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Agricultural Outlook Forum
U.S. Department of Agriculture

Presented: February 26-27, 2009

United Soybean Board Production Program

Ed Ready
Production Program Manager

A vertical strip on the left side of the slide shows a close-up of a soybean plant. It features several green, fuzzy pods hanging from a stem, with small purple flowers interspersed among them. 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.



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

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, light purple flowers are visible on the stem. The background is a soft-focus green.

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

A vertical strip on the left side of the slide shows a close-up of a green bean plant. It features a green, fuzzy bean pod, a small purple flower, and a green leaf. The background is a soft-focus green.

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.



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?