Rooibos

Presentation by: Tiffany Azzarello
Introduction

- Scientific name: *Aspalathus linearis*
- Family: Leguminosae
- Relatives: Aspalathus is a genus of flowering plants in the legume family.
  - *Aspalathus cordata*
  - *Aspalathus forbesii*
  - *Aspalathus nigra*
Geography of Cultivation

- Rooibos has origins and is cultivated on the western coast of the Western Cape province of South Africa in an area known as the Fynbos Biome.
  - All other attempts to grow it outside its local area have failed.
- Grows in symbiotic relationship with local micro-organisms
Morphology

• The main used parts in rooibos are the needle like leaves and red brown stems. The rest of the plant isn’t used for any commercial use.

• As a part of the legume family, it does have nodules containing nitrogen fixing bacteria to help it survive in poor soil.
Cultivation

• Many challenges were faced with cultivation.
  • Seeds very small-unable to germinate
  • Collecting seeds difficult
    • Ant granary
  • Soil conditions needed were very unique
    • Acidic, fine sand and low nutrients

• Rooibos Farms
  • Seedlings germinated in nurseries and planted during winter months
  • Field is not tilled but rather furrows are formed to place seedlings
  • Harvested by hand in summer
    • Use sickles and neatly bound in bundles
  • Brought to processing plant and sorted
Processing

- After sorting bundles are fed into cutting machines.
- Freshly cut rooibos is placed in low heaps to “sweat”
  - Process of enzymatic oxidation
  - Green to red
- After “sweating” they are allowed to dry in the sun
- Transferred to large sacks and transported
- Tea is then sanitized and packed into tea bags
Rooibos Uses and Benefits

- Rooibos is used almost exclusively for tea
  - Also for natural hair dye, meat tenderizer, substitute for water or milk
- Traditionally used to treat:
  - Allergies, source of antioxidants, asthma, diaper rash, digestive problems, hypertension, headaches, nervousness, and vascular disorders
- Rich in minerals such as iron, calcium, potassium, copper, manganese and others
- Mixed evidence on drug interactions
  - It is possible that it interferes with the liver enzyme P450 which could alter how will your bodies ability to breakdown medicine
History

• Traditionally local people would climb mountains and retrieve it for tea
• In 1904, Benjamin Ginsberg designed a variety of experiments
  • Trying to “cure” the tea so it could be fermented in barrels for consumption
• Dr. Nortier considered father of rooibos industry
• In 1930, he discovered how to germinate the seeds by mechanically grinding away some of the seed pod.
Uses in North America

- Statistics on specific types of herbal teas are limited
  - About 5 million pounds of Rooibos, white and oolong tea were imported in 2013
- Americans consume over half a pound of tea per year
  - About 8.1 gallons per year
- Total sales of teas equal about 11.5 billion dollars
Questions?