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Agricultural Outlook Forum  
U.S. Department of Agriculture

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United Soybean Board Production Program

Ed Ready  
Production Program Manager

A vertical photograph of a soybean plant stem on the left side of the slide. The stem is covered in fine hairs and has several green, elongated pods. Small purple flowers are visible at the nodes. The background is a soft-focus green.

# **United Soybean Board Production Program**

Ed Ready  
Production Program Manager  
August 28, 2008




# United Soybean Board

- 68 Farmer directors
- Appointed by the Secretary of Ag.
- Invest soybean checkoff funds in research and promotion
  - 0.5% of selling price at first point of sale.
  - Half stays with states. Half goes to national checkoff.



# Production Program Strategic Areas

- Yield
- Composition
- Research Coordination



# Production Summary

- Yield: protect existing yield potential from stress and increase yield potential
- Composition: Improve composition to meet the needs of end-users better
- Research Coordination: Get the best bang for the research buck.

A vertical strip on the left side of the slide shows a close-up of a green bean plant. It features a green, fuzzy stem with several green bean pods. Small purple flowers are visible at the nodes where the pods attach to the stem. The background is a soft-focus green.

# Yield Strategies

- Increase level of plant resistance to biological and environmental stresses.
- Accelerate introducing new traits into elite germplasm



# Yield Projects


- Increase Resistance
  - Drought
  - Flooding
  - Soybean Cyst Nematode
  - Sudden Death Syndrome
  - Charcoal Rot
  - Rust
  - Aphids
- Increase Yield Potential






# Composition Strategies

- Identify oil and meal traits and the genes that influence them.
- Incorporate genes conferring targeted traits into elite germplasm



# Composition Projects

- Improve oil
  - Reduce linolenic acid
  - Increase oleic acid
  - Reduce saturated fatty acids
- Increase oil without excess loss of protein

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# Composition Projects

- Increase protein
- Reduce phytate phosphorus
- Increase digestible sugars



# Genomics Projects


- Physical Map
- Marker discovery
- Marker analysis of the germplasm collection
- Support for assembly of sequenced soybean genome
- Functional genomics
- Transformation
- Proteomics and metabolomics



# Research Coordination

## Strategies

- Facilitate coordination among checkoff organizations
- Facilitate communication among researchers to coordinate research, share technical advances, and set strategies and priorities
- Attract, encourage, and train future generations of research scientists

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# Production Summary

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# Leveraging and Cooperation

- Start the Process/build the base
- Help others do more
- Use the tools
  - Marker analysis
  - Nested Association Mapping
  - Marker Assisted Selection



Questions?