
PESTICIDES, FOOD SAFETY, GAPS, SUSTAINABILITY, AND THE CALIFORNIA PISTACHIO INDUSTRY

Bob Klein, Manager

Administrative Committee for Pistachios

California Pistachio Research Board

CALIFORNIA PISTACHIO INDUSTRY

- ✘ Rapidly expanding
 - + 104,000 Bearing Acres in 2005
 - + Twice that in 2015
 - + New Growers
- ✘ Division of Program Responsibilities
 - + Marketing, Government Affairs, Human Health
 - + Food Quality/Safety, Statistics – ACP
 - + Production Research/Grower Education - CPRB

ADMINISTRATIVE COMMITTEE FOR PISTACHIOS (ACP)

- ✘ Federal marketing order established by grower referendum in 2004
- ✘ Primary goal – regulation requiring import inspection to our self-imposed standards
 - + Proposed rule published in October, comment period is closed
 - + Decision by late February?
- ✘ Referendum on export authority
- ✘ Food Safety

ACP (CONTINUED)

- ✘ Progress toward reducing risk of food borne pathogens
 - + Processors have HACCP and Food Safety Plans
 - + FDA will be releasing “Prerequisite Programs”, etc
 - + Working on Pistachio Best Processing Practices Manual
- ✘ Risk assessment indicates current processing practices reduces Salmonella risk to acceptable levels (< 1 illness per year)

CALIFORNIA PISTACHIO RESEARCH BOARD (CPRB)

- ✘ State marketing order
- ✘ Established by grower referendum in 2007
- ✘ Production Research
 - + Over 80 projects funded since 2008
 - + About \$2 million in funding
 - + Partner with Almond Board on mutual interests
 - + Food Safety
 - ✘ Center for Produce Safety Partner
 - ✘ CPRB and CPS share costs
 - ✘ GAP Manual and Self Audit

CPRB (CONTINUED)

× Critical Issues

- + Pesticide Registrations
- + New Pests, New Diseases
- + Changing and Expanded Regulations
- + Lack of Researchers
 - × Decline of research capacity to address research needs in plant physiology, breeding, etc.
 - × Loss of Farm Advisors through retirement
 - × CPRB has been examining endowment potential

CPRB AND ENDOWMENTS

- ✘ CPRB looking at UC Cooperative Extension, the UC campuses, and Fresno State
- ✘ We need bodies for critical long-term research, institutions need bodies to meet mandates
- ✘ Endowments will be funded by a \$0.001/pound assessment
- ✘ Depending on institution and position, \$850,000 to \$1.6 million per position

NITROGEN – GROUNDWATER CONTAMINATION

- ✘ Water Resources Board soon to release study on nitrate groundwater contamination
- ✘ Unofficial indications that agriculture is principally responsible, smaller urban and septic tank roles
- ✘ Fertilizer regulations are likely
 - + Growers will need to account for N applications by plant needs

PESTICIDE REGISTRATIONS

- ✘ Last 10 years has seen a huge increase in pistachio registrations
- ✘ Soon to be included in the EPA tree nut crop group – reduce registration errors
- ✘ Look for registrations for new *Alternaria* blight fungicides, new herbicides
- ✘ Biggest challenge is expanded regulation due to air quality concerns

PESTICIDE REGULATION

- ✘ Southern San Joaquin Valley is a non-attainment region for ozone pollution
- ✘ Ozone is produced by reaction of nitrous oxides (engine exhaust) and volatile organic compounds (pesticides and others)
- ✘ Gas tax and regulation of VOC releases
- ✘ Pesticide VOCs come from EC formulations: permethrin, glyphosate, oxyfluorfen, glufosinate, bifenthrin, others

GOOD AGRICULTURAL PRACTICES (GAPS)

- ✘ Manual and self audit developed by CPRB
- ✘ FDA will likely release GAP guidelines soon
 - + May include minimum requirements
- ✘ Current industry GAPs may not be adequate
- ✘ GAPs in general are science-based but:
 - + Usually not quantitative
 - + General science, not commodity or region based
- ✘ GAPs important to maintain consistent quality

SUSTAINABILITY

- ✘ Ambiguous concept, different meaning to different groups – environmental, economic, social equity
- ✘ CPRB has been working with other commodities, SureHarvest to develop a template
- ✘ More involved than GAPs!!
- ✘ No one intends an industry program but may be appropriate for individual growers