ADMINISTRATIVE COMMITTEE FOR PISTACHIOS
ANNUAL REPORT
2016-2017

The Administrative Committee for Pistachios (ACP) is responsible for administering the federal marketing order for pistachios grown in California, Order No. 983. The order was passed by a grower referendum and became law with its publication in the Federal Register on April 5, 2004. Initially, minimum quality and maximum aflatoxin levels were certified for all domestic shipments of California pistachios. Minimum quality regulations were not found to decrease aflatoxin risk and consequently, minimum quality regulations were suspended effective December 10, 2007. The marketing order was expanded to include Arizona and New Mexico in December 2009 and additional authority for research and broader authority for quality regulations were also added. Aflatoxin regulations remain in effect and there are an adequate number of laboratories accredited by the USDA, Science and Technology Branch for aflatoxin analysis to accommodate the pistachio crop. Although most handlers use traditional USDA inspection services, handlers may also choose alternative inspection programs like the Customer Assisted Inspection Program (CAIP) and the Partners in Quality (PIQ) program. A Section 8E import regulation was initiated in August 2012.

Pistachio is an alternate bearing tree nut. Following the extremely off year crop of 2015, the 2016 US pistachio crop, at 903.1 million pounds, was a record breaking on year crop. Winter chill was adequate in all the bearing areas and, due to adjustments in water sources, there was adequate water in most cases. The size of the crop was underestimated early on and many people expected a crop in the range of 650-750 million pounds. As harvest approached, perceived crop size increased and there were expectations of an early harvest. Ultimately, the harvest dates were fairly normal with cv. Kerman harvest beginning after Labor Day. There were concerns about harvest capacity but processing at all processing plants proceeded without equipment malfunctions or undue delays as some growers shifted to night harvesting. Yield per bearing acre is estimated at 3745 pounds per acre. Typical of on year yields, the amount of closed shell was higher than normal at 18.9%. Insect damage, despite low navel orangeworm populations in early August, was higher than expected and averaged about 1.5-1.6%, with late harvested loads averaging much higher. Preliminary processing experiences indicate higher than normal aflatoxin. While final numbers are not available for the average return per pound, grower price per pound was down but return per acre, due to the increased crop size, was close to normal.

Total shipments in the 2015/2016 crop year were down sharply and totaled only 77.1% of the previous year. Domestic shipments were down by about 8% while exports were down by 32%. Consequently, exports slid from 60.6% in 2014/2015 to 53% in 2015/2016. Much of the decrease in exports was due to declining shipments to western Europe but there were also reductions in shipment volumes to the Middle East China/Hong Kong as

total export volumes decreased from 218.6 million pounds in 2014/2015 to 147.7 million pounds in 2015/2016.

Despite the declining shipments, the carryout decreased from 164.9 million pounds to 102.6 million pounds. This was due to the very small 2015 crop. With the record 2016 crop, the gross inventory surged from 439.7 million pounds in 2015/2016 to 1.006 billion pounds. However, total shipments have increased sharply in 2016/2017, totaling 355.9 million pounds as of February 2017. This is 244% of the shipment volume of the previous year, as of February 2016.

Pistachio lots that fail inspection for maximum aflatoxin must be reported to the ACP. Failed lots are initially eligible for reworking. A limited number of lots failed inspection following rework and these lots were exported to countries with higher aflatoxin tolerances or sold for oil extraction. The 2014 crop appeared to have slightly less insect damage than the 2013 crop and 2015 was slightly less as well. Registration for an aflatoxin biocontrol agent, AF36, was received in time for the 2013 crop but supplies were limited and applications were made at reduced rates. Applications of AF36 were continued at the reduced rate in 2014 and 2015. Regardless, research has shown that it requires 2-4 years of repeated applications to significantly displace the toxigenic *Aspergillus flavus* population and consequently little to no measurable effect could be expected until 2014 (2 applications) at the earliest. Both the 2014 and 2015 crops appear to be lower in aflatoxin than expected by insect damage alone but the last few drought and low chill years preclude data-based predictions on the efficacy of the biocontrol agent. However, the 2016 crop appears to be relatively high in aflatoxin despite full label applications of AF36. Research was funded in 2017 to examine AF36 efficacy.

Due to low levels of insect damage and aflatoxin contamination in the 2010-2012 crops, there were few if any rejections in the EU in 2011 and 2012. There were five rejections in 2013. However, in 2014, aflatoxin rejections in the EU increased to 14 and consequently, the EU has placed US pistachios on an enhanced testing regime beginning April 2015. Instead of occasional testing at 3-5% of incoming lots, 20% of incoming lots are tested for aflatoxin. Due to a reduction in the percentage of rejected loads, the testing rate was decreased to 10% as of January 1, 2017. There was an increase in the number of rejections in January and February 2017 but the percentage of rejections is not known. As of April 27th, there have been9 border rejections for excessive aflatoxin; one of the nine was reputedly US product that was processed in Turkey. There will be an audit of the pistachio export system by the Food and Veterinary Office of the EC in September 2017, similar to the audit conducted in 2009. The ACP continues to evaluate a pre-export aflatoxin program for the EU.

The industry has been focused for the last few years on regulations arising from the Food Safety Modernization Act (FSMA). Final rules on Produce Safety and Preventive Controls were released late in 2015. One processor will need to comply with the Preventive Controls Rule in 2016 while other handlers and growers have another year or more before compliance is mandatory. As part of the FDA's tree nut risk assessment, sellers of raw pistachios have been under increased scrutiny. This has resulted in several

recalls of pistachios for potential Salmonella contamination. The processors have required pistachio growers complete a Good Agricultural Practices questionnaire in preparation for possible compliance with the Produce Safety Rule. At this time, it is not yet clear if tree nut growers will be exempted from the Produce Safety Rule by virtue of processor treatment of pistachios.