THE ALMOND BOARD: A TRUSTED RESOURCE

ABC is a trusted resource for data and industry expertise, providing stakeholders with valuable information on matters impacting the entire California almond industry.

As a Federal Marketing Order, ABC is precluded from any lobbying or advocacy activities meant to influence legislation or specific policies. However, USDA/AMS does not restrict ABC's ability to pursue many opportunities to share its expertise and fact-based information with government and other stakeholders.

In other words, ABC can *educate* but not *advocate*.

To further engage on legislation or policy-related matters, ABC staff provide consulting expertise to the Almond Alliance of California, supplying valuable input in support of the Alliance's efforts to ensure the California almond industry has "a seat at the table" with legislators and policymakers.

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TRADE AND TARIFFS

- Unimpeded market access is critical; issues go beyond tariffs to include sustainable practices and climate/environmental priorities.
- In CY21, Almonds were the #2 ag export to the EU (\$1.4 billion) and the #1 ag export to India (\$830 million), accounting for 47% of all U.S. ag exports to India.
- ABC is closely monitoring the EU's Green Deal and Farm to Fork policies that could restrict almond exports to both the EU and its trading partners.
- Higher retaliatory tariffs remain in place in key export markets – particularly in China, where the tariffs on almonds increased from 10% in 2018 to 55% in 2020.
- A waiver on Section 301 retaliatory tariffs allows Chinese importers to import almonds at 25% vs 55% tariff; other countries are subject to the MFN tariff rate of 10%.
- Australia enjoys 0% tariffs in China and signed a trade agreement with India in 2022 that will allow 34,000 MT of Australian almonds to be imported at 50% of the normal MFN tariff levels.
- The U.S. had initiated discussions with India, Kenya and the UK, but currently is not actively negotiating any bilateral trade agreements.
- The IndoPacific Economic Framework Agreement initiative launched in 2022 among 14 countries includes a trade pillar but not tariff reductions.
- California almonds are represented in a number of ag coalitions addressing concerns related to production, trade impacts, technical issues, and potential benefits of agreements.
- Market access being finalized in China for use of whole almond hulls, pellets and cubes as livestock feed.

EXPORT TECHNICAL ISSUES

- Technical advisors and experts in key markets keep ABC updated on tariff or technical issues impacting almonds.
- Technical Barriers to Trade range from pesticide MRLs to labeling to certification requirements, all of which can disrupt almond shipments.
- ABC participates in global Codex Committee meetings dealing with technical issues including food contaminants, pesticides, import procedures and labeling.
- ABC is viewed as a resource by government authorities in the U.S. and abroad, for its wide-ranging, fact-based information concerning agricultural practices and trade flows.
- Since 2020, ABC has provided more than 35 comments to U.S. and global authorities that highlight the almond industry's responsible use of pest management tools.
- ABC continues to closely monitor U.S. Government trade negotiations, which currently place a greater emphasis on labor and environmental issues.
- California almonds are the only U.S. commodity recognized under the EU's Pre-Export Certification (PEC) regulation, which specifies < 1% inspection on import.
- Work continues with FAS to address Japan's 100% import control.
- Efforts are underway with USDA and FDA to recognize USDA-approved labs for aflatoxin inspection to streamline U.S. Goods Return.

ABC staff helped handlers register their facilities for exports in compliance with China's food facility registration. The new single window online portal went into effect on January 1, 2022; the efforts avoided significant trade disruption.

CLIMATE SMART AGRICULTURE

- California has been leading the way toward mitigating emissions and sequestering carbon in working lands. Almond trees store carbon as they grow, while utilization of co-products and biomass significantly reduces their carbon footprint.
- The California almond industry has been an early investor in research on climate smart agriculture and healthy soils including whole orchard recycling, cover crops, compost, nitrogen, and water management.
- ABC is exploring how to improve grower access to ecosystem services markets for practices that store carbon, foster biodiversity, and improve water quality and quantity.
- The almond industry has long worked to reduce impacts on air quality from dust, regulated particulate matter, ozone, and more recently greenhouse gases.
- Research and resources provide growers with techniques to reduce dust. Low-dust harvesting equipment reduces PM2.5 and PM10 dust emissions on average 50%.¹
- The end of most ag waste burning by 2025 in the San Joaquin Valley is driving adoption of Whole Orchard Recycling with new funding for woodchipping equipment.
- Growers can document on-farm practices through the ABC's California Almond Stewardship Platform's (CASP) self-assessment.

California's Green House Gas funds are used in the Healthy Soils Program to incentivize practices such as cover crops and pollinator hedgerows, solar, and SWEEP for irrigation improvements.

 El Jirie N. Baticados et al. Particulate matter emission factors using low-dust harvesters for almond nut-picking operations. Journal of the Air & Waste Management Association. 2019. Management Association. 2019.

BIODIVERSITY AND POLLINATOR HEALTH

- ABC led the launch of the California Pollinator Coalition together with the international nonprofit Pollinator Partnership and the CDFA. It aims to expand pollinator habitat on working lands with 20+ organizations that represent most of California's farmland.
- As of 2022, over 166,000 acres of almonds across 290 almond farms, have been certified as Bee Friendly Farms (BFF) under the Pollinator Partnership. BFF requires growers to provide diverse forage and habitat, and practice integrated pest management.
- In October 2021, the North American Pollinator Protection Campaign (NAPPC) presented its Business for Bees Sustainability Award to the ABC and the state's almond farmers. The award is for standout organizations that go above and beyond to support pollinators.
- NRCS awarded a Regional Conservation Partnership Project (RCPP) to Pollinator Partnership, ABC and other collaborators to cost share with growers the addition of pollinator habitat.
- Beehives brought in to pollinate almonds consistently leave almond orchards stronger than when they arrived.¹
- ABC's Honey Bee Best Management Practices, developed with key stakeholders, identify ways to protect both honey bee and native pollinator health during almond bloom and throughout the year.²
- 1. Elina Niño, University of California, Davis & Ramesh Sagili. Department of Horticulture. Oregon State University.
- 2. James Tauber et al. Colony-Level Effects of Amygdalin on Honeybees and Their Microbes. Insects. 2020.

KEY ISSUES & FAST FACTS 2022



ALMONDS play a significant role in the overall health and well-being of our communities, consumers, environment, and economy. With more than 1.6 million bearing acres statewide, the California almond industry recognizes its role as a leader in California agriculture and global almond production, aiming to make life better by what we grow and how we grow.

California almonds are ...

- #1 U.S. specialty crop export.
- California's #1 ag export with a value of over \$4.9 billion in 2019.
- California's second-largest commodity with a 2020 farmgate value of \$5.6 billion.
- More than 80% of global almond production.
- 70% export, shipped to more than 100 countries.
- Creating more than 110,000 California jobs and contribute \$9.2 billion to California GDP.
- 90% family farms nearly 70% farming 100 acres or less.
- #1 nut in global new product introductions since 2007.

For additional information on key issues impacting the California almond industry, please contact regulatoryissues@almondboard.com

SHIPPING LOGISTICS

- Export logistical delays have had a significant impact on almond shipments and costs.
- Huge demand in the U.S. for manufactured imports from China and other Asian markets has led to carriers shipping more empty containers to China, cancelled ag export bookings, excessive ocean carrier fees, supply chain disruptions, and bottlenecks never seen at California's maritime ports.
- Approximately 80-85% of all almond exports ship from the Port of Oakland, with 15% from the ports of LA and Long Beach, and a growing share out of the Port of Norfolk.
- □ ABC estimates that because of the global shipping crisis almond exports were conservatively down by \$800 million between April 2021 and April 2022.
- An ABC survey found that carrier rates have significantly increased along with the costs of administrative time, almond quality measures, and warehousing space.
- ABC is working closely with the Almond Alliance, ag coalitions and national organizations to educate public and private sector leaders on the export delay issues, as well as the consequences for almond shippers.
- The Bipartisan Ocean Shipping Reform Act of 2021 legislation is the first comprehensive reform of the act since 1998. It addresses ocean transport and port services, as well as enhanced Federal Maritime Commission (FMC) enforcement.

WATER USE

- California's Central Valley is one of 5 regions in the world with the Mediterranean climate needed to grow almonds, making it a unique crop for California.
- With implementation of the Sustainable Groundwater Management Act (SGMA) underway, efforts to implement groundwater recharge are increasingly important.
- California ag largely relies on irrigation. Almonds are grown on 20% of ag land in California and only use 13% of the water dedicated to growing food.
- ABC research has led to the development and adoption of advanced irrigation technologies. 83% of almond orchards use efficient micro-irrigation, allowing precision irrigation based on tree/soil needs and weather conditions.¹
- Water-saving technologies and increased yields have helped growers reduce the amount of water it takes to grow a pound of almonds by 33% between 1994 and 2014.² Current efforts are further increasing water use efficiency.
- ABC has funded 210 water research projects since 1982.
- ABC's Introduction to Groundwater Recharge guide can help growers sustainably manage California's vital water resources.
- The Almond Irrigation Improvement Continuum, based on ABC research and expert advice, is a mechanism for growers to improve water use efficiency.

Grower adoption of irrigation best practices is supported by California and federal incentive programs.

 University of California. UC Drought Management. Feb. 2010. UN FAO. FAO Irrigation and Drainage Paper 66 – Crop yield in response to water. 2012. ABC Almanac 1990-94, 2000-14.

2023 FARM BILL

- The Farm Bill is an omnibus, multi-year law that governs an array of agricultural and food programs, providing an opportunity to comprehensively and periodically address agricultural and food issues.
- Farm Bills typically authorize programs for 5 years. The last Farm Bill was passed in 2018; the 2023 Farm Bill is now being developed.
- ABC is working closely with the Almond Alliance, ag coalitions and national organizations to prioritize issues, highlight concerns, and seek solutions through new program initiatives.
- Among the programs or initiatives that impact the almond industry:
- Crop Insurance, which is utilized as a safety net for approximately 951,000 almond acres.
- The Tree Assistance Program, which provides financial assistance to qualifying orchardists and nursery tree growers to replant or rehabilitate eligible trees.
- Adjusted Gross Income (AGI) levels which prevent many growers from being able to participate in Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), and other NRCS programs.
- Market Access Program (MAP) and Foreign Market Development (FMD) programs that ABC uses to open new markets, address trade barriers and build demand.

Numerous opportunities for incentive funds, marketing efforts and financial/credit guarantees are funded through Farm Bill programs.

PESTICIDES AND PEST MANAGEMENT

- Successful pest management contributes to wholesome nuts as well as efficient use of water and other inputs.
- Since 1973, ABC pest management research has provided almond growers with science-based Integrated Pest Management (IPM) solutions for many pest problems.
- Almond growers utilize IPM in their orchards, emphasizing the balanced use of nonchemical and chemical tactics to manage pests effectively and safely.
- Recent IPM solutions developed with ABC funding support include pheromone-based mating disruption for key insect pests, beneficial thresholds for mites, and assessing the value of cover crops for weed management and soil health.
- In 2022, ABC was awarded a grant from the Department of Pesticide Regulation to promote adoption of navel orangeworm mating disruption among small growers.
- ABC is engaging with registrants, industry, and government authorities to encourage a risk-based, harmonized approach to setting and evaluating pesticide Maximum Residue Limits (MRLs) at a global level. Strict MRLs in export markets can result in trade disruption.
- Market basket surveys in Europe and the U.S. show minimal pesticide residues associated with almonds and tree nuts, well within established MRLs.

NRCS offers cost-share grants for certain IPM practices, including mating disruption and orchard sanitation for navel orangeworm management.

ZERO WASTE

- Almonds grow in a shell, protected by a hull, on a tree. The almond kernel represents about 25% of the total almond "fruit." Applied water and other inputs not only support development of the almond nut, but also these other valuable coproducts.
- One renewable solution for the trees at the end of their productive lives, Whole Orchard Recycling, involves grinding up orchards and incorporating the woody biomass into the soil. ABC-funded research indicates that over time this practice increases yields, returns nutrients to the soil, increases water infiltration and storage¹, and sequesters 2.4 tons of carbon per acre in the soil.²
- Almond hulls, shells and woody biomass can be reused in markets as diverse as industrial sorbents, soil amendments, food and cosmetic ingredients, pulp-based containers, and a variety of activated carbon and biochar products through pyrolysis or torrefaction.
- An ABC completed market assessment identified opportunities for almond biomass as a food additive, in bioenergy, and as animal feed.
- Efforts are underway to identify export markets for almond hulls and shells.

Incentive funds through the Natural Resources Conservation Service and local air districts assist almond growers in transitioning to low-dust harvester equipment and adopting Whole Orchard Recycling.

- 16-PREC3-Holtz. Almond Orchard Recycling https://orchardrecycling.ucdavis.edu/
- Alissa Kendall, et al. Lifecycle-based Assessment of Energy Use and Greenhouse Gas Emissions in Almond Production, Part 1: Analytical Framework and Baseline Results. Journal of Industrial Ecology. 2015.

^{1.} CASP. August 2021