



SENSIENT®

NATURAL INGREDIENTS

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CROP REPORT SEPTEMBER 2019

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California agricultural environment & growing conditions remain fairly stable through 2019. Reservoir and surface water allocations are at healthy levels and water costs are steady, with very few instances of the expensive supplemental purchases we saw just a couple of years ago. The Westlands Water District, the largest agricultural water district in the United States and one of the most impacted districts for drought, is going into 2020 with a 75% allocation, up from the 50% from 2019. As reported in our June release, California remains drought-free, as determined by the National Drought Mitigation Center – for the first time since December 2011.

This year brought us a few bouts of untimely weather, with heavy rains in late May/early June through many parts of the state. These weather pockets did have an impact on this year's crop, which is outlined in the product-specific crop reports below. At present, storm cells are now moving through the eastern part of California near the Nevada border, one of the three large growing regions for garlic seed.

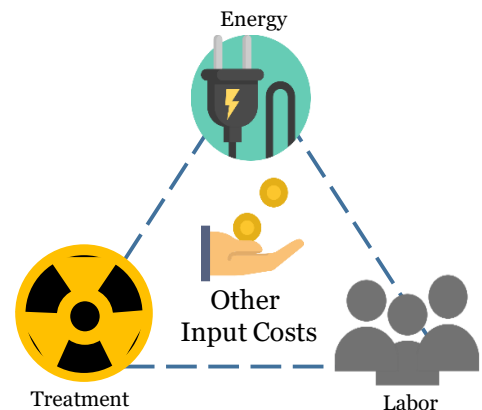
For the remainder of the year, we will continue to watch weather in the northernmost part of the state, which would impact the onion harvest. At this point, precipitation appears to follow the normal patterns with no major events before mid-November.

WATERWAYS MAP



Other Input Costs

- Irradiation treatment cost is up substantially for new agreements with industry-wide capacity expected to be flat to lower going into 2020. Service disruptions and extended lead times are expected to stabilize as the industry adjusts to the stress on irradiation treatment posed by the increased demand coming from medical and other non-food industry sectors. As there are no known plans for capacity expansion in the near future, costs beyond 2020 are likely to continue to rise beyond inflationary rates.
- Energy costs are flat to lower for 2019. Natural gas costs have receded back to 2015/2016 levels, with Henry Hub index prices averaging in the \$2.50-2.60 range vs \$3.00 – 3.10 over the prior 2 years. Diesel costs, which impact everything from over-the-road transportation to powering the farm implements responsible for planting and harvesting, are consistent with 2018 rates through the first 3 quarters of the year, though current costs are 10-15% above the 5-year average. Electricity costs in most districts remain consistent with prior year.
- Labor costs in California rose again with a minimum wage increase of \$1/hr, from \$11 to 12 for 2019, consistent with the existing legislation that will place increases for each of the next 3 years, reaching a final rate of \$15/hr by January 1, 2022. California's most recent unemployment rate stands at 4.2% vs 5.5% just 3 years ago. The smaller labor pool is putting upward pressure on state-imposed minimum wages, particularly in agricultural and rural-type areas, where employers have made wages in the \$14-15/hr their adopted minimum. Wage inflation beyond state-mandated levels will likely continue through 2020.



California Onion

The 2019 crop is about 70% complete as we are finishing the last few weeks in Central California before moving north in late September. The season is scheduled to finish by mid-November, on plan. Harvest from the southern area has come in as expected volume-wise. Instances of seeders are down for the 2019 crop, though we are seeing some micro pressure with pockets of higher plate counts and coliforms, which will stress the natural low micro availability.

Northern California harvest is weeks away – as such, growers are cutting water and preparing the fields for harvest. As expected, we are seeing lower-than-normal growth rates for this point in the season after untimely hail and cold weather cells struck the crop back in June. To date, the crop has not had the heat units necessary to close the maturity gap and is forecasted to finish short of total yield expectations by 10-15%. This area is traditionally a low-micro production region and looks to produce another low-bacteria crop, though visual quality – particularly greening – will be more apparent this year. Solids and the impact of bulk index will become better known once we begin to process the first loads.

In Southern California, ground preparation for the 2020 crop is underway and planting will begin shortly. Over the next few months planting will continue, moving from Imperial Valley through Fresno County by year-end.

2019 Onion Outlook

Industry estimate for 2019 tonnage continues to be 2-5% below prior year, mainly due to a reduction of yield per acre after the recent weather events. Inventory for natural extra-low-bacteria (XLB) product, particularly for granulated and powdered SKU's with a visual spec will be very tight through 2019 and into 2020. Further exacerbating the situation is the sharp increase in demand for naturally occurring low and extra low bac specifications as the market seeks alternatives to low micro via irradiation treatment. Specialty piece sizes, primarily sliced and diced, are completed for the year so any unplanned or significantly increased needs on these sizes will be challenging. Consistent with previous guidance, expect flat rates on open-spec material with price increases and reduced availability on XLB granulated and powder. Availability on irradiated product will be in tight supply due to challenges in the treatment supply chain, and will also see price increases with new agreements.



California Garlic

Harvest is underway and expected to finish late September/early October. This year's crop was significantly impacted by the rain and hailstorms which came through the Central Valley in May / June, which was a critical time for final bulb sizing and overall plant maturity. With back-to-back storms over a 4-week period, excess moisture in the field was a recurring issue leading right into the harvest. Although growers were quick to respond, the fields never dried out to normal levels. Maturity suffered, as well as harvest-ability as the excess moisture eroded the skins and root plate, necessary to machine harvest the crop. As a result, optical indexes are finishing higher for the 2019 crop and low-bulk material will have more limited availability. Total crop estimate is down 20% to plan, so the carry inventories from prior years will cover the shortfall necessary to meet forecasted market demand.

California Organic Garlic

California organic garlic harvest finished in mid-July. Results were consistent with the conventional crop, with overall yields down versus expectation and difficulties in harvesting. This year's organic crop suffered disease pressure as well, related to the aforementioned weather issues. The organic crop finished down about the same level as conventional. However, due to the build of inventory from a very good 2018 crop, the yield concern in the current year will not adversely impact availability of product on current demands. There is some concern for customers without a contracted position as the industry continues to see an increasing demand for California-grown organic garlic, which is being accelerated by the significant rise in Chinese prices.





Chinese Garlic

Harvest has essentially been completed and the last of material being put into cold storage facilities is expected to be finished this month. Fresh material from the 2019 crop is trading at 40-60% higher than last year as plantings for 2019 were down 25-30%. Prices for raw flake, which increased by 50-60% between April and July, have begun to inch down as traders holding raw material without storage are now concerned about sprouting material. Prices have fallen 5-10% in the last weeks in order to move volume, and the aged/sprouting material will soon go to go to the dehydration market for flake production. In the US market, the tariff increase on Chinese imports stands at +25% vs one year ago, further increasing the cost of Chinese material in the US market.

2019 Garlic Outlook

Although the 2019 crop will underperform, the California garlic market has rebounded from the drought conditions, which drove shortages a few years ago. Inventory carries remain healthy in the industry and will support all existing contracted positions. Demand for organic is strengthening and Sensient is investing in the growers and infrastructure necessary to support the forecasted demand and drive down costs. Chinese garlic prices have been volatile and are expected to stay at elevated rates versus last year. Although inventory carry is sufficient, we recommend customers secure any additional demand for California garlic ahead of price increases or Chinese supply disruptions. Consistent with onion, irradiated material will be more restricted and will see higher prices to cover the added cost of treatment.



Chili Pepper and Paprika

Southwest US and Mexican production is behind schedule due to colder than normal weather that delayed plant growth and caused higher than normal re-plantings in the spring. Additionally, late season storms brought hail that damaged several areas. Aside from these two events, production has progressed normally but the re-planted areas will not be sufficient to backfill the shortfall. Overall expectation is this crop will be 5-10% below average yields.

The Peruvian crop is forecasted to finish at plan. Consistent with the last few years, Peruvian paprika production continues to shrink each year in favor of more lucrative crops. As a smaller player versus China, Spain, United States, and Mexico, the smaller Peruvian crop is expected to see large price increases for the spot market. Spot buyers will be affected by higher prices and limited availability. For US buyers, a large concern for importing product via the spot market is meeting US standards for pesticides and light filth with unsecured or trader-based supply chains.

Chinese material available today is from the fall 2018 crop. Availability for material that meets US standards is limited due to pesticide non-conformance and ASTA levels are at their lowest levels of the year. Current crop size is considerably smaller than 2018 so inventories are expected to remain tight. Increasing US tariffs on raw materials and oleoresin will have a negative impact on directly imported material into the US, which brings concerns around Chinese origin capsicums to flowing through other origins prior to importation to avoid duty.

Overall outlook for chili and paprika is restricted availability for 2019/2020, especially on mid-to-high ASTA specifications. Higher ASTA chili and paprika products will see price increases, and we recommend longer positions be taken prior to the end of 2019 as material from North America finishes processing. As with onion and garlic, irradiation costs on capsicums are especially high, and this product is more dense than onion or garlic, requiring more line time at the irradiation facilities.

If you have questions around your specific needs, please reach out to your Sensient representative or contact us at sni.sales@sensient.com.