

# 2020 REPORT



February 5, 2020

## Greetings from Nichols Farms!

We're well into Crop year 2019/2020, and our team has a few updates to share with you. So far, chilling is on par with the average; thanks in advance for keeping Mealybug in check; and as you'll see in the Market Update, Kernels continue to outpace Inshell in consumer purchases. **We're looking forward to a strong year and a high-quality crop!** *Chuck*

### Chilling Update: Jimmy Nichols

We are many months into the 2019/2020 crop year and questions have been asked in regards to chilling. My apologies for being delayed on the report but I do want to say we are in decent shaped heading into the 2020 crop year.

This fall was about average in terms of temperature compared to previous year's, but average is not necessarily ideal. As the trees enter dormancy, cool weather is optimal as research is suggesting the best way to increase yield potential is to increase and preserve carbohydrate storage in the tree. This can be done by irrigating and fertilizing properly, lowering the salt level in soil, and having a cool autumn. Even though trees are in dormancy, they are still respiring and using stored energy. Whenever it is warm, they respire more, draining the stored carbohydrates that they accumulated during the growing season. [See graph from article on dormant bud respiration in Thompson seedless grapes.](#)



Figure 1 below is the historical data from Tulare, CA farms (west of Highway 99).

High Temp Average		Chilling Year						
Months		13-14	14-15	15-16	16-17	17-18	18-19	19-20
Nov		69	68	63	69	70	71	70
Dec		58	59	55	55	61	56	58
Jan		65	55	57	55	59	59	54
Feb		65	68	66	61	64	56	

Figure 1 - Average Max Temps per Day per Month in Tulare, CA

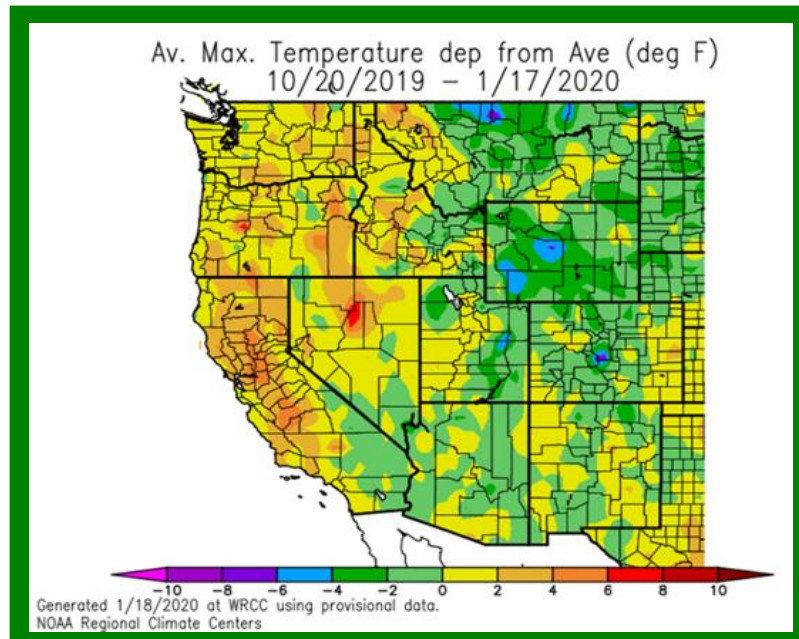
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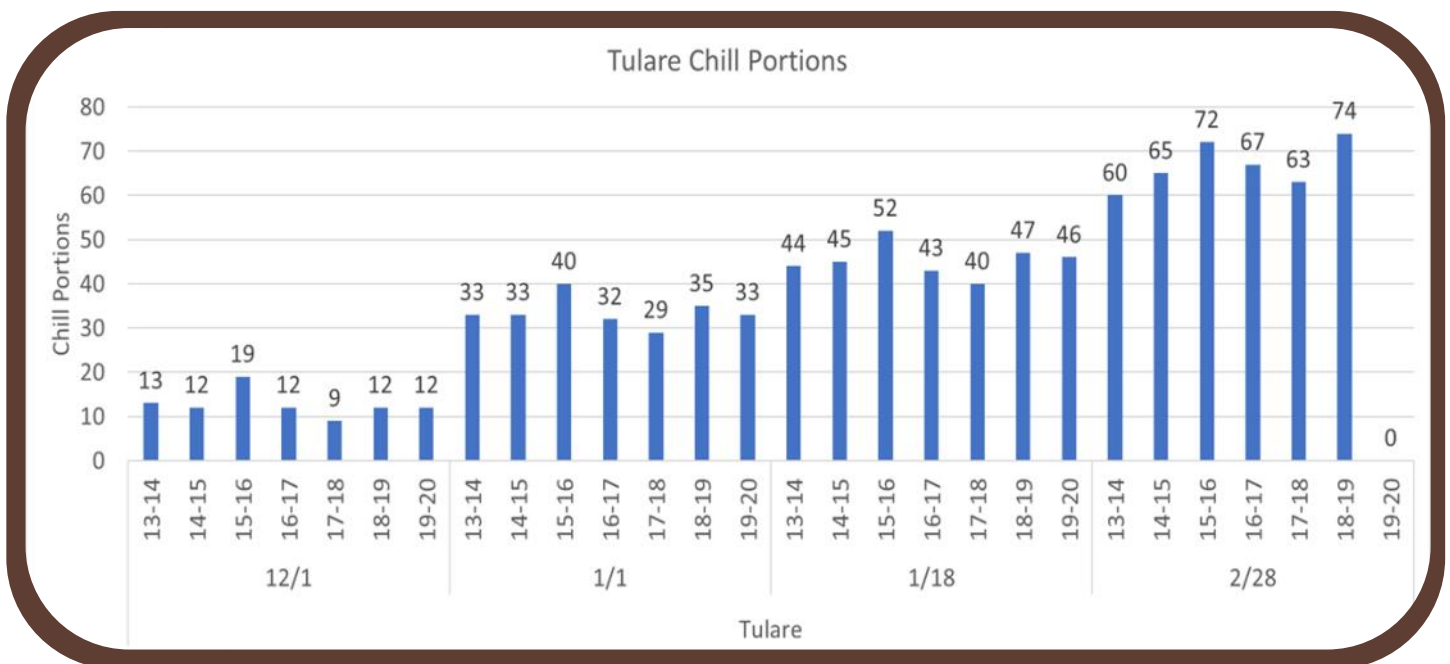
## Chilling Update: continued

The following comes from the following weather database -

<https://wrcc.dri.edu/anom/>.



Comparison of Chill Portions through 12/1, 1/1, 1/18, and 2/28. 2019/2020 chilling is about average compared with previous winters.



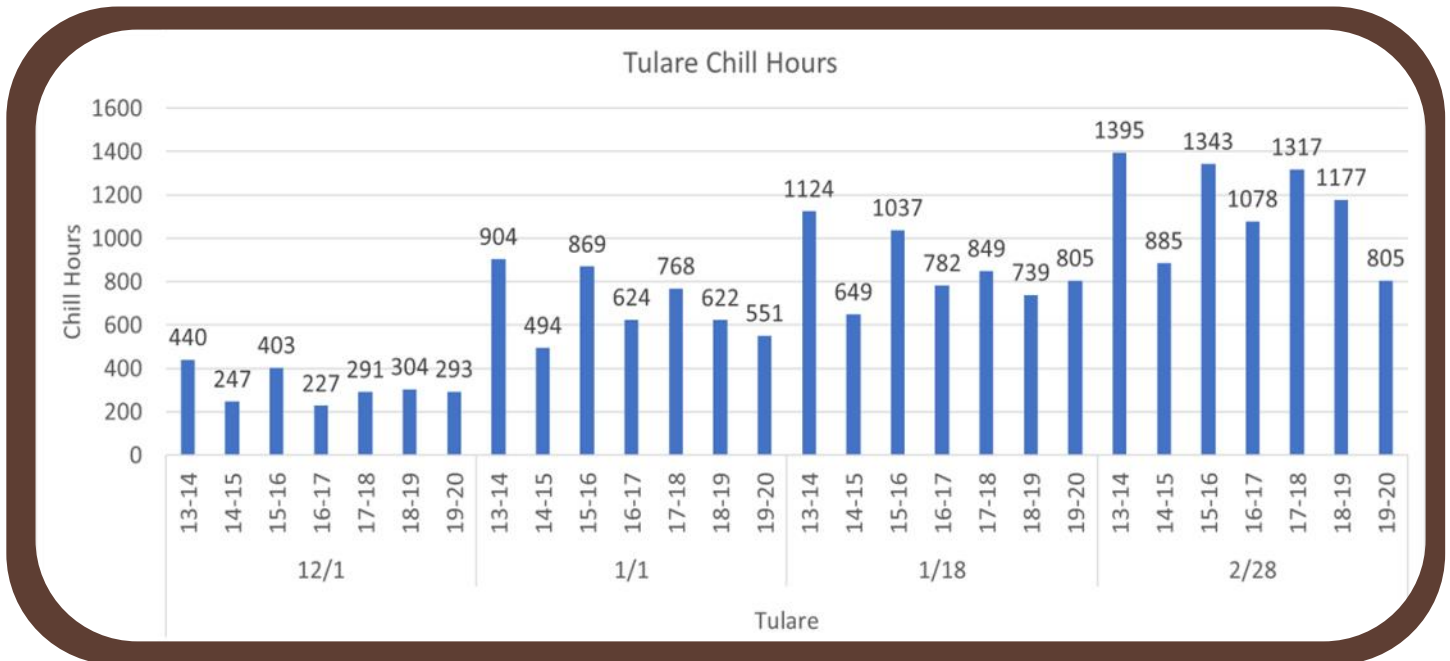


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## Chilling Update: continued

Comparison of Chill Portions through 12/1, 1/1, 1/18, and 2/28. 2019/2020 chilling hours is about average compared with previous winters.



## So, what does this all mean?

When there is a warm fall, like 2019, there is much greater variation in bloom timing between rachises on the trees and between fields the following harvest. A theory on this is that the shaded part of the tree is cooler and preserves more carbohydrates than the sun exposed side. If an orchard is going into an “off year”, the variation in bloom timing will be more prominent than one going into an “on” year. This will likely lead to a wider variety of maturity on the tree at harvest time, which isn’t necessarily a bad thing considering most growers now go with two shakes.

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## MEALYBUG: Gerrid

The 2018 and 2019 pistachio crops were remarkably low in insect damage. This has led to a lift in processing efficiency and sales for the pistachio industry and Nichols Farms. The collective rise of improvements in spray timings, orchard sanitation, and harvest management by growers have led to better success in combatting this difficult insect. The new challenge that has arisen, Mealybug, has led to pistachio rachis collapse and difficulties in harvest removal. Over the past few years Nichols Farms has been hesitant on the usage of Buprofezin, commonly known as Centaur, due to strict MRL levels in Japan and the EU. In recent years Japan has lifted the MRL for Buprofezin while the EU remains at 0.01 ppm, making it risky to ship treated product into Europe.

The manufacturer's recommended application timing for Centaur is early to mid-May. It is a long residual product and has shown up in pesticide analysis testing in the past, resulting in our hesitation to recommend it as a control method. However, with the rise of mealybug in orchards, there is a need for alternative products. Other industries have had similar challenges with mealybug, leading to research with the objective of mealybug control without the risk of MRL issues. Kent Daane Ph.D. CE Specialist at Kearney Ag trialed the efficacy of Centaur as a delayed dormant application on Vine mealybug in Grapes. This has not been trialed in pistachios, but we believe the strategy of treating mealybug before bud swell mitigates the risk of MRL issues and provides effective control. Please see attached PDF for trial results.

For any of our growers who need to rotate in the use of Centaur, here is what we can suggest:

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## Mealybug: continued

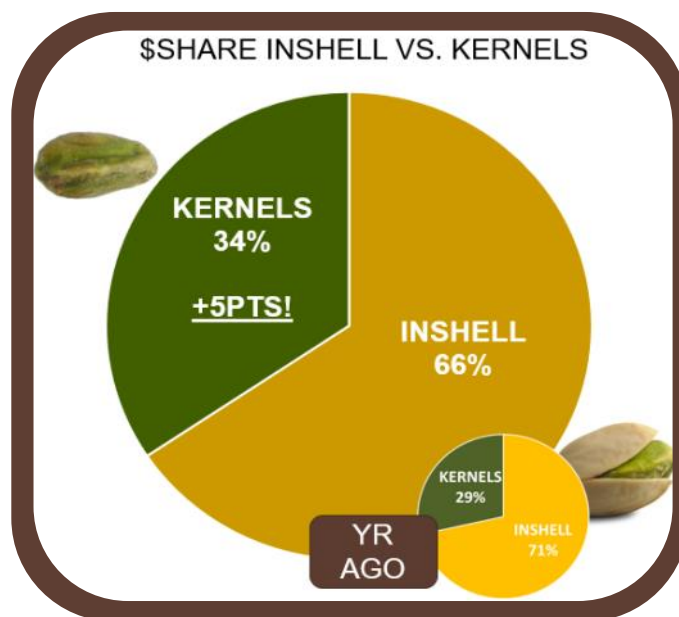
Utilize the products available (Centaur, Movento, Imidacloprid and Assail). Monitor CRAWLER emergence closely!

- A. Centaur: A “Pre-bud push” application (Late February-Early March)
- B. Movento: be actively looking for crawlers around May 1<sup>st</sup> (Mid May application).
- C. Imidacloprid: (Early May application)
- D. Assail: monitor growth stages (late season “Pre-harvest” application)

Application timing is KEY for each of these products listed above!! Please work with your PCA for a plan of action. If there are any questions or concerns you can give me, Gerrid Climer, a call to discuss the applications.

## Market Summary: Latest Quarter

- Pistachios are up 3% in \$ volume.
- Pistachios and Cashews are the only major nut segments with growth.
- Pistachios bring in the most \$ for the space they are given—a strong case for retailers to shift distribution from other nuts to Pistachios.
- Pistachio kernels are up 24%; inshell are down 6% in \$ volume.
- Nichols Farms is up double-digits in the latest quarter.



Source: IRI Multi-Outlet + Convenience, 13WE 12-29-19