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Unusually wet weather conditions that extended into the peach harvest season has resulted in peaches being not as sweet tasting as in most years. High water uptake by peach trees dilutes the level of sugars in the fruits which decreases their sweetness.

Q: Did the overabundance of cloudy days this spring effect the growth of vegetables? How much light is lost on a cloudy day?

A: As Star Trek's Dr. Spock might say, it would be logical to think so. The preponderance of overcast days this spring was noteworthy in addition to the ample rounds of showers and thunderstorms.

In fact, tomato plants growing in the demonstration garden in Carbide Park this spring seemed to have slower growth rates and reduced

plant vigor. However such an observation would merely be a supposition since I have no research-based data to support or to disprove it.

I knew I would need some assistance from someone with expertise in plant physiology as it's been too many years since I was enrolled in a plant physiology class during graduate school days. I contacted Dr. Gaylon Morgan, a professor in the Department of Crop & Soil Sciences at Texas A&M in College Sta-

tion. Dr. Morgan provided some interesting facts on this topic.

He noted that this spring's unusual weather conditions have had multiple impacts on crop production. Cloudy days have lower levels of light intensity and solar radiation than sunny days.

Then we got into terms such as photosynthetically active radiation (PAR) and I quickly decided that I am bordering on TMI (Too Much Information) so I elected to provide this

Dr. William Johnson is a horticulturist with the Galveston County Office of Texas A&M AgriLife Extension Service. Visit his website at <http://aggie-horticulture.tamu.edu/galveston>.

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Reader's Digest condensed version. A research study conducted in Iowa reported that light intensity could be reduced by 25% to 50% on partly cloudy to cloudy days, and by over 60% on rainy days.

This same study reported that yield was significantly reduced in field corn by shading at the silking stage (when an ear of corn produces silks) and during post-silking stages. Even though this study was on field corn yields and very few studies have been conducted on vegetables, Dr. Morgan said that the same concepts would apply to vegetables.

Cloudy days can reduce daytime temperatures which in turn can reduce a plant's growth rate but that's a whole other chapter in plant physiology.

Therefore, I can now say with confidence that Yes! this spring's overabundance of cloudy days has had an impact on our vegetables. And I have now exercised my brain so much that I have a brain cramp; I enjoyed my graduate school days but I'm also glad that I have graduated.

Q: My peaches produced good size fruits this spring but the fruits were noticeably less sweet than those produced last year? Why did this happen?

A: The upside of a wet spring is that peach trees will likely produce larger size and juicier fruit. The downside of a wet spring that extends into the harvest season is that the water dilutes the level of sugars in the fruits which decreases the sweetness.

While we cannot control rainfall, peaches would be significantly sweeter if rainfall would lessen dur-

ing the period when peaches start to ripen and through the harvesting season. During the drought of 2011, many home peach growers reported harvesting amazingly sweet peaches.

Dry weather during the ripening period can also affect the amount of sugars and other flavor-modifying compounds in many other fruits and vegetables.

Chili peppers, for instance, produce higher levels of alkaloids, particularly the alkaloid capsaicin, which binds to heat receptors on the tongue and causes that familiar hot, spicy sensation. Flavors can become intensified in some vegetables (including beets, onions and garlic) when weather conditions are a bit on the dry side as the plants near harvest time. Most tomatoes harvested this spring are quite juicy but noticeably lack flavor.

Q: My peach tree flowered out well in early spring and produced good foliage. Most of the fruit fell from the tree and then the leaves started to turn yellow and fall. What happened?

A: Peach trees perform well in Galveston County but among fruit trees grown in this area, peaches by far require good soil drainage. More home peach growers have reported the loss of their peach trees thus far this year than any other year since I have been an Extension Horticulture Agent in Galveston County.

When the soil is saturated with water, pore spaces that normally hold air are filled with water. Because plant roots get the oxygen they need from the air in those spaces, the roots can literally drown in a

soil that stays waterlogged over an extended period. A sick root system leads to a sick plant. Plants in this situation often lose vigor, look wilted, turn yellow, become stunted or even die.

