

GETTING THE NEEDLE!

Next time you are thrashing through the undergrowth, to clear some new corner or prevent re-encroachment elsewhere, consider the humble nettle – surely one of Nature’s most successful plants. As a word of solace, when you suffer another unprovoked attack from their vicious stinging leaves, they grow bigger and better in other parts of the world – those from East India cause a burning sensation like hot irons, which can last for several hours or even days and may be attended by lockjaw-like symptoms. Another, from Java, produces effects which can last a whole year and even cause death.

With its tough stems, unbeautiful flowers and those unkind stinging hairy leaves, the stinging nettle (*Urtica dioica*) is unloved by everyone, nonetheless it thrives almost everywhere and follows human habitation relentlessly. Not only is it resilient to a wide range of environmental conditions, but nothing has learned to eat it apparently, apart from a few hardy caterpillars, like those of the small tortoiseshell and comma butterflies.

However, mankind was never a species to overlook the possibility of a free meal and has devised various ways of making the nettle palatable. Amongst these are the well known nettle soup, prepared from the new young nettle tips. Less well known is the ‘nettle porridge’ served to Samuel Pepys, by the wife of his friend William Symons, one cold winter’s day in 1661. Pepys considered it to be ‘very good’. The Scots have refined the idea of porridge and nettles to produce nettle pudding: leeks, onions, oats, Brussel sprouts and nettle tops, to be served with gravy or butter. I dread to think what such a combination does to the digestive system!

Medicinally, the nettle was believed to be useful for skin complaints. This concept arose from the ‘doctrine of plant signatures’, when physicians and apothecaries believed that all plants had some medicinal value for humans and this was revealed by the plant’s shape, colour or other characteristics. Hence nettles produced rashes, so *had* to be good for skin complaints. Its irritant properties were also made use of for rheumatism sufferers, who were advised to flog themselves with bunches of nettles; an idea based on the belief of counter irritation i.e. a new pain or irritation in another part of the body will alleviate the original problem – basically it removed the patient’s concern with the first problem, by giving him another pain to worry about!

Surprisingly it was its use as a substitute for flax that provided the greatest variety of uses for the nettle. The tough fibrous stems were made wide use of for a wide variety of textiles, especially in Austria and Germany. Hans Christian Anderson’s story of the eleven swans was obviously based on this knowledge. Some travellers to Europe reported they had slept in nettle sheets, dined off nettle tablecloths and used nettle serviettes. According to the treatment of the fibre extracted, from the stems, fine or coarse material could be produced, ranging from the fine linen already mentioned to sailcloth and German army uniforms prior to and during the 1914-18 war. In contrast the English, not quite able to bring themselves to use the

plant for uniforms, collected 100 tons of nettles, to produce green dye for camouflage, as part of the war effort during the 1940s.

Contrary to popular belief the stinging sensation is not produced by formic acid, but a cocktail of three chemicals; a histamine to irritate the skin, acetylcholine to produce a burning sensation and hydroxytryptamine to enhance the action of the other two. Curiously, the latter two chemicals are nerve transmitter hormones found in animals – could this indicate some primeval link to the nettle family during the evolution of animals? A good question to ponder whilst you search for the necessary dock leaf, next time you get stung – by the way, the dock leaf contains a chemical inhibitor for the hydroxytryptamine from the nettle leaf, so really does have a soothing effect.

References

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