Georgia Pecans

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Characteristics of Pecan

• Cross pollinated crop

• Similar to people
  – Takes two to make a seed
  – Seedlings are different from the parent and each other
Seedling Vs. Cultivar

• Pecans may be either grafted cultivars or seedlings.
• Cultivar = Variety

Seedling trees have diverse nut size, nut shape, and kernel quality.
Quality factors of pecan

• Nut Size
  – Generally sold as # nuts per pound
    • Large – 55 or less nuts per pound
    • Medium – 55-70 nuts per pound
    • Small – 71 or more nuts per pound

• Gram Weight
  • Large   8+ grams
  • Medium   6.5 – 8.0 grams
  • Small   < 6.5 grams
Quality factors of pecan

• % Kernel = \( \frac{\text{kernel weight}}{\text{nut weight}} \times 100 \)

– The kernel is the useful part, so the higher the percentage kernel the more valuable the nut.
– Thicker shells reduce percent kernel.
– Large nuts should have a higher percent kernel than small nuts.
– Each cultivar has a characteristic percent kernel.
– Higher percent kernel = better developed kernel = more oil and flavor.
- High % kernel
- Medium % kernel
- Undeveloped kernels
Quality factors of pecan

• Kernel Color
  – Light colored kernels are generally favored.
  – Kernels darken as they age.
  – Different cultivars have different kernel colors.
  – Some cultivars have undesirable spots, or dark veins.
Kernel Color Variation
Color Defects

Kernel Spotting

Dark Veins
Prominent Georgia Cultivars

• ‘Desirable’
  – Georgia’s leading cultivar.
  – Large size and high quality.
  – Less alternate bearing.
  – Disease susceptible.

48 nuts / pound
51 % kernel
Prominent Georgia Cultivars

• ‘Stuart’
  – Widely planted cultivar.
  – Large size.
  – Early harvest date.

55 nuts / pound
47 % kernel
Prominent Georgia Cultivars

• ‘Sumner’
  – Large size and good quality.
  – Late harvest date.
  – Disease resistant.
  – Becoming more popular.

56 nuts / pound
52 % kernel
Prominent Georgia Cultivars

• ‘Cape Fear’
  – Medium size.
  – Variable quality.
  – Golden kernel color.
  – Alternate bears.

55 nuts / pound
51 % kernel
Prominent Georgia Cultivars

• ‘Pawnee’
  – Very early harvest date.
  – Large size.
  – Good percent kernel.
  – Can have color defects (spotting and dark veins).
  – Disease susceptible.

56 nuts / pound
54 % kernel
Prominent Georgia Cultivars

• ‘Elliot’
  – Small nut size.
  – Alternate bearing.
  – Round kernel.
  – Oily, high-quality kernel.
  – Scab resistant.

77 nuts / pound
51 % kernel
Questions?