

Pteridium aquilinum

[Synonyms : *Aquilinum languinosa*, *Eupteris aquilina*, *Pteridium aquilinum* var. *lanuginosum*, *Pteridium aquilinum* subsp. *typicum*, *Pteridium caudatum*, *Pteridium japonicum*, *Pteridium latiusculum*, *Pteridium pseudocaudatum*, *Pteris aquilina*, *Pteris aquilina* var. *lanuginosa*, *Pteris capensis*, *Pteris caudata*, *Pteris lanuginosa*, *Pteris latiuscula*]

BRACKEN is a deciduous fern. Believed to be native to the northern hemisphere and Africa (although now found everywhere apart from Antarctica) it has tall green fronds. It is also known as Adder's spit, *Adelaarsvaren* (Dutch), *Adlerfarn* (German), Bracken fern, Brake, Brake fern, Common bracken, Eagle brake, Eagle fern, Feather fern, *Felci* (Maltese), Female fern, Fern, Fern of God, *Feûgiéthe* (Channel Islander-Jersey Norman-French), *Fouâle* (Channel Islander-Guernsey), *Fougère aigle* (French), *Gemeiner Adlerfarn* (German), *Hasivka orličí* (Czech), Hog brake, *Kakhash* (Punjabi), *Orličník obyčejný* (Slovak), *Örnbräken* (Swedish), *Papradie orličie* (Slovak), *Parnai* (Tamil), Pasture brake, *Phteres* (Greek), Rock brake, *Ruthiru* (Kikuyu), *Sananjalka* (Finnish), Upland fern, and Western brackenfern; and in flower language is said to be a symbol of confidence, fascination, humility, and sincerity.

Warning – despite the fact that parts of the plant are eaten in Japan and north-eastern North America (both in the United States and Canada) the whole plant is poisonous (it has carcinogenic properties) especially the underground stem. This applies even when dried and used say for bedding. Investigation of the risks for man whether bracken is eaten directly or indirectly (entering the food chain when eaten by animals themselves subsequently consumed) is being carried out at present. It has already been shown to be extremely poisonous for some animals.

Aquilinum is Latin (relating to an eagle) meaning 'eagle-like'.

Its Anglo-Saxon name *fepern* which means a 'feather' provides the basis for the modern English name Bracken – and also according to some authorities the root of various English place names such as Farnham and Farnborough where bracken was and still is abundant. In some parts of England bracken used also to be called 'King Charles in the Oak Tree'.

In Britain witches were said to be repelled by the plant because the Chalcidian Greek letter 'X' (an abbreviation for the word 'Christ') appears in the stem., In Ireland bracken was called Fern of God because it was said that the letters 'G', 'O' and 'D' could be identified – one letter in each of the three sections of the stem. In contrast in Scotland bracken was viewed as the imprint of the devil's foot. There again for some not only could it provide perpetual youth but if on the eve of St. John (when it was believed the minute spores on the back of the fronds could be seen with the naked eye) the fronds were harvested their owner would receive the gift of invisibility. One other English superstition prevalent in the 17th Century was practised to produce rain – the growing bracken was set alight. Proof of the seriousness with which this last belief was viewed is provided in a letter dated 1st August 1636 from the Lord Chamberlain to the High Sherriff of Staffordshire in which it says

His Majesty taking notice of an opinion entertained in Staffordshire that the burning of Ferne doth draw down rain, and being desirous

that the country and himself may enjoy fair weather as long as he remains in those parts, his Majesty hath commanded me to write unto you, to cause all burning of Ferne to bee forborne, until his Majesty be passed the country. Wherein not doubting but in consideration of their own interest, as well as that of his Majesty, will invite the country to a ready observance of his Majesty's command.

It is an emblem of at least two Scottish clans, the Robertson and the Chisholm. An English saying once quoted ran

When the fern is as high as a spoon,
You may sleep an hour at noon;
When the fern is as high as a ladle,
You may sleep as long as your able;
When the fern begins to look red,
Then milk is good with brown bread.

Bracken used to be the traditional thatching material (beneath grass) for homes in the Kenyan highlands.

Many divers communities ranging worldwide from North American Indians, to Maoris or inhabitants of some of the islands in the Canaries (off the coast of southern Morocco) ate large quantities of the underground stem and the young fronds (like garden asparagus, *Asparagus officinalis*) – although many recognized its poisonous qualities. For some of the North American tribes such as the Sierra, Thompson and Klallam bracken was a staple food. While the Thompson, Atsugewi, some of the Salish and the Costanoan Indians all ate the young fronds raw, the Mahuna and some of the Chippewa Indians (and the Costanoans too) as well as Alaskans all cooked them (often like asparagus). Cooked roots also provided a vegetable for the Montana Indian, Thompson, some of the Okanagan-Colville, some of the Skagit and the Hahwunkwut tribes – and some of the Salish prepared flour from the underground stem which was then used to make bread. The underground stem was eaten raw by some of the Kwakiutl and some of the Salish Indians, and the Hesquiat, Bella Coola, Nitinaht and Thompson tribes all enjoyed it cooked. In relatively more recent times the Alaskans have canned the young fronds for Winter food.

The plant was also used in the past in Norway and Siberia to produce a kind of beer. Even early in the 20th Century it seems that serious consideration was being given in Britain to recognizing the underground stem (with its large quantity of starch) as a viable source of food. Today still both the young fronds and the underground stem are eaten by the Japanese who call them *sawarabi*.

Bracken was once employed extensively as fodder (and litter).

As already mention the plant is extremely poisonous for animals and it is now believed likely to promote stomach cancer in man if nothing else. Research into its effect on human beings is at present in progress. This is taking into account the form of poisoning possible from both direct and indirect (bracken's poisonous elements entering the food chain when the plant is eaten by animals which are subsequently consumed by man) human consumption.

In the past in Europe the ashes from burning the underground stem have been used in making glass and soap, and a decoction of the underground stem has been used in dressing and preparing kid and chamois leathers. Bracken ash has also provided a manure for cultivating crops and flowers (although this of course might be an unwise practice to follow now until the outcome of research into the plant's poisonous qualities is known). When boiled the root will yield a black dye, and the plant is also a source of both a green and a dark yellow dye. The latter is used in some Scottish tartans.

Some of the North American Indian tribes found a variety of uses for bracken other than food or medicine. Both the Shuswap and Klallam Indians covered their berry baskets with the fronds (and the latter also used them to clean fish ready for smoking). The Okanagan-Colville and Costanoan tribes lined their ovens with them. Fronds made Costanoan sunshades and the Okanagan-Colville Indians travelling in mountainous regions relied on finding bracken growth as an indicator of water close at hand. The shredded underground stems were a source of fuel for the Oweekeno, and both the Nitinaht and Shuswap tribes laid the fronds for bedding. Roots were used by several tribes, including the Round Valley Indian, Mendocino Indian, Costanoan, Ukiah, Pomo and Mewuk for basketry.

Bracken's applications were even more varied however. Authorities have noted that North American Iroquois Indians seem to have conferred an awesome power on the fern. Apparently when its root fashioned into the likeness of the subject was placed in a coffin with other ingredients that person would die within ten days. On a pragmatic gentler note Thompson Indians took the fern to enhance failing appetite, the Costanoan tribe made a hair wash from the root (the use of which was believed to promote hair growth), and their sick horses were treated with the fern by the Mendocino Indian tribe.

Despite awareness in many North American Indian tribes of bracken's poisonous nature it was a source of medicine for quite a few of them including the Montagnais – and the Cherokee used the root as a tonic. It was taken to ease diarrhoea by the Iroquois who also turned to it as a treatment for tuberculosis, liver ailments, urinary problems, blood diseases and venereal disease. It was prescribed as a stimulant by Micmac Indians, and the Koasati used it for various lung disorders. Thompson Indians took it for colds, and some of the Chippewa used it for easing headaches. The fern provided a treatment for some female problems in the Menominee, some of the Chippewa and the Iroquois tribes, and both the Iroquois and Thompson Indians viewed it as a treatment for rheumatism. While Hesquiat Indians ate the young shoots in treatments for cancer, Cherokee and Thompson Indians used the fern to ease vomiting. The Thompson tribe also applied it to some skin problems, and the Yana tribe applied it to burns.

Medicinally, herbalists used to recommend a decoction of the underground stem for treating worms, applied it powdered as a remedy for ulcers, and included it in ointments for healing wounds. The leaves were once believed to be helpful in remedies for stomach complaints.

It is the birthday flower for 24th March.