PLANT FACT SHEET

Ullucus tuberosus Caldas

GENUS *Ullucus* **FAMILY** Basellaceae

COMMON NAMES Ulluco

EDIBLE PARTS AND USES

Edible parts: Leaves, Tubers, Root, Vegetable

The tubers are eaten boiled and served with vinegar. They are also dried and ground into flour. They can also be fried.
The leaves are edible cooked.

DESCRIPTION

A small herb with creeping pink stems. It is erect and compact. It puts up branches which can be 30-50 cm high. The stems form roots where they touch the ground. At the end of its growth plants are lying along the ground. The leaves are broad and heart shaped. In some kinds the leaves have red spots or a reddish blue edge. Small tubers form on the ends of the roots. Often they are yellow but shape and colour vary with variety. Flowers are in the axils of leaves. They are small and star shaped. Seeds are occasionally produced in a triangular capsule. These seeds will grow after their dormancy period has passed (2-3 months). Aerial tubers sometimes also occur. There are about 50-70 cultivated varieties.

HABITAT

A tropical plant. It grows well in cool moist climates in the tropics. It will probably suit high altitude places. In the Andes it grows at altitudes of 1,000-4,000 m. It can stand light frosts. It shows drought resistance and has low fertility demands. It gives low tuber yields under long day conditions.

PRODUCTION

Cultivation

Plants are grown from tubers. They can be grown from cuttings. Soil needs to be earthed up around the growing plant. A spacing of 60 to 80 cm between plants is suitable. Some plants have 3 sets of chromosomes and these must always be grown from tubers or cuttings. Plants are often severely affected by viral diseases.

Harvesting and Seed Production

Tubers mature in about 4-6 months but can be 7-8 months. It the dry high altitude Andes tubers are frozen then dried.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

REFERENCES

Castillo, R. O., 1995, Plant Genetic Resources in the Andes: Impact, Conservation, and Management. Crop Science 35:355-360

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 47

Feld, D., 2021, A Systematic Checklist of Food Plants, including Herbs and Spices, and with an Index. p 8

Franquemont, C., et al, 1990, The Ethnobotany of Chinchero, an Andean Community in Southern Peru. Fieldiana Botany No. 24 p 43

French, B.R., 1986, Food Plants of Papua New Guinea, A Compendium. Asia Pacific Science Foundation p 24

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. p18, 159

Heywood, V.H., Brummitt, R.K., Culham, A., and Seberg, O. 2007, Flowering Plant Families of the World. Royal Botanical Gardens, Kew. p 57

Kay, D.E., 1973, Root Crops, Digest 2, Tropical Products Institute, London, p 183

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

Kermath, B. M., et al, 2014, 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. On line draft. p 887

Kew Plants of the World Online

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1874

Lim, T. K., 2015, Edible Medicinal and Non Medicinal Plants. Volume 9, Modified Stems, Roots, Bulbs. Springer p 84

Macmillan, H.F. (Revised Barlow, H.S., et al), 1991, Tropical Planting and Gardening. Sixth edition. Malayan Nature Society. Kuala Lumpur. p 366

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 182

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

PROSEA handbook Volume 9 Plants yielding non-seed carbohydrates. p 182

Purseglove, J.W., 1968, Tropical Crops Dicotyledons, Longmans. p 628

Semanario nueva reyno Grenada 185. 1809 [As Caldas]

Smith, P.M., 1979, Ullucu, in Simmonds, N.W., (ed), Crop Plant Evolution. Longmans. London. p 303 and (Also as Ullucus aborigineus)

Smith, K., 1998. Growing Uncommon Fruits and Vegetables. New Holland. p 33

Smith, N., Mori, S.A., et al, 2004, Flowering Plants of the Neotropics. Princeton. p 45

Tapia, M. E., The role of under-utilised plant species with regard to increased food security and improved health of poor poeople, in mountain regions. IIAP-PNUD/Peru

Terra, G.J.A., 1973, Tropical Vegetables. Communication 54e Royal Tropical Institute, Amsterdam, p 80

Thomas, E., et al, 2008, The Relationship Between Plant Use and Plant Diversity in the Bolivian Andes, with Special Reference to Medicinal Plant Use. Hum Ecol (2008) 36:861–879

Tindall, H.D., 1983, Vegetables in the tropics. Macmillan p. 71

Torre, de la L., et al, 2008, Enciclopedia de las Plantas Útiles del Ecuador. Herbario QCA. Pontificia Universidad Católica del Ecuador. p 238

Ulian, T., et al, 2020, Unlocking plant resources to support food security and promote sustainable agriculture. Plants, People, Planet. 2020;2:421–445.

USDA, ARS, National Genetic Resources Program. Germplasm Resources Information Network - (GRIN). [Online Database] National Germplasm Resources Laboratory, Beltsville, Maryland. Available: www.ars-grin.gov/cgi-bin/npgs/html/econ.pl (10 April 2000)

van Wyk, B., 2005, Food Plants of the World. An illustrated guide. Timber press. p 371

Wiersema, J. H. & Leon, B., 2013, World Economic Plants. A Standard Reference CRC Press. 2nd Ed. p 704

World Checklist of Useful Plant Species 2020. Royal Botanic Gardens, Kew

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/13af8caa-7735-4375-a9e8-7cc503e32f9f