

Risks to Availability and Efficacy of Pesticides

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The success of any agricultural commodity depends on key factors that include: 1) productivity at the grower level and 2) having a viable market for the final product. During the historical peanut quota system (prior to major changes in Federal farm legislation in 2003), peanut production was heavily tied to domestic needs resulting in stable market for peanuts and consequently consistent and predictable financial returns for growers. After the elimination of the quota system, peanut acreage increased along with yield in some states, especially Georgia, due to the release of more productive cultivars and more effective pesticides. Economic return of peanut has often been greater for peanut than crops like corn or cotton that are often grown in rotation with peanut. This dependence on peanut for the last 10 years has pushed growers to depend more on pesticides to manage pests and to remain highly productive. With acres and productivity at higher levels, the peanut industry has expanded export markets to deal with large peanut carryovers and to maintain reasonable peanut prices. A downside to expansion of peanut exports market has created greater scrutiny of production and pest management practices for peanuts grown in the United States in the European Union (EU) and other markets. This has allowed some of the peanut industry to prohibition on certain pesticides being applied due to little to no detectable residue levels being allowed on peanuts exported to select countries. Another issue peanut growers are facing in the US is the lack of new chemistries being developed to take the place of older chemistries because of the limited market in peanut compared with corn, cotton, and soybean. The development of resistance is becoming more prevalent as growers are shortening rotations causing entrenched pests and subsequent reliance on pesticides and increased selection pressure relative to resistance. This review is aimed at providing information on the current economic and production situation peanut growers are facing as it relates to effectively managing pests in a global marketplace.