



PLANT FACT SHEET

Chenopodium quinoa Willd.

GENUS *Chenopodium* FAMILY Amaranthaceae

COMMON NAMES Quinoa

EDIBLE PARTS AND USES

Edible parts: Leaves, Seeds, Vegetable

The seed is used for soups and stews. They can be puffed or eaten as a side dish like rice. The seeds can be eaten or ground into flour.

Young leaves can be cooked and eaten as a vegetable.

Sprouted seeds are used in salads.

The flower clusters are steamed like broccoli. They can be mixed with cheese, dipped in egg batter and fried. Many varieties contain saponins which give them a bitter taste. The outside skin is removed to get rid of these saponins.

DESCRIPTION

A small herb. It grows 20 cm to 3 m high. The taproot is branched. The leaves vary in shape. They are toothed and somewhat grey-green. The flowers are grouped in clusters on the stalk. The flowers are small and without stalks. They are in dense clusters at the top of the plant. The seeds are 1-2.6 mm across. They can be white, yellow, red, purple, brown or black. Plants vary a lot in colour, flowering and other ways.

HABITAT

It is a tropical plant. It grows between 500 and 3,900 m altitude in the Andes. It can adapt to cold and drought. Plants grow with rainfalls between 250 mm to 1 500 mm. Once established plants can tolerate temperatures down to -5°C. The soil needs to be well drained. Some varieties are suited to acid soils with a pH of 4.5, and others to alkaline soils with a pH of 9.5. Some can tolerate salty conditions. It suits hardiness zones 8-11.

PRODUCTION

Cultivation

Seed germinate whenever conditions are suitable. Seeds are scattered. Rates of 15-20 kg of seed per hectare are used. Normally a range of varieties are mixed to allow for variations in conditions.

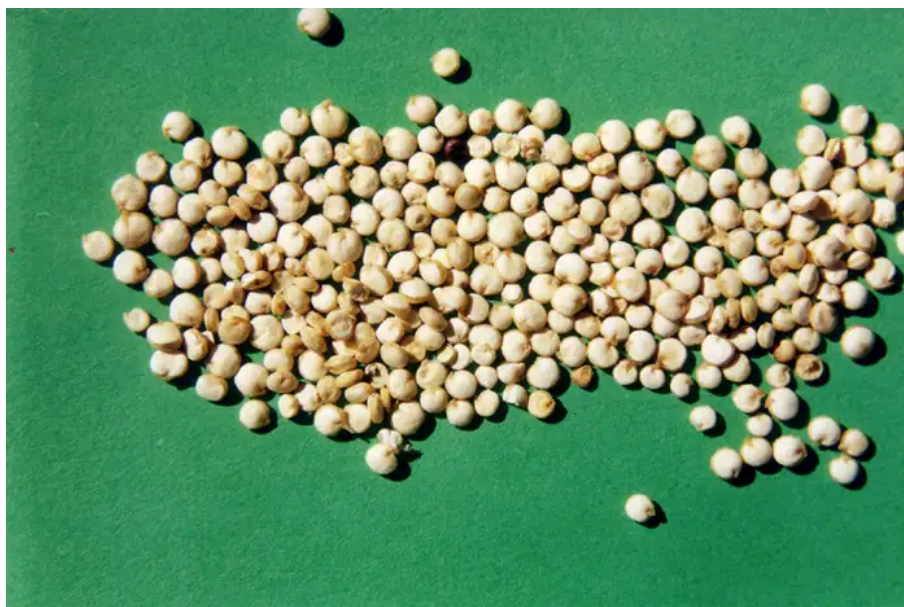
Harvesting and Seed Production

A life cycle varies between 120-240 days. Plants are harvested when mature then allowed to lie for 30-45 days before threshing. Yields of 400-1 200 kg per hectare occur.

NOTES

There are about 100-150-250 *Chenopodium* species. They are mostly in temperate regions. It suits the high altitude tropics. The protein is good quality because of its amino acid balance. It has 2-6% more protein and better amino acid balance than wheat. The saponins in the skin protect it from insects. Also put in the family *Chenopodiaceae*.

PICTURES



Credit: Food Plants International (Bruce French)

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