PLANT FACT SHEET

Persicaria hydropiper (L.) Delarbe

GENUS *Persicaria* **FAMILY** Polygonaceae

COMMON NAMES Water pepper, Marshpepper Smartweed

EDIBLE PARTS AND USES

Edible parts: Leaves, Seeds, Leaves - spice, Leaves - tea

The stems and leaves are eaten. Young leaves have a strong peppery taste and are used to flavour food. They are finely chopped.
The stalks are roasted, then peeled and eaten.
The acrid juice is used as a spice.
The young seedlings are used to garnish many dishes.

DESCRIPTION

An annual herb. The stems are erect and curve upwards. It can be 80-100 cm tall. The stem has many branches. It forms roots at the nodes. The nodes are enlarged and they have a red ring at the base. The leaves are alternate and narrowly sword shaped. They have glands. The leaves narrow towards their base. The leaves have a peppery taste when chewed. There is a stipule or leaf like structures at the base of the leaf stalk. This has bristles. The leaf stalk is 2-5 mm long. The blade is sword shaped and 2-8 cm long by 0.5-2 cm wide. The flowers are in a slender spike. The spike is spread along the stalk. It tends to bend over. The flowering shoots can be 17 cm long. The individual flowers are small and white. There are 2 subspecies suited to temperate and tropical locations.

HABITAT

It is a temperate plant. It grows in shallow water along the edges of creeks and rivers. It grows in wetlands. It grows in open waste places. It suits sunny wet locations. It can grow from the seashore to 1500 m altitude. Tasmania Herbarium. In Yunnan. In Sichuan.

NOTES

Chemical composition (Chinese sample): Protein = 7.54%. Fat = 1.86%. Carbohydrate = 7.99%. Ash = 1.99%. There are about 50 Polygonum species.

PICTURES



Credit: Food Plants International (Bruce French)



Credit: Food Plants International (Bruce French)

REFERENCES

Altschul, S.V.R., 1973, Drugs and Foods from Little-known Plants. Notes in Harvard University Herbaria. Harvard Univ. Press. Massachusetts. no. 848 (As Polygonum hydropiper)

Ambasta, S.P. (Ed.), 2000, The Useful Plants of India. CSIR India. p 480 (As Polygonum hydropiper)

Arora, R. K., 2014, Diversity in Underutilized Plant Species - An Asia-Pacific Perspective. Bioversity International. p 44 (As Polygonum hydropiper) (And alss Polygonum maximowiczii)

Bodkin, F., 1991, Encyclopedia Botanica. Cornstalk publishing, p 819 (As Polygonum hydropiper)

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 1823 (As Polygonum hydropiper)

Cerne, M., 1992, Wild Plants from Slovenia used as Vegetables. Acta Horticulturae 318. (As Polygonum hydropiper)

Chen, B. & Qiu, Z., Consumer's Attitudes towards Edible Wild Plants, Ishikawa Prefecture, Japan. p 24 www.hindawi.com/journals/ijfr/aip/872413.pdf (As Polygonum hydropiper)

Cherikoff V. & Isaacs, J., The Bush Food Handbook. How to gather, grow, process and cook Australian Wild Foods. Ti Tree Press, Australia p 196 (As Polygonum hydropiper)

Cooper, W. and Cooper, W., 2004, Fruits of the Australian Tropical Rainforest. Nokomis Editions, Victoria, Australia. p 404

Cribb, A.B. & J.W., 1976, Wild Food in Australia, Fontana. p 126 (As Polygonum hydropiper)

Curtis, W.M., 1993, The Student's Flora of Tasmania. Part 3 St David's Park Publishing, Tasmania, p 590 (As Polygonum hydropiper)

Deka, N. & Devi, N., 2015, Wild edible aquatic and marshland angiosperms of Baka district, BTC area, Assam, India. Asian J. Plant Sci. Res. 5(1):32-48

Duke, J.A., 1992, Handbook of Edible Weeds. CRC Press. p 154 (As Polygonum hydropiper)

Elliot, W.R., & Jones, D.L., 1997, Encyclopedia of Australian Plants suitable for cultivation. Vol 7. Lothian. p 204

Facciola, S., 1998, Cornucopia 2: a Source Book of Edible Plants. Kampong Publications, p 185

Flora of Pakistan. www.eFloras.org

Foo, J.T.S.(ed), 1996, A Guide to Common Vegetables. Singapore Science Foundation. p 124 (As Polygonum hydropiper)

Hani Medicine of Xishuangbanna, 1999, p 103 (As Polygonum hydropiper)

Hist. nat. veg. 10:536. 1841

Hu, Shiu-ying, 2005, Food Plants of China. The Chinese University Press. p 372 (As Polygonum hydropiper)

Huq, A. K. M. M., Jamal, J. A. and Stanslas, J., 2014, Ethnobotanical, Phytochemical, Pharmacological, and Toxicological Aspects of Persicaria hydropiper (L.) Delarbre, Evidence-Based Complementary and Alternative Medicine, pp.1-5.

IRVINE, (As Polygonum hydropiper)

Irving, M., 2009, The Forager Handbook, A Guide to the Edible Plants of Britain. Ebury Press p 174

Kiple, K.F. & Ornelas, K.C., (eds), 2000, The Cambridge World History of Food. CUP p 1797 (As Polygonum hydropiper)

Kumar, Y J. et al, 1987, Further Contribution to the Ethnobotany of Meghalaya: Plants used by "War jaintia" of Jaintia Hill District. Econ. Tax. Bot. Vol 11 No. 1 pp 65- (As Polygonum flaccidum)

Lamp, C & Collet F., 1989, Field Guide to Weeds in Australia. Inkata Press. p 225 (As Polygonum hydropiper)

Larkcom, J., 1991, Oriental Vegetables, John Murray, London, p 130 (As Polygonum hydropiper)

Lazarides, M. & Hince, B., 1993, Handbook of Economic Plants of Australia, CSIRO. p 194 (As Polygonum hydropiper)

Li, D. et al, 2017, Ethnobotanical survey of herbal tea plants from the traditional markets in Chaoshan, China. Journal of Ethnopharmacology. 205 (2017) 195-206 (As Polygonum hydropiper)

Low, T., 1992, Bush Tucker. Australia's Wild Food Harvest. Angus & Robertson. p 185 (As Polygonum hydropiper)

Luo, B., et al, 2019, Wild edible plants collected by Hani from terraced rice paddy agroecosystem in Honghe Prefecture, Yunnan, China. Journal of Ethnobiology and Ethnomedicine 15:56 (As Polygonum hydropiper)

MacKinnon, A., et al, 2009, Edible & Medicinal Plants of Canada. Lone Pine. p 322

Martin, F.W. & Ruberte, R.M., 1979, Edible Leaves of the Tropics. Antillian College Press, Mayaguez, Puerto Rico. p 99, 214 (As Polygonum hydropiper)

Masoodi, H. U. R. & Sundriyal, R. C., 2020, Richness of non-timber forest products in Himalayan communities—diversity, distribution, use pattern and conservation status. Journal of Ethnobiology and Ethnomedicine 16:56

Meitei, L. R., et al, 2022, An ethnobotanical study on the wild edible plants used by forest dwellers in Yangoupokpi Lokchao Wildlife Sanctuary, Manipur, India. Ethnobotany Research and Application 23:15

Moerman, D. F., 2010, Native American Ethnobotany. Timber Press. p 424

Pham-Hoang Ho, 1999, An Illustrated Flora of Vietnam. Nha Xuat Ban Tre. p 749 (As Polygonum hydropiper)

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

PROSEA handbook Volume 13 Spices. p 259

Full reference list (20 more) at https://www.echocommunity.org/en/resources/6150d5b2-8154-4e8e-b442-d2953acd9a0e

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/6150d5b2-8154-4e8e-b442-d2953acd9a0e