## **Processing Tomatoes Benefit** from Machine Harvesting and Storability

Ellen Bruno and Mark Evans

Tomatoes are a top 10 commodity for California that bring in over \$1 billion in revenues annually. About 80% of that value is derived from processing tomatoes, that is, the tomatoes that are used in shelf-stable sauces and pastes. California is the leading producer, growing 95% of processing tomatoes nationwide and 28% of processing tomatoes worldwide.

The economic impacts of the pandemic on the processing tomato industry will depend largely on the degree to which producers and processors can respond to changes in demand. Tomato processors selling to the foodservice industry typically produce in gallon-size or larger containers. This production requires specialized equipment that is often shipped from abroad, meaning it is not feasible for processors to convert a major portion of their production to retail sizes this year if foodservice operations continue to be shuttered or operating under limited capacity. In the short run, some processors will struggle to adapt to the recent surge in retail demand due to the pandemic. As a result, we may see temporary scarcity for some retail products that could manifest in either higher prices or shortages at the retail level.

An important dynamic for understanding the longer-term implications of COVID-19 to the processing tomato industry is that of storability. The industry will benefit from the fact that canned product has a relatively long shelf-life. Bulk and canned products can maintain their full quality in warehouse storage for at least 2 years. This will help with managing the disruptions to demand for product that was processed for foodservice. Unlike some other fresh vegetables slotted for foodservice, this product will not

go to waste. According to the April crop update by the World Processing Tomato Council, some California tomato processors have reduced their contracted acreage in response, which will either get picked up by other processors or lead to an overall reduction in acres planted.

Bulk product that was originally intended to be an ingredient in foodservice manufacturing can easily (at least physically) be shifted to use in retail production. For example, processors could repurpose a 300-gallon package of tomato paste intended as an ingredient in foodservice spaghetti sauce to make sauces in retail-size containers. Although the canneries may face logistical challenges as to the timing of the final-goods production, the lengthy shelf-life of the 300-gallon product should allow for these adjustments. While this may be great from a food waste and overall industry standpoint, some producers may face negative impacts. Excessive inventories may occur when the economy reopens, driving some prices down.

Commodities that involve laborintensive activities, such as hand picking, are likely to be at higher risk for outbreaks and supply disruptions than mechanically harvested produce. Even though processing tomatoes are mechanically harvested, the industry and its workers still face some outbreak risk. For example, tomato plants are started in greenhouses that often require substantial hand labor. People also work in close proximity to each other during the field transplanting process. The industry has taken precautions to minimize risks and, to date, there has been no significant disruption in establishing the crop this season.

There is always some concern in the industry regarding how government regulations will impact the ability to produce food in a cost-effective manner. For example, (understandable) limitations in CA Department of Motor Vehicles licensing activities due to COVID-19 may lead to difficulties in obtaining licenses for truck drivers who are needed to deliver tomatoes from the fields to the canneries. Even if an abundance of people are motivated to get trained and licensed, backlogs due to the suspension of driver's tests may prevent the agricultural industry from adapting quickly if and when licensed truckers get sick.

There is no doubt that the pandemic is causing disruptions on both the supply and demand sides that affect the processing tomato industry. The magnitude of the impacts from these disruptions remains uncertain. Further, policies and regulations intended to enable social distancing will challenge the production efficiency and quality of the products. The tomato industry, like the rest of the agricultural sector, is committed to maintaining a healthy workforce and a strong supply chain to continue supplying healthful food.

## Authors' Bios

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