

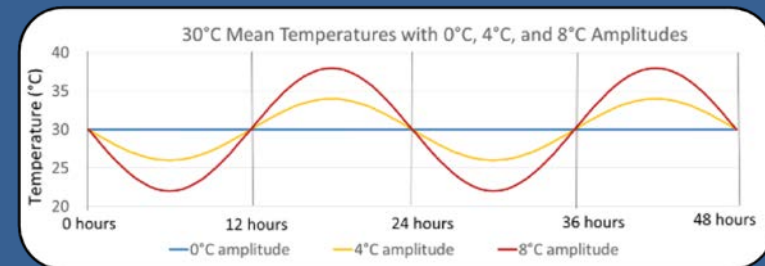
# Surviving Production Uncertainty: A focus on plant diseases and peanut production.

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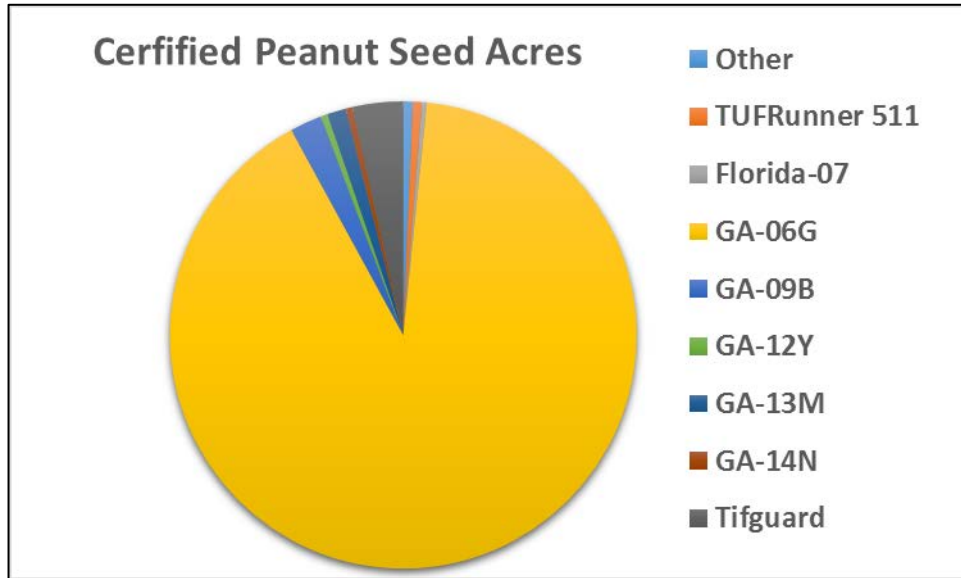
**2016 Southern Peanut Growers Conference**  
**July 22<sup>nd</sup> Miramar Beach, FL**



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# Genetic uniformity in the hosts and population shifts in the pathogens.

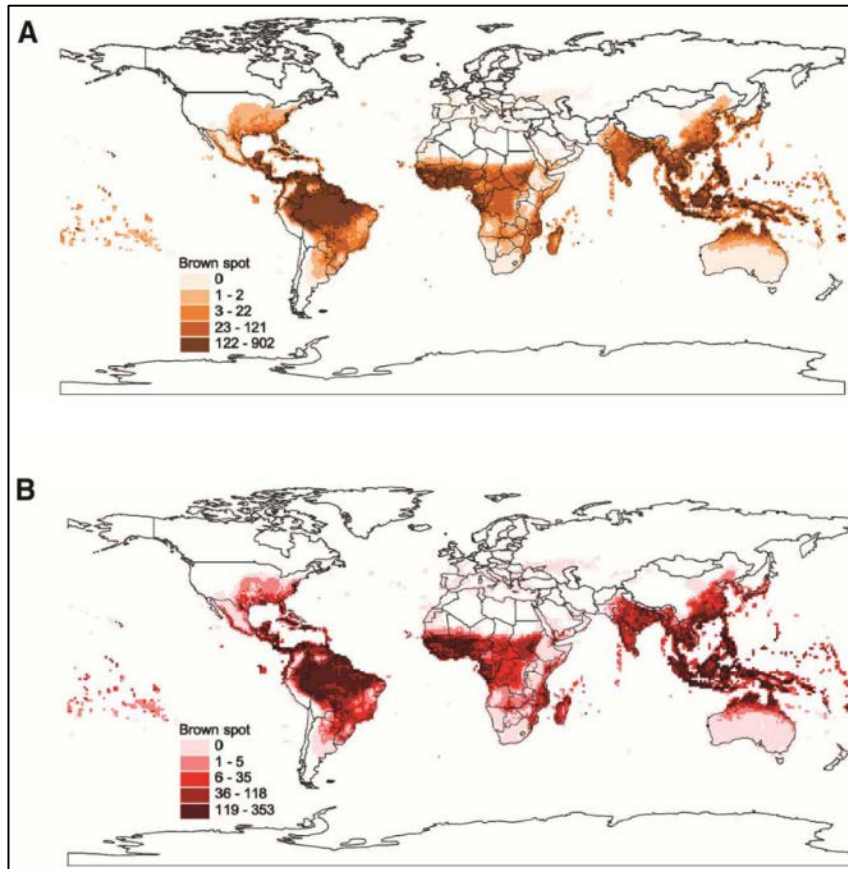


- Fungicide products
  - Many available
  - Resistance a concern
  - MRLs affect trade
  - 10 to 12 yrs to develop

- Host genetic uniformity
  - Selects new populations
  - High risk with disease
  - Examples
    - TSWV
    - Tifguard (single gene)



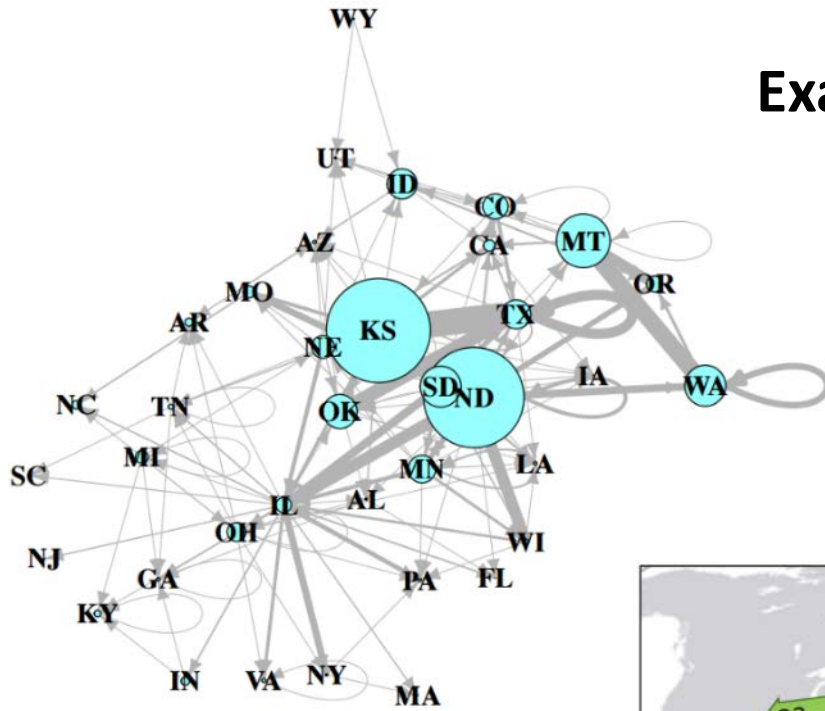
# Climate change could cause a shift in common diseases and when they occur.



Savary et al. Plant Disease / Vol. 95 No. 10

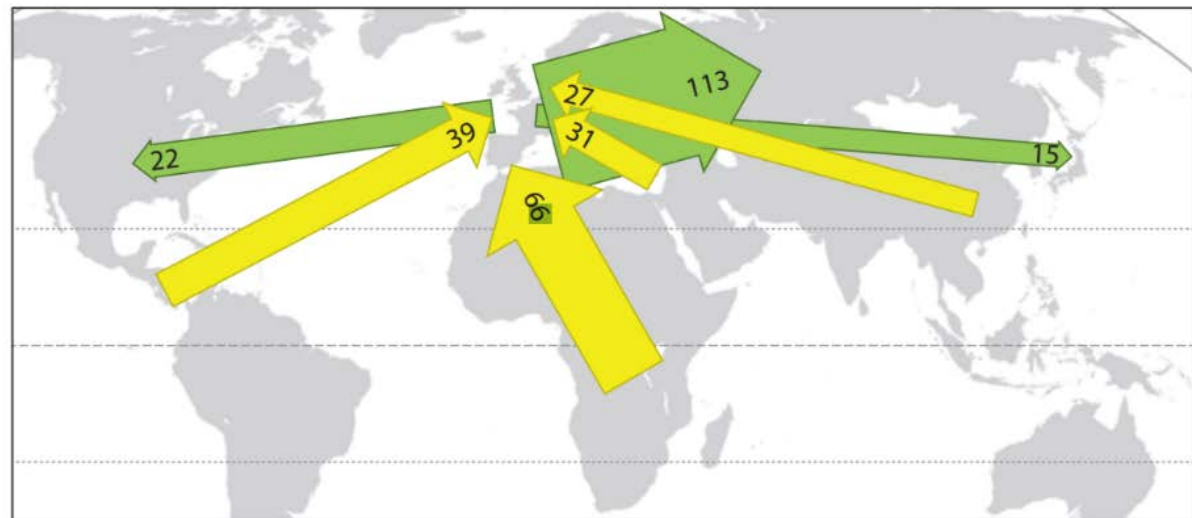
- Warm temperatures
  - Increase range
  - Early infections
  - Later disease
- Rainfall variability
  - More moisture
  - Plant stress
  - Pathogen movement

# Global connectivity can create risks for pathogen and pest invasion.



## Examples of Invasive Plant Pathogens:

- Citrus Greening
- Daylily rust
- Soybean rust
- Chestnut blight

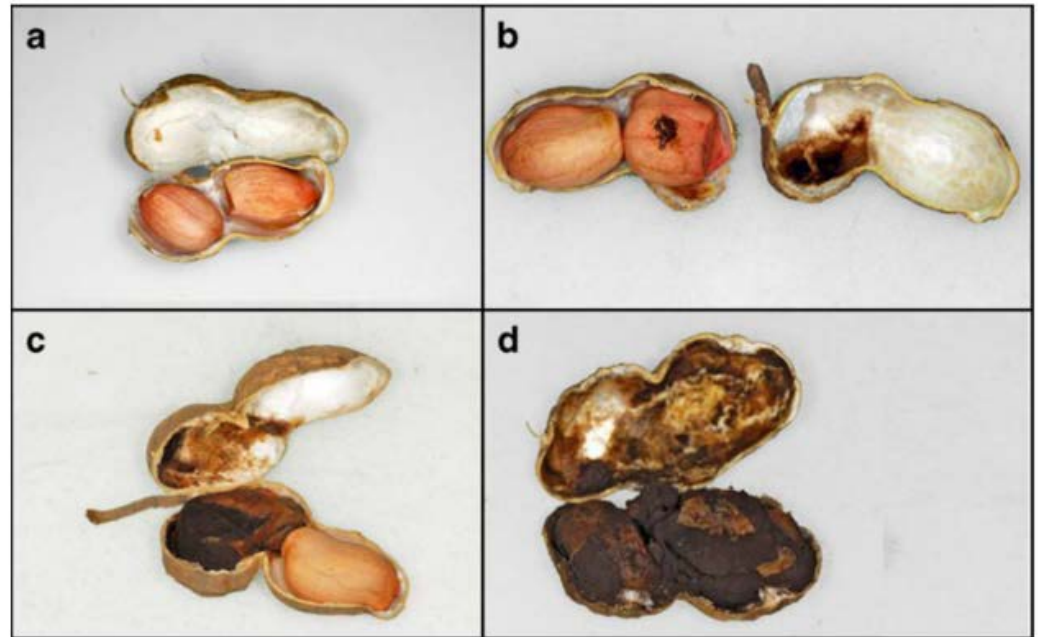


<http://bioscience.oxfordjournals.org>

**The networks are complex, but can help identify risk.**

# Some new, emerging and possibly invasive diseases of concern in peanuts are:

- Tospoviruses (e.g. Tomato Spotted Wilt Virus)
  - Groundnut Ring Spot Virus
  - Tomato Chlorotic Spot Virus
- South America
  - Peanut Scab
  - Peanut Smut
- Australia
  - Necosmospora



Conforto et al. Eur J Plant Pathol (2013) 137:663–666



# Agriculture consolidation could limit the diversity in crop protection research.

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Consolidation would eliminate some of the duplicate research and development efforts in the industry, the CEO said.  
“We continue to see the low effectiveness of R&D with some of our competitors, and we continue to think that consolidation in this space is inevitable,” Grant said. [Bloomberg (10/7/15)]

Research could be limited to **large acreage and high value crops leading to delayed releases on other crops.**



