PLANT FACT SHEET

Lens culinaris Medik.

GENUS *Lens* **FAMILY** Fabaceae

COMMON NAMES Lentils

EDIBLE PARTS AND USES

Edible parts: Seeds, Pods, Vegetable

The seed are cooked or sprouted or eaten raw.
Young seedpods can be cooked and eaten.
The ground seed can be used with cereals.
The seeds are often eaten in soups and stews. They are served as Dahl in India.
Lentil flour can be mixed with cereal flour to bake bread.
The sprouted seeds are eaten in salads, vegetable dishes and soups.

DESCRIPTION

A slender annual plant. They grow to about 25-40 cm high. It is erect with many branches. Plants are softly hairy. The leaves are compound with leaflets along the stalk. There is usually a tendril at the end. There are 4-7 pairs of leaflets and these do not have a stalk. They are sword shaped and 1.3 cm long. The flowers are in the axils of leaves. There are 1-4 flowers in a group. The flower stalk is slender. The flowers are small and up to 8 mm long. The flowers are bluish. The pods are oblong and 1.3 cm long. There are 1-2 seeds per pod. The pods are flat and the seeds are about 3-6 mm across. There are also large seeded kinds with seeds 6-9 mm across. The seeds are lens shaped, round and curved out on both sides. The seeds become reddish brown when ripe. There are several named cultivated varieties.
Possibly now Vicia lens

HABITAT

A plant of warm temperate and tropical zones. It prefers a sandy soil in a warm position. It produces most seed when grown on poorer soils. They grow in subtropical, warm temperate and high altitude tropical places. In India they grow from sea level to 3,500 m altitude. In Nepal they grow to about 1000 m altitude. In Ethiopia it grows between 1,600-2,350 m above sea level. They can grow on a range of soils. It suits hardiness zones 7-11. In Yunnan.

PRODUCTION

Cultivation

Seed are sown where they are to grow. Plants are normally self pollinated but cross pollination can occur. In India it is often grown mixed with rice. When grown as a pure stand it can be broadcast or planted in rows.

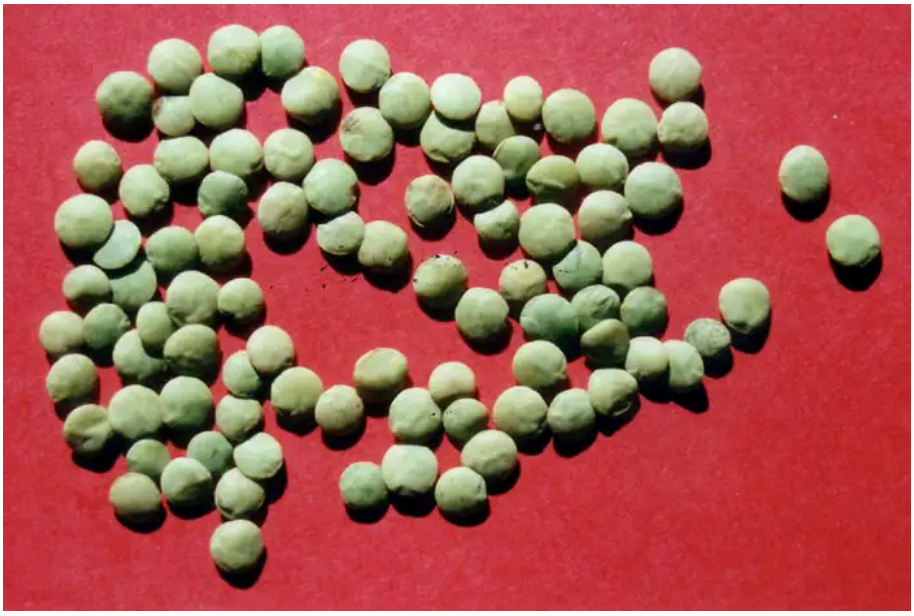
Harvesting and Seed Production

Yields of 2 ton per hectare are possible. For sprouts the seeds are soaked for 12 hours in warm water then allowed to sprout for 5 days. Crops mature in about 3.5 months.

NOTES

There are 4 Lens species. Biblical references: Genesis 25:29-34; 2 Samuel 17:28; Ezekiel 4:9

PICTURES



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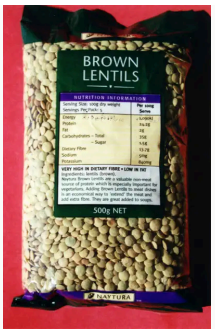

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REFERENCES

Addis, G., et al, 2005, Ethnobotanical Study of Edible Wild Plants in Some Selected Districts of Ethiopia. Human Ecology, Vol. 33, No. 1, pp. 83-118 (As Lens ervoides)

Ali, A. M. S., 2005, Homegardens in Smallholder Farming Systems: Examples from Bangladesh. Human Ecology, Vol. 33, No. 2 pp. 245-270 (As Lens esculenta)

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 322

Ara, R. I. T., 2015, Leafy Vegetables in Bangladesh. Photon eBooks. p 142 (As Lens esculenta)

Bejiga, G., 2006. Lens culinaris Medik. [Internet] Record from Protabase. Brink, M. & Belay, G. (Editors). PROTA (Plant Resources of Tropical Africa), Wageningen, Netherlands. < http://database.prota.org/search.htm>. Accessed 16 October 2009.

Bianchini, F., Corbetta, F., and Pistoia, M., 1975, Fruits of the Earth. Cassell. p 40

Brouk, B., 1975, Plants Consumed by Man. Academic Press, London. p 112

Burkill, I.H., 1966, A Dictionary of the Economic Products of the Malay Peninsula. Ministry of Agriculture and Cooperatives, Kuala Lumpur, Malaysia. Vol 2 (I-Z) p 1350 (As Lens esculenta)

Bussman, R. W. et al, 2017, Ethnobotany of Samtskhe-Javakheti, Sakartvelo (Republic of Georgia), Caucasus. Indian Journal of Traditional Knowledge Vol. 16(1) pp 7-24 (As Lens cornicularis)

Cobley, L.S. (rev. Steele, W.M.) 2nd Ed., 1976, An Introduction to the Botany of Tropical Crops. Longmans. p 98 (As Lens esculenta)

Cundall, P., (ed.), 2004, Gardening Australia: flora: the gardener's bible. ABC Books. p 805

D'Ambrosio, U., & Puri, R. K., 2016, Foodways in transition: food plants, diet and local perceptions of change in a Costa Rican Ngäbe community. Journal of Ethnobiology and Ethnomedicine (2016) 12:3 p 24

Demir, I. & Ayaz, N., 2022, Wild edible plants contributing to the traditional foods of Mardin (Turkey) Province. Indian Journal of Traditional Knowledge Vol 21(3), July 2022, pp 569-582

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 106 (As Lens esculenta)

FAO, 1988, Traditional Food Plants, FAO Food and Nutrition Paper 42. FAO Rome p 350 (As Lens esculenta)

Flora of Pakistan. www.eFloras.org

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 376 (As Lens esculenta)

Hermandez Bermejo, J.E., and Leon, J. (Eds.), 1994, Neglected Crops. 1492 from a different perspective. FAO Plant Production and Protection Series No 26. FAO, Rome. p 298

http://www.botanic-gardens-ljubljana.com/en/plants

Hu, Shiu-ying, 2005, Food Plants of China. The Chinese University Press. p 476

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 25

Jha, P. K., et al, 1996, Plant genetic resources of Nepal: A guide for plant breeders of agricultural, horticultural and forestry crops. Euphytica 87:189-210

Kays, S. J., and Dias, J. C. S., 1995, Common Names of Commercially Cultivated Vegetables of the World in 15 languages. Economic Botany, Vol. 49, No. 2, pp. 115-152

Kew, Plants of the World on Line

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1801 (As Lens esculenta)

Macmillan, H.F. (Revised Barlow, H.S., et al) 1991, Tropical Planting and Gardening. Sixth edition. Malayan Nature Society. Kuala Lumpur. p 325

Manandhar, N.P., 2002, Plants and People of Nepal. Timber Press. Portland, Oregon. p 289

Menninger, E.A., 1977, Edible Nuts of the World. Horticultural Books. Florida p 96 (As Lens esculenta)

Moerman, D. F., 2010, Native American Ethnobotany. Timber Press. p 301

Molares, S. & Ladio, A., 2012, The Usefulness of Edible and Medicinal Fabaceae in Argentine and Chilean Patagonia: Environmental Availability and Other Sources of Supply. Evidence-Based Complementary and Alternative Medicine. Volume 2012, Article ID 901918, 12 pages, Hindawi Publishing Corporation.

Molla, A., Ethiopian Plant Names. http://www.ethiopic.com/aplants.htm (As Lens ervoides and Lens esculenta)

Pham-Hoang Ho, 1999, An Illustrated Flora of Vietnam. Nha Xuat Ban Tre. p 978

Plants for a Future database, The Field, Penpol, Lostwithiel, Cornwall, PL22 0NG, UK. http://www.scs.leeds.ac.uk/pfaf/

Plants for a Future database, The Field, Penpol, Lostwithiel, Cornwall, PL22 0NG, UK. http://www.scs.leeds.ac.uk/pfaf/ (As Lens ervoides)

Polunin, O., & Stainton, A., 2006, Flowers of the Himalaya, Oxford India Paperbacks. p 101

Purseglove, J.W., 1968, Tropical Crops Dicotyledons, Longmans. p 279 (As Lens esculenta)

Rashid, H. E., 1977, Geography of Bangladesh. Westview. p 252 (As Lens esculenta)

Ruiters-Welcome, A. K., 2019, Food plants of southern Africa. Ph.D. thesis. Univ. of Johannesburg p 58

Sabbah, A., et al, 2024, Women's Knowledge of Local Plants and Their Gastronomic Heritage in Chitral, NW Pakistan. Plants 2024, 13, 2747

Small, E., 2009, Top 100 Food Plants. The world's most important culinary crops. NRC Research Press. p 314

Solomon, C., 2001, Encyclopedia of Asian Food. New Holland. p 210

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