PLANT FACT SHEET

Triticum aestivum subsp. spelta (L.) Thell.

GENUS *Triticum* **FAMILY** Poaceae

COMMON NAMES Dinkel wheat, Spelt

EDIBLE PARTS AND USES

Edible parts: Seeds, Cereal

The seed is eaten cooked. Usually it is ground into flour. It is used for cereal, bread, muffins, and cookies. It can be roasted and used as a coffee substitute.

DESCRIPTION

An annual grass plant. It is related to wheat. It grows to 1 m high. The ears are slender, long, lax and somewhat four sided. The spikelets have 2 grains. The grains are long, pointed and flinty.

HABITAT

It is a temperate plant. It needs well drained soil. It needs to be in a sunny position. It can grow on poor soils. It is often grown in areas of extreme climate. Under low temperatures and soil moisture shortage spelt can still yield well.

PRODUCTION

Cultivation

Seed is sown just below the soil surface as spring approaches. Seed germinate in a few days. Seeding rates of 90-112 kg/ha are recommended.

Harvesting and Seed Production

It takes 6-7 months to reach maturity and seeds ripen by 8-9 months. The spelt kernels do not thresh free of the glumes. There have been wide variations in yield (7000-1000 kg/ha), test weight (462-315 kg/m3), days to heading (154-166 days), plant height (97-140 cm), and kernel protein content (15.8-19.2%). Spelt yields are given as harvested with the kernel in the hull, and kernel yield only as estimated for a 60% kernel weight thresh out.

NOTES

It has higher protein than wheat. Spelt is a hexaploid plant (AABBDD) having 6 sets of chromosomes from 3 different origins. Some of the earliest recordings of spelt appear in the Bible (Exodus 9:30, Isaiah 28:25, and Ezekiel 4:9)

PICTURES



Credit: Food Plants International (Bruce French)

REFERENCES

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 654 (As Triticum spelta)

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 182 (As Triticum spelta)

Feldman, M., 1979, Wheats, in Simmonds N.W.,(ed), Crop Plant Evolution. Longmans. London. p 120 (As Triticum spelta)

Hedrick, U.P., 1919, (Ed.), Sturtevant's edible plants of the world. p 657 (As Triticum spelta)

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

Jardin, C., 1970, List of Foods Used In Africa, FAO Nutrition Information Document Series No 2.p 10 (As Triticum spelta)

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 881

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1856 (As Triticum spelta)

Naturwiss. Wochenschr. 17:471. 1918

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

Purseglove, J.W., 1972, Tropical Crops. Monocotyledons. Longmans p 290 (As Triticum spelta)

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

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)

Vaughan, J. C. & Geissler, C. A., 2009, The new Oxford Book of Food Plants. Oxford University Press. p 4

Wiersema, J. H. & Leon, B., 2013, World Economic Plants. A Standard Reference CRC Press. 2nd Ed. p 699

Zeven, A. C. & de West, J. M. J., 1982, Dictionary of cultivated plants and their regions of diversity. Wageningen. p 93

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/2dd82ff0-88ac-432c-a35d-3ade3e3c1846