PLANT FACT SHEET

# *Agave americana* L.

**GENUS** *Agave* **FAMILY** Asparagaceae

**COMMON NAMES** Agave, Century Plant

## EDIBLE PARTS AND USES

**Edible parts:** Flower stalk, Seeds, Shoots, Drink, Sap, Pith, Vegetable, Leaves

The heart of the plant can be eaten after baking. It is sweet but fibrous. The tender shoots are eaten raw.
The seed is ground into flour and used to thicken soups.
The flower stalk can be roasted and used like asparagus. They are also used to make wine.
Sap from the cut flowering stems can be used as a syrup. This is called 'pulque' in Mexico.
The flowers are cooked as a vegetable and also pickled.

## DESCRIPTION

A perennial plant up to 7.5 m tall and 2.5 m wide. It does not have a trunk and has suckers. The plants have a very sharp and tough spine at the tip of each leaf. The leaves are grey-green and occur in rings at the base. There are spines on the edges of the leaves. There are 5-8 mm long and 2-6 cm apart. The leaves are word shaped and 1-2 m long. The flowers are tubular and yellow-green. These occur on stems 6 m high.

## HABITAT

It is a tropical plant. Plants are naturalised in the Mediterranean and it grows wild in Mexico. It can grow in arid places. It requires a very well drained soil and a sunny position. Plants are frost tender. They need a temperature above 5°C. They suit warmer climates. In Sikkim it grows between 400-1,200 m above sea level. In Brisbane Botanical Gardens.

## PRODUCTION

### Cultivation

Plants can be grown from seed. Seed should be sown on the surface and germinate in 1-3 months at 20°C. The seedlings should be grown in a sunny position until 20 cm tall. Plants can also be grown from offshoots.

### Harvesting and Seed Production

The flower lives for a number of years without flowering but dies once it does flower. It normally dies after 20 to 30 years. Suckers however continue to grow. Suckers flower after 15 years in warm climates.
The young flower is removed creating a trough like depression in which sap collects. It is drained out daily over several weeks. The yield can be 3-5 litres per day and a total of 800 litres of sap.

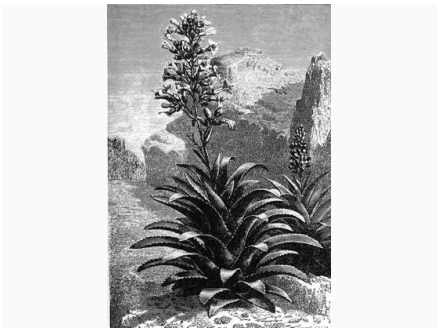
## NOTES

There are about 250 Agave species. The Agavaceae are mostly in the tropics and subtropics. They are usually in dry rocky regions. The sap contains 12-15% sugar.

## PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

## REFERENCES


Ambasta S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 19

Andersohn, G., 1983, Cacti and Succulents. EP Publishing. p 73

Anderson, M., 2002, The World Encyclopedia of Cacti and Succulents. Hermes House, New York. p 124

Astrada, E., et al, 2007, Ethnobotany in the Cumbres de Monterrey National Park, Nuevo Leon, Mexico. Journal of Ethnobiology and Ethnomedicine 3:8

Bhatia, H., et al, 2018, Traditionally used wild edible plants of district Udhampur, J&K, India. Journal of Ethnobiology and Ethnomedicine (2018) 14:73

Bircher, A. G. & Bircher, W. H., 2000, Encyclopedia of Fruit Trees and Edible Flowering Plants in Egypt and the Subtropics. AUC Press. p 12 and p 13 (As Agave complicata) (Also as Agave melliflua)

Blamey, M and Grey-Wilson, C., 2005, Wild flowers of the Mediterranean. A & C Black London. p 488

Bodkin, F., 1991, Encyclopedia Botanica. Cornstalk publishing, p 57

Bhogaonkar, P. Y. & Devarkar, V. D., 2018. Inventory for ethnovegetable knowledge of the tribals of Satpura hill area-Melghat, Dist. Amravati (India), Plantae Scientia, 2018; Vol. 01 Issue 01: 01-08

Borrell, O.W., 1989, An Annotated Checklist of the Flora of Kairiru Island, New Guinea. Marcellin College, Victoria Australia. p 13

Bremness, L., 1994, Herbs. Collins Eyewitness Handbooks. Harper Collins. p 139

Brickell, C. (Ed.), 1999, The Royal Horticultural Society A-Z Encyclopedia of Garden Plants. Convent Garden Books. p 88

Brown, D., 2002, The Royal Horticultural Society encyclopedia of Herbs and their uses. DK Books. p 105

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 112

Datar, M. N. & Upadhye, A. S., 2015, Forest foods of Northern Western Ghats: Mode of Consumption, Nutrition, and Availability. Asian Agri-History Vol. 19, No. 4, 2015 (293–316)

Delgado-Lemus, A., et al, 2014, Vulnerability and risk management of Agave species in the Tehuacan Valley, Mexico. Journal of Ethnobiology and Ethnomedicine 10:53

Esperanca, M. J., 1988. Surviving in the wild. A glance at the wild plants and their uses. Vol. 1. p 42

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications. p 2

Geraci, A., et al, 2018, The wild taxa utilized as vegetables in Sicily (Italy): a traditional component of the Mediterranean diet. Journal of Ethnobiology and Ethnomedicine (2018) 14:14

Harter, J.(Ed.), 1988, Plants. 2400 copyright free illustrations. Dover p 7.1, 7.6, 7.7

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 28

Heywood, V.H., Brummitt, R.K., Culham, A., and Seberg, O. 2007, Flowering Plant Families of the World. Royal Botanical Gardens, Kew. p 339

Hussey, B.M.J., Keighery, G.J., Cousens, R.D., Dodd, J., Lloyd, S.G., 1997, Western Weeds. A guide to the weeds of Western Australia. Plant Protection Society of Western Australia. p 14

Jadhav, R., et al, 2015, Forest Foods of Northern Western Ghats: Mode of Consumption, Nutrition and Availability. Asian Agri-History Vol. 19, No. 4: 293-317

Joyce, D., 1998, The Garden Plant Selector. Ryland, Peters and Small. p 201

Kauthale, V. et al., 2017, Diversity of Wild Edible Plants in Dhadgaon Block of Nandurbar District in Maharashtra, India. Int. J. Curr. Res. Biosci. Plant Biol. 4(6), 62-73

Kermath, B. M., et al, 2018, Food Plants in the Americas: A Survey of the Domesticated, Cultivated and Wild Plants Used for Human Food in North, Central and South America and the Caribbean. p 32

Kharade, S. & Mali, S., 2022, Ethnobotanical Survey of Wild Edible Plants from Raigad District, Maharashtra. International Journal for Research Trends and Innovation. Vol. 7 Issue 6. p 160

Kharat, A.J. & Bhandare, R. Y., 2021, Contribution of Wild Vegetables to meet Nutritional Demand of tribal population of Surgana, District Nashik, Maharashtra, India. Flora and Fauna, Vol.27 No.2:pp169-176

Khyade, M. S., et al, 2009, Wild Edible Plants Used By the Tribes of Akole Tahasil of Ahmednagar District (Ms), India. Ethnobotanical Leaflets 13: 1328-36, 2009

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1890

Kumar, R. & Saikia, P., 2020, Wild edible plants of Jharkhand and their utilitarian perspectives. Indian Journal of Traditional Knowledge Vol 19 (2), April 2020, pp 237-250

Lazarides, M. & Hince, B., 1993, Handbook of Economic Plants of Australia, CSIRO. p 10

Llamas, K.A., 2003, Tropical Flowering Plants. Timber Press. p 43

Lord, E.E., & Willis, J.H., 1999, Shrubs and Trees for Australian gardens. Lothian. p 203

Majeed, M., et al, 2021, Gathered Wild Food Plants among Diverse Religious Groups in Jhelum District, Punjab, Pakistan. Foods 2021, 10, 594.

Marinelli, J. (Ed), 2004, Plant. DK. p 330

Morales, J. & Gil, J. M., Gathering in a new Environment: The Use of Wild Food Plants during the Colonisation of the Canary Islands, Spain (2nd-3rd Century BCE to 15th Century CE) p 221

Full reference list (22 more) at https://www.echocommunity.org/en/resources/d7e5ce12-f382-48fb-b971-94c4e7bbac4c

**PROVIDED BY** **Food Plants International**

French, B.R. & Maynard, A.R. Food Plants International Database. Food Plants International

**LICENCE** CC BY-NC-SA 3.0

**ONLINE FACT SHEET** https://www.echocommunity.org/en/resources/d7e5ce12-f382-48fb-b971-94c4e7bbac4c