

GreenGate Fresh Crop Report

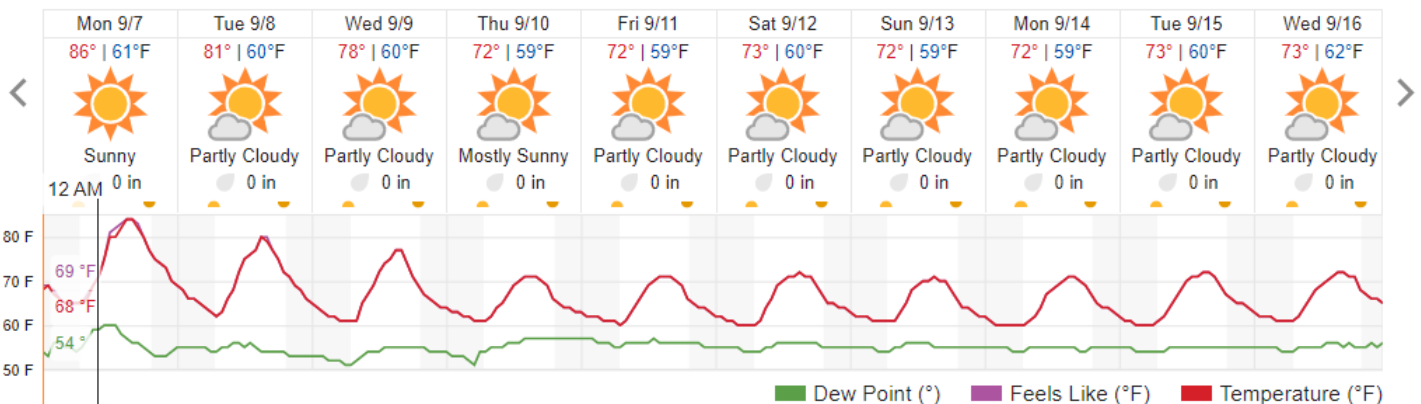
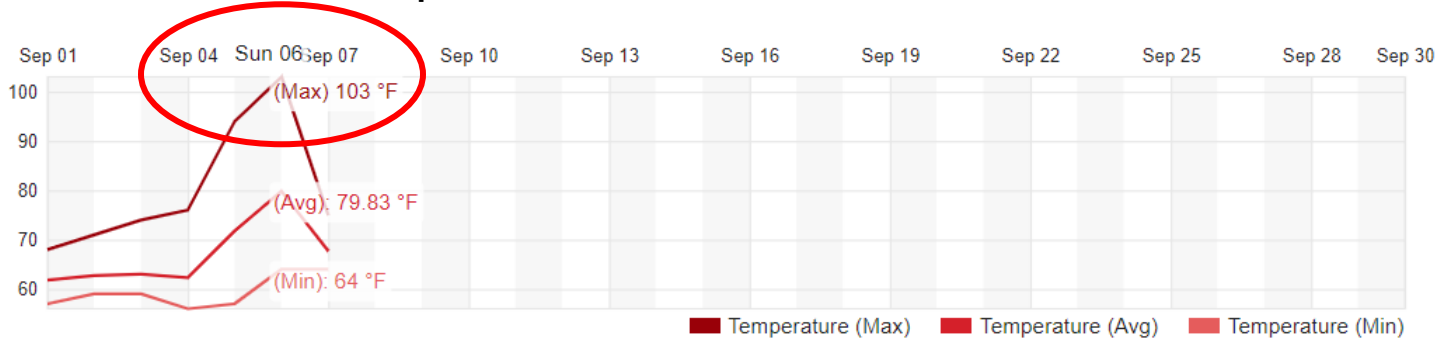


Report Date	9/7/2020
Growing Location	Salinas, CA

Overview

- The fires are now contained in the Salinas area, but Labor Day weekend has slammed us yet another heat wave, breaking records for high temperatures across the state. Salinas hit 100F+ in some areas.
- Crops that were recovering from the previous heat wave when the fires were sparked are now plunged back into another difficult time. Tip burn is rampant, sun scalding is present and plants in general are exhibiting signs of stress which show as twisting/elongated cores, plants wanting to flower, bitter taste and other survival tactics.
- Both yields and quality will be impacted by this second round of extreme heat that many crops have had to live through. Some fields will be left behind completely, and markets will likely show the impact of these stressors.
- Shippers will be relying heavily on their harvest crews to identify and discard heads that are showing more stress than others and overall defect percentages for conditions like tip burn, fringe burn and wilting are likely to increase in the bag for a period of approximately 2 weeks (depending on how the weather continues to develop as the season begins to wind down).
- Thankfully, temperatures are expected to return to normal by Tuesday/Wednesday and there are currently no immediate forecasts of another spike in temperatures or any precipitation.

Historical Weather (Salinas Airport Station):



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Crops Covered This Week:

- Iceberg Lettuce
- Romaine Lettuce
- Green Cabbage
- Spinach
- Arugula
- Kale

Iceberg

Within the last weeks, iceberg fields have been showing the main effects of the heat stress from a few weeks back. There's no sugar-coating the fact that nearly every iceberg field in the region is feeling the burn one way or another. Tip burn is very widespread across virtually the entire valley. Other main defects showing include twisting cores, burst heads, sun scalding, verticillium wilt and rib blight.

The burst heads are created when a bulb will break out of the side of the head, causing the head to crack and split open. The area that has split open then leaks latex out, which dries and discolors looking like a brown stain across the wound. Many times, this burst damage has not broken completely out of the head and cannot be seen during harvest.

Similarly, tip burn is primarily internal and does not always show itself during harvest. Harvest crews will keep a close eye out for obvious tip burn damage as well as fully burst heads. Those heads identified will be discarded, ultimately being turned back into the soil to help recharge the composition along with the rest of the green waste.



Twisted/elongated cores

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Burst damage



Burst damage

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Small pieces of tip burn, present in most heads



Heat stress induced rib discoloration. When caught, these are removed during harvest or inspection.

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More heat stressed breakdown

Romaine

Like Iceberg, romaine is showing a bit of tip burn and elongated cores. The tip burn is mostly internal and not always noticed during harvest, though the crews must move slow to take their time to evaluate after 'topping' the head so they can see any tip burn showing. Even so, they will not be able to remove all of it. Some fringe burn and rib discoloration seen as well.

The elongated cores make coring in the field a bit more difficult. The crews will have to do a high v-cut and sometimes they can miss all the core, especially if it's starting to veer off in one direction or another. If you see a small piece of core in your bag of romaine, it will have made it through a gauntlet of harvest techniques and inspection.

In general, romaine is faring a bit better than iceberg is, though this week's heat will cause more issues.

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Romaine head before trimming.

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Heavy trim necessary, slightly elongated cores

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Green Cabbage

Green cabbage continues to hold up better than other commodities in the heat. Variability in head sizing continues to be an issue in some fields but doesn't have a noticeable effect on quality. Mildew is present in some fields but at very low levels (more in specialty cabbages such as Napa & Savoy). As we move into the fall months, we do expect movement of critters such as cabbage loopers and other moth or butterfly larvae to try and get into fields and do some damage. PCAs are keeping a very close eye on these programs and movement of insects around the area to prevent any damage.



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Compact, dense heads. Little to no defects in trimmed heads.

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Spinach

Spinach has been growing very fast, despite the shortening days. The higher temps over the last few weeks have generated a more fragile texture in some teen spinach. Flat leaf varieties tend to see more mechanical damage or mildew pressure at this point in the season compared to the more bubbly, 'savoy-like' leaf textures.

Insect pressures are likely to continue to increase over the next couple of months, particularly with those insects that have lost their habitat due to fire and have been driven down into the valley. Moths are the worst offenders and a few green shield bugs, ladybugs and dragonflies have been seen in fields.



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Relatively consistent sizing, but thinner leaves.

Arugula

Like the spinach, arugula is growing faster than expected and both heat waves contribute to 'bolting' and flowering in arugula. Even with the quick growth, arugula leaf textures have been very good and mechanical damage is minimal. Sizing is a little bit trickier to manage right now as leaves on the same rosette tend to stretch away from each other in length, also creating a challenge to avoid long-stem during harvest.



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Kale

Like the cabbage, the kale has been able to withstand the higher temperatures better than other more sensitive crops. Sizing is a little uneven with some portions of the plant growing faster than expected, but this only creates minor complications for harvest crews and shouldn't equate to any noticeable quality impacts for consumers.



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Little to no burn or discoloration.

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