PLANT FACT SHEET

Agave sisalana Perrine

GENUS *Agave* **FAMILY** Asparagaceae

COMMON NAMES Sisal, Green agave, Hemp

EDIBLE PARTS AND USES

Edible parts: Leaves, Sap, Plant heart, Flower stalk, Vegetable

The sweet sap is used to make beer.
The heart of the new shoots is eaten.
The flower stalk can be boiled or roasted.

DESCRIPTION

A woody herb. It grows for several years. The leaves come out in spirals and have spines. The leaves occur near ground level. The leaves are sword shaped and 2 m long. The leaves end in a sharp dark brown tip. The plant flowers at maturity. The flowers occur in a stem which can be 6-8 m tall. The flowers are small and green to yellow. The fruit is a dry capsule which contains seed. Few seed will grow. Some flower buds become thick and develop into bulbils. These can be planted and will grow. Suckers are produced at the base of the leaves.

HABITAT

A tropical plant. It suits tropical and subtropical places. It grows on a wide range of soils. It can withstand waterlogging and can tolerate drought. It suits hardiness zones 9-11. It does best in gritty, well drained soils and in full sun. It can grow in light shade. It is sensitive to cold. It can grow in arid places.

PRODUCTION

Cultivation

Plants are normally grown from suckers or from the bulbils on the flower stalk. Mostly very few of the seeds will grow. After flowering the whole plant dies. Flowering normally occurs after 7 years.

Harvesting and Seed Production

The plant is fast growing.

NOTES

There are about 250 Agave species. The Agavaceae are mostly in the tropics and subtropics.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)



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 20

Bircher, A. G. & Bircher, W. H., 2000, Encyclopedia of Fruit Trees and Edible Flowering Plants in Egypt and the Subtropics. AUC Press. p 13

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

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

Bunderson, W. T. et al, 2002, Common Agroforestry Species in Malawi. Malawi Agroforestry Extension Project, Pubication No. 46, Lilongwe. p 2

Cobley, L.S. (rev. Steele, W.M.) 2nd Ed., 1976, An Introduction to the Botany of Tropical Crops. Longmans. p 280

Cowie, I, 2006, A Survey of Flora and vegetation of the proposed Jaco-Tutuala-Lore National Park. Timor-Lests (East Timor) www.territorystories.nt/gov.au p 42

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 116

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications. p 3

Fowler, D. G., 2007, Zambian Plants: Their Vernacular Names and Uses. Kew. p 67

Franklin, J., Keppel, G., & Whistler, W., 2008, The vegetation and flora of Lakeba, Nayau and Aiwa Islands, Central Lau Group, Fiji. Micronesica 40(1/2): 169–225, 2008

Hani Medicine of Xishuangbanna, 1999, p 763

Henty, E.E., 1980, Harmful Plants in Papua New Guinea. Botany Bulletin No 12. Division Botany, Lae, Papua New Guinea. p 12

Katende, A.B., Birnie, A & Tengnas B., 1995, Useful Trees and Shrubs for Uganda. Identification, Propagation and Management for Agricultural and Pastoral Communities. Technical handbook No 10. Regional Soil Conservation Unit, Nairobi, Kenya. p 70

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 40

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

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

Llamas, K.A., 2003, Tropical Flowering Plants. Timber Press. p 46

Marinelli, J. (Ed), 2004, Plant. DK. p 331

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 174

Mbuya, L.P., Msanga, H.P., Ruffo, C.K., Birnie, A & Tengnas, B., 1994, Useful Trees and Shrubs for Tanzania. Regional Soil Conservation Unit. Technical Handbook No 6. p 84

Paczkowska, G. & Chapman, A.R., 2000, The Western Australian Flora. A Descriptive Catalogue. Western Australian Herbarium. p 29

Purseglove, J.W., 1972, Tropical Crops. Monocotyledons. Longmans p 14

Royal Botanic Gardens, Kew (1999). Survey of Economic Plants for Arid and Semi-Arid Lands (SEPASAL) database. Published on the Internet; http://www.rbgkew.org.uk/ceb/sepasal/internet [Accessed 24th March 2011]

Salako, V. K. et al, 2013, Home gardens: an assessment of their biodiversity and potential contribution to conservation of threatened species and crop wild relatives in Benin. Genet Resour Crop Evol

Siemonsma, J. S. & Kasem Piluek, eds. 1993. Vegetables. In: Plant Resources of South-East Asia (PROSEA) 8:311

Smith, A.C., 1979, Flora Vitiensis Nova, Lawaii, Kuai, Hawaii, Volume 1 p 154

Staples, G.W. and Herbst, D.R., 2005, A tropical Garden Flora. Bishop Museum Press, Honolulu, Hawaii. p 580

Sukarya, D. G., (Ed.) 2013, 3,500 Plant Species of the Botanic Gardens of Indonesia. LIPI p 999

Swaziland's Flora Database http://www.sntc.org.sz/flora

Terra, G.J.A., 1973, Tropical Vegetables. Communication 54e Royal Tropical Institute, Amsterdam, p 19

Thaman, R. R., 1987, Plants of Kiribati: A listing and analysis of vernacular names. Atoll Research Bulletin No. 296

U.S. Congr. 25, Sess. 2, House of Represent. Rep. 564:(8,9,16,47,60,86)87. 8 Mar 1838 (Senate Rep. 300:36, 105, t. 1, 2, 4. 12 Mar 1838)

Vander Velde, N, 2003, The Vascular Plants of Majuro Atoll, Republic of the Marshall Islands. Atoll research Bulletin. No. 503. Smithsonian Institute. p 16

Vickery, M.L. and Vickery, B., 1979, Plant Products of Tropical Africa, Macmillan. p 74, 95

Wienk, J.F. and S'chendellaan, A.,van, Sisal and relatives, in Simmonds, N.W., (Ed.), 1979, Evolution of Crop Plants. Longman. p 1

Williamson, J., 2005, Useful Plants of Malawi. 3rd. Edition. Mdadzi Book Trust. p 17

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/99ce54d3-3483-4ce6-a3c6-a911acd9e7e6