



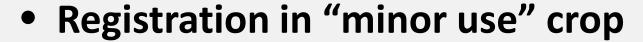
Limited Chemical Tools

Insecticide resistance

- Thrips, tobacco budworm, soybean looper
- Neonicotinoids, pyrethroids, diamides

Regulation

- EPA cancellation of registrations
- Global trading partners



Potential ROI





New and Invasive Pests

Global trade

- Movement of exotic species
- Helicoverpa armigera

Climate change

- Reproduction, overwinter survival...
- Velvet bean caterpillar??

Changes in agronomic practices

- Tillage, insecticide use patterns,...
- Burrower bug





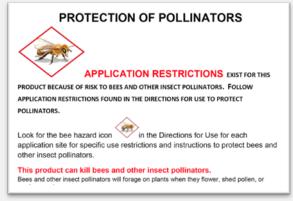




Pollinator Protection



- In peanut?...Really???
- YES, REALLY!!
- It does not matter if pollinator services are not important in peanut. Regulations that limit the use of insecticides on flowering crops, are still the law and apply to peanut.
- We do need to protect pollinators.
- We do not need to sit back and fail to provide input in the regulatory process.





Economies of Scale and Limited Time

- Large farms
- Limited equipment and labor



- Today, we can usually get by with "less than ideal" insect management practices in peanut.
 - Not scouting, calendar based spray programs,
 limited use of thresholds, driving too fast and using too little water...
- This may not be possible in the future...

