Chickpea

Family: Fabaceae
Subfamily: Faboideae
Genus & species: *Cicer arietinum*
Common names: Gram, garbanzo, garbanzo bean, hommes, hamaz, chick gram, common gram, Bengal gram

**Biogeography:**

Chickpeas probably originated in southeastern Turkey and later spread throughout the Middle East and Mediterranean regions. Archaeological remains from present-day Israel and Turkey indicate that chickpeas had been domesticated by Neolithic times (about 7,000 years ago). Chickpeas were mentioned in written documents from the Nile valley in Egypt that date to about 6,500 BP (before present). By the Bronze Age (about 5,000 BP), they had spread to Greece and Italy.

Today, some 7 million tonnes of chickpeas are cultivated annually in 45 different countries, making them one of the most widely grown grain legumes in the world. The Indian subcontinent accounts for about 75% of world production, with the remainder coming from eastern Africa, the Mediterranean, western Asia, Australia, southern Europe, and North and South America.

The most common commercial varieties are the small dark ‘desi’ type (of Indian origin) or the larger light-coloured ‘kabuli’ type (from the Mediterranean and Middle East regions). Desi chickpeas account for about 90% of the world’s current commercial production.

**Botanical features:**

Chickpea is an upright annual herbaceous legume, from 30-70 cm tall, that is well adapted to arid climates. The compound leaves, composed of 10-16 leaflets with serrated edges, are covered with fine hairs that limit water loss from evapotranspiration. Some of the hairs secrete an acid that helps protect the plant against attack by insects. The leaflets can also fold up slightly during hot dry weather further limiting water loss, and a large deep tap root allows the plant access to deeper water supplies.

The plant produces small pea-like flowers, generally white in the kabuli type and violet in the desi type. The purple colouring is caused by a chemical called anthocyanin. Because of the anthocyanin, the purple-flowered varieties also have darker leaves, stems and seed coatings. Flowers, and later pods, form at axillary nodes and each pod contains from two to three seeds.

The root system of the chickpea also secretes an acid that helps the plant take up phosphorus from the soil, allowing growth on soils with limited supplies of this essential element.
General:

The name *Cicer* probably comes from the Greek word ‘kikus,’ meaning strength or power, because of the chickpea’s high nutritional value and its reputation as an aphrodisiac. The species name *arietinum* is derived from the Latin word ‘aries,’ meaning ‘ram,’ and refers to the ram’s-head shape of the seed. Chickpeas were held in such high regard in ancient Rome that the statesman Cicero took his name from this legume.

Uses:

Chickpeas are very popular in the cuisines of many different cultures including Indian, Italian, Greek, Spanish, Middle Eastern and some Latin American. They can be eaten fresh, dried, boiled or roasted. The cooked seeds are used in soups and salads or ground into flour. Cooked green pods and tender shoots can be consumed as vegetables. During World War II, the roasted roots were used as a substitute for coffee.

Other uses for chickpeas include stock feed and as a source of starch for textile sizing.

Human health benefits & concerns:

Chickpeas are relatively low in anti-nutritional factors and are one of the most easily digested beans. Their high fibre content decreases serum glucose and cholesterol, potentially reducing the risk of heart disease and lowering the insulin requirement for diabetics. They contain from 19-25% protein. The protein is low in the essential amino acid methionine, however, so chickpeas should be combined with other protein sources for optimal nutrition.

Chickpeas are also a good source of vitamin C, calcium, phosphorus and iron.

References:


http://www.hort.purdue.edu/newcrop/cropfactsheets/Chickpea.html