

All Public Peanut Breeding Programs Have Benefited from TPRF Funding

Peanutresearchfoundation.org



DELIVERING 10 YEARS
OF PEANUT GENOMIC SCIENCE AND COMMERCIAL ROI

The infographic features a 4x6 grid of circular images. The top row shows various sky conditions. The second row includes a tractor in a field. The third and fourth rows show different stages of peanut plants, from seedlings to mature crops, and finally harvested peanuts.



AMERICAN PEANUT COUNCIL



THE PEANUT
RESEARCH
FOUNDATION

What Your Money Has Done...

- Funded the **development** and **utilization** of the publicly available **peanut genome**
- Facilitated **Marker Assisted Selection (MAS)** technology
- **Protected** valuable peanut germplasm
- Provided **centralized storage** for complex sets of data

Real Research Results:

- Release of **TifCB7**
 - High level of leaf spot resistance
 - Economic and environmental sustainability
- Marker Identification
 - **White mold, Leaf spot, Sclerotinia, TSWV, Nematode and Rust resistance**
 - **Aflatoxin resistance**
 - **Water efficiency**
 - **Linoleic/Oleic acid content**
 - **Saturated/Unsaturated fatty acid content**
 - **Seed Weight/Pod Weight**
 - **Flavor attributes**
- Model for **high throughput phenotyping**



2024 Research Plan

The Peanut Research Foundation's board of directors and staff have worked diligently over the past year to assess the wishes of the peanut industry regarding future research priorities.



Support Marker Development & Breeding Programs Targeting Quality and Nutritional Goals

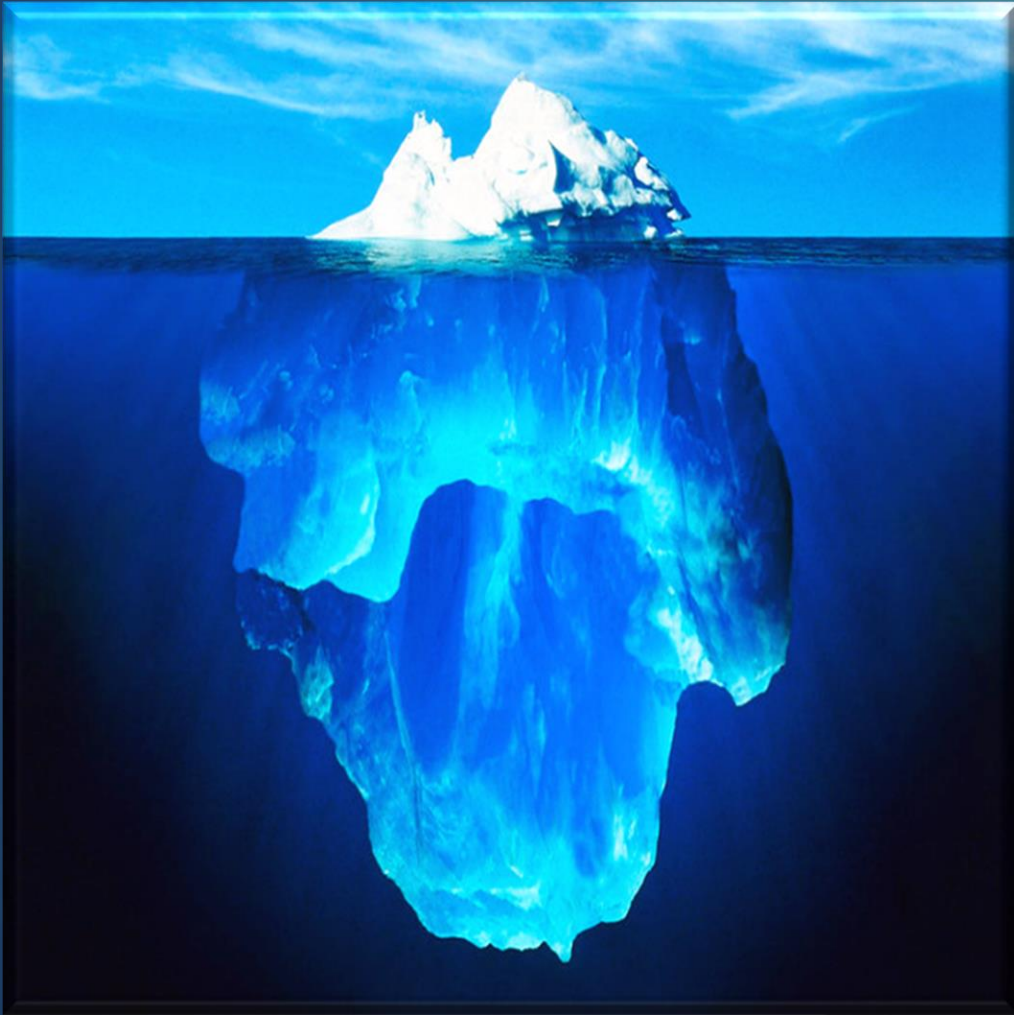
Develop and Release Varieties...

- ▶ that absorb less heavy metals
- ▶ with higher protein content and other nutritional advantages
- ▶ with improved flavor qualities
- ▶ that support less aflatoxin contamination
- ▶ with more desirable fatty acid compositions
- ▶ which provide a more complete amino acid profile

Develop Technologies that Provide Efficiencies and Enhanced Profits for Producers

- ▶ Improved disease resistance
- ▶ Increased insect resistance
- ▶ Maintain viable yields under heat and water stress
- ▶ Improve soil health and carbon sequestration
- ▶ Increased oil content to grow US peanut oil market

We Have Only Scratched the Surface



- Maintain the MAS “Pipeline”
- Continue to Support Our Breeding Programs
- Facilitate Collaboration and Information Exchange
- Protect and Curate Germplasm
- Assist with Genotyping and Phenotyping Costs