



PLANT FACT SHEET

Fagopyrum esculentum Moench

GENUS *Fagopyrum* FAMILY Polygonaceae

COMMON NAMES Buckwheat, Japanese buckwheat, Silverhull buckwheat

EDIBLE PARTS AND USES

Edible parts: Seeds, Leaves, Flowers

CAUTION: The seeds are used mainly for flour and stock feed. Seeds are bitter. If they are eaten in large amounts they can produce an unpleasant skin disorder.

The seeds are eaten in porridge and biscuits etc. The seeds can be made into flour and eaten in pancakes, noodles and breads or for thickening soups and gravies. Seeds can be soaked overnight then sprouted and eaten.

The tender leaves and shoots are cooked and eaten. The young leaves can be stored for 4-5 days after harvest.

DESCRIPTION

An upright annual herb up to 1 m high. It spreads to 1 m across. It has angular hollow stems. These are erect and branching. Leaves are heart shaped or triangular and small. It has groups of white or pink flowers. These have a smell. They occur in clusters at the ends of branches. Fruit are small and 3 angled. The plants are not grasses but the seeds are normally grouped with other grain crops.

HABITAT

It is a temperate plant. It can be grown at high altitudes in the tropics. It will grow on poor soils. It prefers rich soils and a protected sunny position. It can grow in acid soils. It is resistant to frost but damaged by drought. In Nepal it grows between 1000-2500 m altitude. It can grow up to 4,400 m altitude. In Uttar Pradesh it grows up to 3000 m altitude. In Yunnan.

PRODUCTION

Cultivation

Plants are grown from seed.

Harvesting and Seed Production

Seeds usually germinate in 5 days. It has a very short growing period from sowing to maturity. It can produce a crop of leaves in 8 weeks and seeds in 12 weeks. Seed ripen irregularly over several weeks making harvesting difficult. Under cool conditions plants flower in 7-9 months. Commercial grain yields in Australia have been up to 2.5 tonnes/ha. In India yields of 600-800 kg/ha are achieved.

NOTES

The plant contains rutin useful for blood conditions. The plant inhibits the germination of other seeds for a period of time. Seeds are 11% protein. It is insect pollinated.

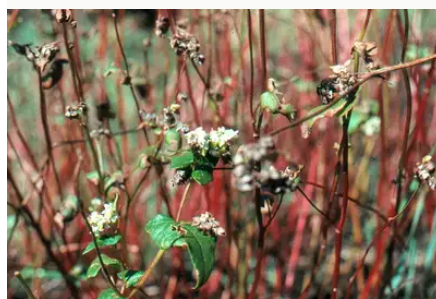
PICTURES



Credit: Food Plants International (Bruce French)



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REFERENCES

- Aldhmoun, M., et al, 2025, Old Plants for New Food Products? The Diachronic Human Ecology of Wild Herbs in the Western Alps. *Plants* 2025, 14, 122.
- Ambasta, S.P. (Ed.), 2000, *The Useful Plants of India*. CSIR India. p 218
- Angmo, D., et al, 2022, Ethnobotanical Survey of Wild Edible Plants of Leh District, Ladakh. *Defence Life Science Journal*, Vol. 7, No. 4, October 2022, pp. 257-266
- Anderson, E. F., 1993, *Plants and people of the Golden Triangle*. Dioscorides Press. p 211
- Angami, A., et al, 2006, Status and potential of wild edible plants of Arunachal Pradesh. *Indian Journal of Traditional Knowledge* 5(4) October 2006, pp 541-550
- Aryal, K. P., et al, 2018, Diversity and use of wild and non-cultivated edible plants in the Western Himalaya. *Journal of Ethnobiology and Ethnomedicine* (2018) 14:10
- Bandyopadhyay, S. et al, 2009, Wild edible plants of Koch Bihar district, West Bengal. *Natural Products Radiance* 8(1) 64-72
- Bhatia, H., et al, 2021, Wild Edible Fruits and Vegetables of Himachal Pradesh. *Journal of Research: The Bede Athenaeum Indian Journals.com* March 2021, Vol. 12 No. 1 (53-66)
- Bianchini, F., Corbetta, F., and Pistoia, M., 1975, *Fruits of the Earth*. Cassell. p 28
- Bodkin, F., 1991, *Encyclopedia Botanica*. Cornstalk publishing, p 469
- Brouk, B., 1975, *Plants Consumed by Man*. Academic Press, London. p 35
- Brown, D., 2002, *The Royal Horticultural Society encyclopedia of Herbs and their uses*. DK Books. p 211
- Burkill, I.H., 1966, *A Dictionary of the Economic Products of the Malay Peninsula*. Ministry of Agriculture and Cooperatives, Kuala Lumpur, Malaysia. Vol 1 (A-H) p 1009

- Campbell, C.G., 1979, Buckwheat, in Simmonds, N.W., (ed), Crop Plant Evolution. Longmans. London. p 235
- Cerne, M., 1992, Wild Plants from Slovenia used as Vegetables. Acta Horticulturæ 318
- Cheng, Z., et al, 2022, Ethnobotanical study on wild edible plants used by Dulong people in northwestern Yunnan, China. Journal of Ethnobiology and Ethnomedicine (2022) 18:3
- Dangol, D. R. et al, 2017, Wild Edible Plants in Nepal. Proceedings of 2nd National Workshop on CUAOGR, 2017.
- Doni, T., & Gajurel P. R., 2020, Diversity of wild edible plants traditionally used by the Galo tribe of Indian Eastern Himalayan state of Arunachal Pradesh. Plant Science Today. 2020;7(4):523-533.
- Dorje, K., 2015, Exploration of Plant based Traditional Knowledge from Sham region of Ladakh (J. & K.), India. Journal of Plant Development Sciences Vol. 7 (5) : 429-433.
- Dutta, U., 2012, Wild Vegetables collected by the local communities from the Churang reserve of BTDA, Assam. International Journal of Science and Advanced Technology. Vol. 2(4) p 121
- Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 184
- Fang, Q., et al, 2024, Wild edible plants of the Yao people in Jianghua, China: plant-associated traditional knowledge and practice vital for food security and ecosystem service. Journal of Ethnobiology and Ethnomedicine (2024) 20:80
- Feld, D., 2021, A Systematic Checklist of Food Plants, including Herbs and Spices, and with an Index. p 8
- Flora of China @ efloras.org Volume 5
- Flora of Pakistan. www.eFloras.org
- Fox, F. W. & Young, M. E. N., 1982, Food from the Veld. Delta Books. p 304
- French, B.R., 1986, Food Plants of Papua New Guinea, A Compendium. Asia Pacific Science Foundation p 347
- Gangwar, A. K. & Ramakrishnan, P. S., 1990, Ethnobotanical Notes on Some Tribes of Arunachal Pradesh, Northeastern India. Economic Botany, Vol. 44, No. 1 pp. 94-105
- Gautam, R. S., et al, 2022, Ethnobotanical Review of Wild Edible Plants of Nepal. Journal of Natural History Museum Volume 32, 2021-22 p 126
- Gillani, S. W., et al, 2024, The nexus between ecology of foraging and food security: cross-cultural perceptions of wild food plants in Kashmir Himalaya. Journal of Ethnobiology and Ethnomedicine, (2024) 20:77
- Giménez-Bastida, J. A. and Zieliński, H. (2015), Buckwheat as a Functional Food and Its Effects on Health, Journal of Agricultural and Food Chemistry, 63 (36), pp 7896-7913.
- Haq, N., Anthony, K., Sarwar, M., and Ahmad, Z. (eds.), 1998, Underutilized Crops of Pakistan. Plant Genetic Resources Institute. p 13
- Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 305
- Heyne, K., 1927, p 599
- Hibbert, M., 2002, The Aussie Plant Finder 2002, Florilegium. p 100
- https://en.wikipedia.org/wiki/List_of_wild_edible_plants_in_Mongolian_cuisine
- Hu, Shiu-ying, 2005, Food Plants of China. The Chinese University Press. p 370
- Irving, M., 2009, The Forager Handbook, A Guide to the Edible Plants of Britain. Ebury Press p 168
- Jansen, P.C.M., 2006, Fagopyrum esculentum Moench. [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.
- Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 3

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