Highlights of 60 Years of Processing Tomato Research in California

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Outline of Presentation

• Research Collaborations – Past & Present
  – California League of Food Producers
  – University of California – Davis
  – Growers and Processors

• Materials Used for Research Review

• Research Highlights
  – Financial Allocations
  – Research Topics
    • 1957-2000 – Breeding, Disease Resistance
    • 2001+ - Variety Evaluation, Peelability, Sorting, Pectic Enzymes & Viscosity, Color, Mold, Quality

• Future Research Needs
Processing Tomato Research Cooperation

UC Davis

CTRI & CLFP

Growers and Processors

**Department of Food Science Example**

- 1978* ~ 8 faculty & staff
- 1992 ~ 5 faculty & staff
- 2018 ~ 3 faculty & staff

*Diane graduated from UCD with BS in 1978, hired as faculty member in 1992.
Examples of Successful Cooperation between Growers, Processors, CTRI, CLFP and the University

Vegetable Crops
- Breeding for yield, disease resistance, quality

Food Science
- Paste concentration
- Product color
- Peelability
- Pectic enzymes

Agricultural Engineering
- Mechanical harvesting
- In-line viscometer
- Irrigation
- Wastewater

Plant Pathology
- Diseases
- Nematodes
Materials for Research Review

• A summary of processing tomato research funded by year, research topic, amount of funding and accumulated total was provided by the CLFP.

• Minutes from an October 2017 “research needs” meeting of the CLFP Processing Tomato Research Committee and CTRI with UC Davis, Fresno State and US Dept. of Agriculture researchers.
RESEARCH HIGHLIGHTS
Total Annual Research Allocation (US$)
Average Allocation per Project (US$)

$63,000.
Accumulated Total Funding (US$)
• $6.6 Million from the California industry over a 60 year period
• Does not include research funded by individual industry members
• Does not include projects funded such as wastewater land application manual
• **UC contributions** include in-kind donation of faculty member’s time, facilities and laboratory instruments
## Most Frequently Funded Research Topics

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<tr>
<th>Research Topic</th>
<th>Years Funded</th>
<th>Total Years</th>
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Future Research Needs

- In-plant water use and conservation
- In-line wireless sensors
- Rapid food safety/spoilage testing
- Reducing energy use – alternative technologies (HPP, Microwave etc.)
- Automated collection, processing, and reporting of production/process data
- Wastewater management

- All require more cooperation between growers, processors, university and CLFP