Avocado

*Persea americana* (Lauraceae)

- Also known as the alligator pear, due to its shape and the leather-like appearance of its thick skin
- Rich nutty flavor
- High fat content that is natural
  - Considered most nutritious of the unsaturated fatty acids
  - Often referred to as the most nutritious of all fruits

Origin

http://arlenedodge.com/photogallery/map.html
Origin

• Since ancient times, grown in Neotropics
  – May have been of the first trees domesticated in the Neotropics
• Human consumption dates back as far as approx. 8000-7000 BC
• First cultivated and domesticated by the Mesoamerican cultures
• Human selection may have begun between 4000 and 2800 BC
  – Larger seed sizes found in more recent archeological sites at Tehuacan and Oaxaca Valley sites
Early Distributions and Dispersal

• Early dispersal difficult to determine using historical literature
• Long-distance dispersal methods are still unknown
  – Early dispersal perhaps accidental (transportation within soils or water), facilitated by animals such as big mammals (sloths)
• Humans became an important mechanism of dispersal when they arrived in America about 13,000 years ago
Varieties

- Like most members of the Lauraceae family, the avocado is very variable.
- Consists of several taxa, botanical varieties and subspecies.
- Much of the variation is because of the diversity of environmental conditions and cultural diversity.
  - Possible that much of avocado diversity is a result of human intervention.
West Indian

- Central American forests
- Largest fruits with light green skin
- Well adapted to lowland tropical regions
- Short dry season
- Lowest oil content

http://www.virtualherbarium.org/TropicalFruit/Avocado.html
Mexican

- Resides in more elevated and cooler habitat with a 6-8 month winter-spring dry period
- Very thin skin which makes it susceptible to diseases
- Large seed and smaller fruit than is usually desired
- Crushed leaves have a distinct anise (licorice) smell, unique to this race
Guatemalan

- Similar to Mexican in oil content and flavor
- Found in less extreme conditions common in tropical highlands with year-round cool conditions
- Skin is thicker and seed smaller
- Highest in horticultural quality of the three races
- Needs more time to mature
  - Hybrids with other two help bridge the race maturity gap

http://www.clovegarden.com/ingred/laurel.html
Hass cultivar

- Most popular cultivar in the US
- Popularized in California, where the first commercial avocado orchards were planted in the early 1900s
- Also produced in Mexico (world’s largest avocado producer) and Chile
- Descends primarily from Guatemalan race, hybrid with Mexican
- Known as the year round avocado

• Appreciated as a valuable food plant since pre-historic times and is gaining popularity.
• Also has medicinal purposes
• There is still not much information on the origin and centers of domestication, or pre-Hispanic use.
• Because of different purposes and necessities, there a great amount of species diversity.