



PLANT FACT SHEET

Amaranthus spinosus L.

GENUS *Amaranthus* FAMILY Amaranthaceae

COMMON NAMES Prickly amaranth, Spiny Pigweed

EDIBLE PARTS AND USES

Edible parts: Leaves, Seeds, Vegetable, Flowers, Leaves - tea

The young leaves are edible cooked. They are boiled or fried.

The seeds are ground into flour and cooked.

CAUTION: This plant can accumulate nitrates if grown with high nitrogen inorganic fertilisers and these are poisonous.

DESCRIPTION

An annual plant 60 -100 cm high. It can be erect or lie over. The stems can be nearly round or they can be angular. The plant branches from the base upwards. Leaves are fairly smooth or hairless but can be tinged purple. The leaf stalk can be 0.5-10 cm long. The leaf blade is oval or sword shaped and 2-7 cm long by 0.6-3 cm wide. There can be a short tip at the top end and gradually tapering to the base. Flower clusters occur at the sides and these can be single or arranged in compound spikes. The flower clusters at the top can be 3-10 cm long. The top flowers often droop over. Parts of the flowers in the clusters of the leaves form spines. These are very sharp. They can be 0.5-2 cm long. The upper flowers are male and the lower flowers are female. The seed are 1-1.2 mm across and flattened.

HABITAT

A tropical plant. It occurs world wide from the tropics to the warm temperate zone. It can grow in sun or light shade. In Nepal it grows to 1500 m altitude. In Tanzania it grows from sea level to 1,800 m above sea level and in areas with 800-1,300 mm rainfall. It grows well in moist, damp soil. It grows in wetlands. It can grow in arid places. In Argentina it grows up to 1,000 m above sea level. Tasmania Herbarium. In Yunnan. It grows in Sichuan.

PRODUCTION

Cultivation

Plants are often self sown. Plants can be grown from seed. They can be sown direct or transplanted.

Harvesting and Seed Production

Leaves are often picked early in the season before spines develop. Leaves can be dried and stored.

NOTES

There are about 60 *Amaranthus* species. The dried leaves contain (per 100g) 267 - 276 calories, 20 - 34.4% protein, 2 - 4.5% fat, 45 - 54% carbohydrate, 9.8 - 10.4% fibre, 16.6 - 24% ash, 1795 - 5333 mg calcium, 333 - 460 mg phosphorus, 13.5 - 152.7mg iron, 13 - 37 mg sodium, 337 - 3528 mg potassium, 27.9 - 40.8mg betacarotene equivalent, 0.06mg thiamine, 2.02mg riboflavin, 7.7 - 8.6mg niacin and 503 mg ascorbic acid.

Chemical composition (after Hooper): Water = 52.10% (fresh). Fat = 2.21% (dry). Albumenoids = 19.43% (dry). Carbohydrates = 38.35% (dry). Fibre = 19.82% (dry). Ash = 20.20% (dry). Nitrogen = 3.11% (dry). Phosphoric acid = 1.13% (dry). Silicates = 1.90% (dry). It is high in proVitamin A.

It has 2.9 mg per 100 g dry weight and 1.6 mg fresh weight of alpha-tocopherol (Vitamin E).

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

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