

# Quality Breakout Group

Both breakout groups concurred that rapid, simple and inexpensive methods to predict maturity, harvest date, best product use and final quality target are needed.

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1. What are the top 3-5 grape related accomplishments of ARS during the past 3 years? What priorities of industry have been met?

Although ARS scientists have studied the flavor components of many crops, grapes are an example of a crop in which there is much more work to be done in identifying metabolic components, specifically those associated with flavor.

2. What major gaps still exist between ARS' research focus and the needs of industry?

From a quality perspective, the industry's most pressing needs are the availability of rapid, simple and inexpensive test methods for evaluating fruit for best product use (for either fresh or processed products).

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3. What are the future research projects that could address these gaps?

Projects in which test methods are developed, validated and subsequently applied to understanding underlying metabolic and biological processes would most effectively address these gaps.

4. Which teams of scientists (ARS, university, and industry), that currently exist or that could be created, are in the best position to address the research gaps?

Scientists with the appropriate skill sets (e.g. genomics, breeding, chemistry, physiology, etc.) are found within ARS, universities and the industry. Research teams should be formed based on the scientific question and the skills needed to properly elucidate the question in a timely fashion.

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5. How can the progress and impact of ARS research on grapes be increased with existing resources?

Increased impact is achievable through capitalizing on existing projects. Allowing existing projects to expand to include grapes when the flavor/metabolic components under investigation as part of the project are common to both the studied commodity and grapes. For example, a project studying anthocyanins in either blue berries or blood oranges would be allowed to study anthocyanins in grapes.

6. How will research results be extended to end users through an outreach plan? What is that outreach plan?

Outreach will be achieved through publications and partnering with extension agents for the dissemination to end users the information obtained from studies.

# Quality Action Plan

- A. Conduct a meeting under the Quality component of NGWI to set ground rules for sharing information, identify needed test methods and prioritize the list of desired methods.

Methods identified as need from Tuesday's discussions included analytical methods to determine flavor components (green notes, Concord profile), tannins and GGs.

- B. Approach international contacts to determine the feasibility of exchanging data or forming collaborations?
- C. Upon completing A & B, reevaluate breakout questions 2-6 and move forward with planning and execution.