PLANT FACT SHEET

Salvadora persica L.

GENUS *Salvadora* **FAMILY** Salvadoraceae

COMMON NAMES Salt Bush, Mustard Tree, Toothbrush tree

EDIBLE PARTS AND USES

Edible parts: Seeds, Leaves, Fruit, Bark, Vegetable, Seeds - oil

The ripe fruit are edible when cooked. They are also used to make a drink. The fruit can be dried and stored.
The leaves are cooked as a vegetable. They are also used in sauces.
The tender shoots and leaves are eaten raw in salads.
The seed oil is edible. A fat from the seeds is used as a substitute for vegetable butters in chocolate.
The seeds have a spicy taste like mustard.
A vegetable salt is derived form the ash of the plant.

DESCRIPTION

An evergreen shrub or small tree. It grows 4-6 metres high. It has many branches forming a rambling habit. The stems are crooked and can grow along the ground. The branches are drooping and twisted. They are slender and greenish white. The bark is thin and rough. It is cream coloured. The leaves occur opposite one another along the stem. They are on short stalks. The leaves are smooth and fleshy but thick and leathery. They are greenish blue and have small stipules. The leaves are oval and 7 cm long by 3 cm wide. They end in a short stiff point. The flowers are yellow and small. many flowers occur together in a branched arrangement near the ends of branches. These flower arrangements are 5-8 cm long. The fruit is a round berry about 6 mm across. They are red when ripe. Seedless fruit can occur. The seedless fruit are dark red. The fruit are edible.

HABITAT

A tropical plant. It grows in the dry tropics. It grows in the Sahel. It occurs at low altitudes. It suits high temperatures. Temperatures of 20-30°C annual average are appropriate. It cannot stand frost. It occurs in areas with an annual rainfall of 50-300 mm but also in areas with 1,100 mm. In high rainfall areas it occurs on salty soils. It prefers clay to sandy soils such as on flood plains. It can be in mangroves. It can be used to reclaim salty soils. In Kenya it grows from sea level to 1,500 m altitude. It can grow in arid places.

PRODUCTION

Cultivation

Plants can be grown by seeds. Many seeds are produced. Germination is poor due to substances in the fruit flesh. Therefore it is important to remove seeds from the fruit before planting. Plants can be grown in a nursery then transplanted when 3 years old.

Harvesting and Seed Production

In the Sahel the plant flowers in January-February and fruit ripens February-March.
In Tanzania, fruit are collected during the rainy season.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

REFERENCES

Addis, G., Asfaw, Z & Woldu, Z., 2013, Ethnobotany of Wild and Semi-wild Edible Plants of Konso Ethnic Community, South Ethiopia. Ethnobotany Research and Applications. 11:121-141

Addis, G., et al, 2013, The Role of Wild and Semi-wild Edible Plants in Household Food Sovereignty in Hamer and Konso Communities, South Ethiopia. Ethnobotany Research & Applications. 11:251-271

Al-Fatimi, M. A., Wild Edible Plants Traditionally Collected and Used in Southern Yemen. Research Square. University of Aden. p 23

Allen, D. J., 2007, Wildflowers and Common Trees of East Africa. Camerapix Publishers p 136

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 543

Arora, R. K., 2014, Diversity in Underutilized Plant Species - An Asia-Pacific Perspective. Bioversity International. p 86

Asfaw, Z. and Tadesse, M., 2001, Prospects for Sustainable Use and Development of Wild Food Plants in Ethiopia. Economic Botany, Vol. 55, No. 1, pp. 47-62

Assefa, A. & Abebe, T., 2010, Wild Edible Trees and Shrubs in the Semi-arid Lowlands of Southern Ethiopia. Journal of Science and Development 1 (1) 2010

Awodoyin, R.O., Olubode, O.S., Ogbu, J.U., Balogun, R.B., Nwawuisi, J.U. and Orji, K.O., 2015, Indigenous Fruit Trees of Tropical Africa: Status, Opportunity for Development and Biodiversity Management. Agricultural Sciences, 6, 31-41

Bahru, T., et al, 2013, Wild Edible Plants: Sustainable Use and Management by Indigenous Communities in and the Buffer Area of Awah National Park, Ethiopia. Ethiop. J. Sci., 36(2): 93-108

Bailey, C. and Danin, A., 1981, Bedouin Plant Utilization in Sinai and the Negev. Economic Botany 35(2): 145-162

Bekele-Tesemma A., Birnie, A., & Tengnas, B., 1993, Useful Trees and Shrubs for Ethiopia. Regional Soil Conservation Unit. Technical Handbook No 5. p 402

BHANDARI,

Bole, P.V., & Yaghani, Y., 1985, Field Guide to the Common Trees of India. OUP p 89

Burkill, H. M., 1985, The useful plants of west tropical Africa, Vol. 5. Kew.

Centofanti, T. & Banuelos, G., 2019, Practical uses of Halophytic Plants as Sources of Food and Fodder. CAB International. p 334

Dalziel, J. M., 1937, The Useful plants of west tropical Africa. Crown Agents for the Colonies London.

Dharani, N., 2002, Field Guide to common Trees & Shrubs of East Africa. Struik. p 262

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 222

FAO, 1988, Traditional Food Plants, FAO Food and Nutrition Paper 42. FAO Rome p 434

Feyssa, D. H., et al, 2011, Seasonal availability an consumption of wild edible plants in semiarid Ethiopia; Implications to food security and climate change adaptation. Journal of Horticulture and Forestry 3(5): 138-149

Flora Somalia Vol. 1, 1993, http://plants.jstor.org

Flora of Pakistan. www.eFloras.org

Food Composition Tables for use in Africa FAO http://www.fao.org/infoods/directory No. 833

Flora and Livestock in Coastal Karnataka. 2007, Report. EMPRI p 60

Fowler, D. G., 2007, Zambian Plants: Their Vernacular Names and Uses. Kew. p 59

Fox, F. W. & Young, M. E. N., 1982, Food from the Veld. Delta Books. p 331

Goode, P., 1989, Edible Plants of Uganda. FAO p 30

Grivetti, L. E., 1980, Agricultural development: present and potential role of edible wild plants. Part 2: Sub-Saharan Africa, Report to the Department of State Agency for International Development. p 26, 41

Grubben, G. J. H. and Denton, O. A. (eds), 2004, Plant Resources of Tropical Africa 2. Vegetables. PROTA, Wageningen, Netherlands. p 564

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 590

Heywood, V.H., Brummitt, R.K., Culham, A., and Seberg, O. 2007, Flowering Plant Families of the World. Royal Botanical Gardens, Kew. p 290

Ichikawa, M., 1980, The Utilization of Wild Food Plants by the Suiei Dorobo in Northern Kenya. J. Anthrop. Soc. Nippon. 88(1): 25-48

INFOODS:FAO/INFOODS Databases

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 99, 160

JSTOR Global Plants edible

Karim, F. M. & Dakheel, A, J., 2006, Salt-tolerant plants of the United Arab Emirates. 2006. International Center for Biosaline Agriculture, Dubai, UAE. p 148

Kebede, A., et al, 2017, An Ethnobotanical Survey of Wild Edible Plants Commercialized in Kefira Market, Dire Dawa City, Eastern Ethiopia. Plant 5(2): 42-46

Kew Plants of the World onLine

Khan, D. & Shaukat, S.S., 2006, The Fruits of Pakistan: Diversity, Distribution, Trends of Production and Use. Int. J. Biol. Biotech., 3(3):463-499

Krishen P., 2006, Trees of Delhi, A Field Guide. DK Books. p 114

Kuhnlein, H. V., et al, 2009, Indigenous Peoples' food systems. FAO Rome p 239

Le Houerou, H. N., (Ed.), 1980, Browse in Africa. The current state of knowledge. International Livestock Centre for Africa, Ethiopia. p 163

Lulekal, E., et al, 2011, Wild edible plants in Ethiopia: a review on their potential to combat food insecurity. Afrika Focus - Vol. 24, No 2. pp 71-121

Mahony, D., 1991, Trees of Somalia. A Field Guide for Development Workers. Oxfam Research Paper 3. p 9

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