Chickpea

*Cicer arietinum*

Sarah DeSpiegelaere
Chickpea

Genus: *Cicer*

Species: *Cicer arietinum*

Family: Fabaceae

- Also known as
  - Bengal gram
  - Garbanzo bean
  - Egyptian pea
  - Ceci

- One of the earliest cultivated legumes with 7,500 year old remains found in the Middle East.

- Relatives are beans, peas, soybeans, and alfalfa.
Geography

- Chickpeas originated in Turkey and Greece in the late Neolithic period around 3500 BC.
- Spread throughout the Mediterranean region, West Asia, Indian subcontinent, and Australia through trade.
- Came to U.S. through immigration.
- Grown in tropical, subtropical, and/or temperate regions.
Morphology

- Herbaceous annual plant, similar to a small shrub
- Flowers are white with blue, violet or pink veins and are bisexual
- Self-pollinated
- Fruits are a legume
- Roots are classified as a taproot system with 3-4 rows of lateral roots. Roots typically grow 1.5-2 m deep.
  - Rich in starch
- The stem is erect, branched and hairy
- Leaves are compound, obovate, and are pubescent.
  - Margins are serrated
Two Kinds of Chickpea

**Desi**
- Small, dark, have a rough coating
- Earliest variety
  - Most closely resembles seeds from archaeological sites
- High in fiber
- Origin: Turkey

**Kabuli**
- Lighter in color, has a smoother coating
- Found in Mediterranean, South Europe, North Africa, and South America
- Introduced to India in 18th Century
  - Green varieties
Cultivation

- Grown in Mediterranean, West Asia, Indian subcontinent, Australia, Great Plains
  - India is the largest producer and Australia is the second
- It is an annual, with a long growing season requiring 100 days until harvest
- Prefers full sun, can be planted in partial sun, however the yield will decrease
- Likes warm temperatures ~70-80°F
- Potassium and phosphorus should be added to the soil
- Susceptible to blight, mosaic virus, fungi, and anthracnose
- May be machine harvested
Plant Uses

- There are few references regarding medicinal uses, but have been noted for having diuretic effects.
- They are high in nutrients, especially manganese, iron, phosphorus, copper, dietary fiber, and folate.
- Traditionally chickpeas are used as food and can be found in a variety of dishes
  - Salads
  - Stews
  - Flour
  - Hummus
  - Roasted as a snack
  - Some varieties are popped like popcorn
History

- In the Bronze Age, chickpeas became a staple in Greece and Italy.
- The Roman “Apicius” has several recipes
  - Ancient recipe book
- In ancient times, chickpeas were associated with the planet Venus as it was once thought to increase sperm and provoke menstruation.
- During World War I chickpeas were roasted and then ground to be used as a coffee substitute.
Use in North America

- Chickpeas were brought to North America through immigration.
- Indian dishes such as hummus made chickpeas popular due to the flavor and the health benefits.
- California, Idaho, Montana and Washington are the main producers in the United States.
Fun Facts

- The Latin name *Cicer arietinum* means “small ram” as the shape of the seed may resemble a ram’s head.
- Stems, leaves, and pod shell have compounds that have aphrodisiac properties.
- Leaves are used to manufacture blue/indigo dyes.
References