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

Bob Klein, Manager
Administrative Committee for Pistachios
California Pistachio Research Board
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
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
Progress toward reducing risk of food borne pathogens

- Processors have HACCP and Food Safety Plans
- FDA will be releasing “Prerequisite Programs”, etc

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
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