoes will be given out one to two weeks earlier than this year.
- Data collection cut-off will be August 31st.
- Production measurements will be streamlined to allow for better accuracy and ease of answer.

If you want the compiled data, see the appendix for tables, tables and more tables!

Appendix

Health Rating

Variety	May	June	July	August
Atkinson	3.00	2.71	2.73	2.36
Bella Rosa	2.87	2.36	2.33	1.86
Big Beef	2.89	3.00	2.44	2.57
Celebrity	2.87	2.86	2.56	2.00
Cherokee Purple	2.83	3.00	2.88	2.33
Purple Calabash	2.92	3.00	2.57	2.50
Thessaloniki	2.82	3.00	2.38	2.13
Tasti Lee	2.92	2.30	2.11	1.55
Valley Girl	2.83	2.73	2.50	2.11

Cells in red indicate there are less than ten replies for that variety.

Percent Flowering

Variety	May	June	July	August
Atkinson	0	92	73	69
Bella Rosa	47	79	60	57
Big Beef	33	100	67	57
Celebrity	30	82	61	58
Cherokee Purple	50	45	64	60
Purple Calabash	33	73	56	63
Thessaloniki	9	45	44	75
Tasti Lee	46	73	67	45
Valley Girl	50	91	40	56

Cells in red indicate there are less than ten replies for that variety.

Percent Tomato Sets

Variety	June	July	August
Atkinson	46	27	31
Bella Rosa	43	7	21
Big Beef	56	22	43
Celebrity	61	25	38
Cherokee Purple	36	0	10
Purple Calabash	36	33	63
Thessaloniki	27	22	50
Tasti Lee	27	22	9
Valley Girl	64	40	44

Cells in red indicate there are less than ten replies for that variety.

Production

Variety	Average Picked	SD	% Produced A Tomato
Atkinson	9.42	11.81	83
Bella Rosa	10.50	7.87	93
Big Beef	10.25	3.92	100
Celebrity	12.44	8.18	89
Cherokee Purple	5.89	5.04	67
Purple Calabash	8.82	7.56	83
Thessaloniki	8.20	10.89	67
Tasti Lee	6.00	3.85	75
Valley Girl	10.73	10.70	83

Percent Survival

Variety	May	June	July	August	September
Atkinson	100	100	100	93	50
Bella Rosa	100	93	100	93	71
Big Beef	100	100	100	78	50
Celebrity	97	97	97	93	74
Cherokee Purple	92	92	92	83	78
Purple Calabash	92	92	90	67	42
Thessaloniki	100	100	100	80	40
Tasti Lee	92	85	82	85	42
Valley Girl	92	92	91	75	50

Cells in red indicate there are less than ten replies for that variety.

August Comments

September Comments

Variety	# Positive	# Negative	Neutral	Total	Variety	# Positive	# Negative	Neutral	Total
Atkinson	3	2	1	6	Atkinson	1	3	2	6
Bella Rosa	4	2	2	8	Bella Rosa	5	3	0	8
Big Beef	1	2	0	3	Big Beef	3	4	0	7
Celebrity	10	5	0	15	Celebrity	10	2	0	12
Cherokee Purple	3	0	0	3	Cherokee Purple	4	4	0	8
Purple Calabash	6	2	0	8	Purple Calabash	5	1	0	6
Thessaloniki	2	2	0	4	Thessaloniki	2	3	0	5
Tasti Lee	2	0	0	2	Tasti Lee	1	1	0	2
Valley Girl	3	0	0	3	Valley Girl	5	1	0	6

Where Were the Tomatoes Grown?

