
American Peanut Council STRATEGIC PLAN FOR PEANUT RESEARCH 2004-2006

Key Strategic Issues:

Over the next several years, several key strategic issues will be faced by the US peanut industry and its consumers. Chief among them, is a continued emphasis on food safety and nutrition. Consumers will continue to seek out foods which not only provide comfort, but positive health reassurances. To remain competitive, peanut producers will continue to require improved production and processing methods which improve yields, reduce inputs and costs, while finding new uses for their products and by products. Additionally, the industry must be at the forefront of new research designed to improve quality and breeding so as to remain available for all users.

KEY RESEARCH STRATEGIES

Food Safety:

Aflatoxin:

- Non toxigenic competitive fungus
- Resistant varieties
 - Traditional breeding
 - Genetic engineering
- Insect resistance
- Expert systems for production management
- Other means of developing pre-harvest aflatoxin resistance

Food Allergies (peanut focus):

- Industry education programs (GMP focus)
- Educational programs (food allergy management through Food Allergy and Anaphylaxis Network and Anaphylaxis Network Canada)
- Vaccine development
- Peanut sensitization/tolerance
- Population studies
- Wild species screening for reduced allergenicity
- Researcher/consumer group conferences

Peanut Production Management:

- Water utilization and management
- Breeding and/or biological control for disease resistance/reduced cost
 - TSWV resistance
 - Sclerotinia resistance
 - Nematode resistance
 - Leafspot resistance
 - White mold resistance
 - Rust resistance
 - Reduced chemical effectiveness
- Farm management systems
 - Software/expert systems
 - Precision agriculture
 - Alternate crop rotation
 - Improved farm equipment (diggers, combines, dryers)
 - New grading methods

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- Green weight
 - Chemical testing
 - Early detection
 - Improved tillage methods
 - Production management tools/methods
 - Drying technology
 - Pesticide management systems

Quality Enhancement

- Reduced foreign material
- Flavor development and enhancement
 - Breeding
 - Curing
 - Control of flavor loss in handling and processing
 - Screening
 - Causes/elimination of off flavors
- Accelerated new peanut varieties with improved
 - Yield
 - Flavor preservation
 - Early maturing
 - Nutritional/Nutraceutical enhancement
 - Shelling/Blanching characteristics
- New end uses/by product utilization
- Protein quality
- Land selection systems
- Maintenance of seed quality
- Maturity detection
- Storage/insect control
- Relationships between cultural practices and final nutritional/quality value
- Origin studies and comparisons

Peanut Nutrition Research

Studies showing positive impact of peanuts in the diet for:

- Weight Loss
- Cardiovascular Disease
- Cancer Prevention
- Diabetes
- FDA Approved Health Claim