

Hemp and Nettle:

Two Food/Fiber/Medical plants in use in Eastern Europe.

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Most of us are familiar with flax and its byproducts including linen and linseed oil. However, two related plants show up in East and Central Europe for similar purposes: hemp (*Cannabis sativa*) and nettle (*Urtica dioica*). Both hemp and nettle fibers were used to make cloth, as well as being used for food and medicine: remember Shakespeare's 'Hempen Homespuns' and the story of Seven Swans whose sister had to spin and weave them all nettlecloth shirts without speaking, to turn them back into humans?

Generally, Herodotus' description of the Scythians (residents of what would become the Crimea) using hemp is considered the first mention of hemp in Russia. Apparently the Scythians used hemp in their steam/sauna baths: "These tents were made of thick felt, with all cracks carefully sealed up. Inside was placed a bowl full of red-hot stones, onto which cannabis seeds were thrown.

According to Herodotus, the Scythians would howl with delight as they breathed in the fumes. Sitting in these tents was clearly one of their favorite pastimes. The reference to seeds of in Herodotus and other sources is puzzling, since as any cannabis smoker knows, the seeds are by far the least intoxicating part of the plant. But as the flowering heads, the most potent element, also contain the seeds, such confusion is understandable..." (P. James and N. Thorpe, *Ancient Inventions*; NY: Ballantine, 1994, p. 342.)

[Interestingly, the authors of *Ancient Inventions* claim that this is confirmed by the finds of hempseeds and hempseed smoking kits in tombs on the borders of Russia and Mongolia-- presumably the assumption is that the flower heads rotted but the seeds remained?]

However, after the dates of this reference, the archaeological and historical records pretty much fall silent about pot smoking. Instead, more mundane uses of hemp crop up. (I find it significant that though Arabic and Roman authorities-- i.e. Galen-- mention medicinal pot-smoking, it's seldom mentioned in Northern European medieval and renaissance sources. Perhaps their hemp was closer to modern industrial hemp than the Arabic kind-- apparently the cultivars are significantly different.)

Hemp, as a fiber plant, appears to have spread from the mediterranean through the Roman area and also perhaps from the East. The Scythians died out before the fall of Rome, and connections between them and modern Slavs are considered tenuous by most historians I've read. (An excellent article on hemp, nettle, and other fibers such as bast appears in *World Wide Words*, "Fibres from the Earth: Names for some natural materials," by Michael Quinion: <http://www.quinion.com/words/articles/fibres.htm>).

R.J. Forbes, *Studies in Ancient Technology*, vol IV (EJ Brill, 1987, copyright 1956/1964), says, on page 60: "The plant [hemp] came to prehistoric Europe from Southern Russia, as is also evident from the etymology of the terms for hemp in Indo-Germanic Languages. At Wilmersdorf fruit and seeds of hemp were found but no fibres. It may have been smoked in the pipes found in the Celtic area of Western Switzerland. The Goths brought the plant from Western Russia in the second and third century AD and only then did the use of the fibres in central Europe start. The Slavonic migrations of the ninth century gave a new impetus to its cultivation which begins to displace flax in certain regions. It was also used by the Vikings but is still regarded with antipathy in medieval western Europe."

Both hemp and flax were major agricultural crops in Russia in period. Hemp was grown in the south, flax in the north. According to the *Encyclopedia Britannica*, one of the major exports of the Muscovy Company (founded in the second half of the 16th century) was hemp.

According to many textile sources, the archaeological record of hemp and nettle fabric is confused by the fact that archaeologists, not being able to tell hemp, nettle and flax cloth apart without chemical testing, use the term 'linen' to refer to any fabric of spun and woven vegetable fibers. (Apparently, however, Czech archaeologists call all such fabrics 'hemp', according to Alastair Miller.) Linen is not distinguishable from hemp or nettle cloth in paintings, either.

Both hemp and nettle have been used to make fabric since prehistoric times, as alternatives to flax, and processed similarly to flax. Hemp, with fibers up to 12 feet long, produces a stronger thread than flax; nettle produces a somewhat "finer and silkier" fabric than flax. (E.W. Barber, *Women's Work: the first 20,000 Years: Women, cloth and society in early times*. W.W. Norton, 1994).

For near-period English instructions on growing, harvesting and processing hemp, see Gervase Markham's *English Housewife*, 1615. Hemp can be either wet retted, by immersion in water such as a pond or stream, or dew retted, by laying in the fields. Once "the fiber bundles appear white, separate from the woody core, and divide easily into individual, finer fibers for their full length," retting is complete, and the stems are dried, then broken with a 'breaker'. The fibers are separated using processes known as 'scutching' (beating), then hankled (combed) for spinning. (*Advances in Hemp Research*)

The Muscovy Company (1555-1649) exported hemp (probably for rope rather than cloth) from Russia during their period of operation (*Encyclopedia Britannica*). Hemp and nettle cloth have reportedly been found among the clothing in the Scandinavian graves at Birka (Thora Sharpooth, quoted in *Stefan's Florilegium*: <http://www.florilegium.org/files/TEXTILES/hemp-cloth-msg.html>)

Hemp seeds and a fragment of hemp cloth were found the excavations of the 12th century levels of Gniezno, according to M. Polcyn, "Archaeobotanical Evidence for Food Plants in the Poland of the Piasts (10th-13th Centuries AD)", *Biological Journal of Scotland*, vol 46, no 4, p 533-537: "In archaeological sites hemp (*Cannabis sativa* L.) has been found as uncharred achenes. In the early Middle Ages hemp became an important technological plant used in the production of thick cloth. Fragments of such cloth have been discovered in Gniezno." (p. 535) Sophie Knab (*Polish Herbs, Flowers & Folk Medicine*, Hippocrene Books, 1995), says of Hemp: ". . . widely cultivated in Poland for its oil and fibers. The fibers of hemp were retted, dried and broken on a flax brake-- similar to the process used for flax. The thick inner fibers were spun on the spinning wheel and then designated for making sacking or very strong thread. They were often plied together to make rope." Nettle cloth, says Knab, was used in Poland from the 12th century onward; "Nettle thread was used in Poland from ancient times up until the 17th century when it was replaced by silk." (It also had superstitious uses: "Slavic people have attributed magical properties to [nettle] since ancient times," using it to defend against demons, disperse storms and protect against lightning as well.)

At least in western Europe, hemp appears to have often been grown in small plots and cultivated with garden tools rather than field equipment (*Medieval farming and technology : the impact of agricultural change in northwest Europe*, edited by G. Astill and J. Langdon, New York : Brill, 1997.). From various references, one suspects that nettle may have been primarily gathered from the wild rather than cultivated.

The Hemp Museum's history page (<http://hempmuseum.org/SUBROOMS/HEMP%20TEXTILE%20HISTORY.htm>) quotes a number of statements from *The Book of Fine Linen*, by François de Bonneville (Paris: Flammarion , 1994):

"Starting around 1322...The finest sheets were of linen, most were of hemp, and the poorest woven from tow, scrap hemp, or flax combings. . . up to the end of the seventeenth century, sheets were generally made from linen or hemp. Historians, citing the fact that the founding of the hemp-weavers guild long predated that of the linen-weavers, believe that hemp was far more common than linen until the late fourteenth century."

While hemp can be harvested for either the fiber or the seeds, it appears that hemp for fiber needs to be harvested before it goes to seed; so different plots would be allotted for fiber production than for seed. *Advances in Hemp Research* (edited by Paolo Ranalli, New York : Food Products Press, 1999) says: "The centuries-old method of hemp textile production involves . . . Harvesting after flowering but before the seeds set, when the stems are whitening at the base and the leaves are starting to drop. The fiber content is reduced and becomes coarser toward seed formation. Where it is desired to obtain fiber and seed the male plants are first collected by hand pulling, and the female plants are left to enable the seeds to ripen."

Magdalena of Vratislavia noted on the Slavic Interest Group list that:

In "POLONIA SIVE DE SITU, POPULIS, MORIBUS, MAGISTRATIBUS ET REPUBLICA REGNI POLONICI LIBRI DUO" by Marcin Kromer , first time printed in 1575, then 1578 etc. Book one: subtitle: occupations of woman: "Noble ladies and maids are taking care of wool, linen and hem..." (in my translations)

Hemp seed oil, obtained by crushing, was a major part of Polish, Russian and other Eastern European countries. Hempseed and poppyseed oils were necessary for cooking when fast-day restrictions forbade the use of animal fats in cooking. In Russia, say Smith and Christian (*Bread and Salt: A social and economic history of food and drink in Russia*. NY: Cambridge University Press, 1984), "Hemp and flax . . . were used in dishes with peas, for instance, or gave oil which was either an element in various dishes or the medium in which they were cooked." (p. 5) The Domostroi advises that stores of hempseed and hempseed oil should be kept in the house; the post period menus therein include several varieties of hempseed cakes, as well as mentions of hempseed oil.

Hempseed was also stewed into a sort of porridge, popular in Poland. According to Dembinska (*Food and Drink in Medieval Poland*, University of PA Press, 1999), hempseed porridge/soup appears to have been served in monasteries, garrisons and to the poor; it's unclear whether the hempseed oil was extracted first. Though no Eastern European recipes for hempseed porridge survive, there is a hempseed porridge recipe in the Italian health handbook by Platina, and the Underground Cooks Collective have published a redaction of the recipe on the SCA-Cooks list, and it is included in the Florilegium file on Hemp: <http://www.florilegium.org/files/PLANTS/hemp-msg.html>

The 16th century Polish herbalist Syrennius (via Knab) mentions nettle cooked with snails, and Lang (*George Lang's Cuisine of Hungary*) mentions the same dish in Hungary. Syrennius suggested it for gas and stomach cleansing. Smith & Christian also cite nettle, along with sorrel, goose-foot and ground-elder as plants that were probably harvested and consumed locally in Russia (p.10) .

Both nettle and hemp were recommended by physicians as treatments. Zevin (*A Russian Herbal: Traditional Remedies for Health and Healing*, Healing Arts Press, 1997) notes ". . . during the seventeenth century physician's primary interest in nettle centered around the treatment of wounds. One Russian herbal of that period, (known simply as *The Herbal Book*) describes the use of nettle: 'we chew raw nettle, mash it and apply it to fresh wounds, and so we clean and heal the wounds.' For old, infected wounds, the practitioner was advised to crush both the nettle leaves and seeds, and add salt: 'Apply to old infected wounds and they will get the dead tissue out and heal the wounds.'" (p. 106)

Hildegard of Bingen in her treatise on Physic (translated by Patricia Throop, Healing Arts Press, 1998) discussed not only the humeric properties of hempseed but the use of hemp cloth as a bandage:

"Hemp is hot, and it grows where the air is neither very hot nor very cold, and its nature is similar. Its seed is salubrious, and good as food for healthy people. It is gentle and profitable to the stomach, taking away a bit of its mucus. It is easy to digest, diminishes bad humors, and fortifies good humors. Nevertheless, if one who is weak in the head, and has a vacant brain, eats hemp, it easily afflicts his head. It does not harm one who has a healthy head and full brain. If one is very ill, it even afflicts his stomach a bit. Eating it does not hurt one who is moderately ill.

[Let one who was a cold stomach cook hemp in water and, when the water has been squeezed out, wrap it in a small cloth, and frequently place it, warm, on his stomach. This strengthens and renews that area. Also, a cloth made from hemp is good for binding ulcers and wounds, since the heat in it has been tempered.]"

Hildegard also recommended eating the young shoots of nettle as a tonic (as American modern and colonial herbalists suggest), "Nettle is very hot in its own way. It is not at all good eaten raw, because of its harshness. But, when it newly sprouts from the ground, it is good when cooked, as food for a human. It purges his stomach and takes mucus away from it. Any kind of nettle does this." She also suggested preparations of nettle, to cure internal worms in humans, internal discomfort in horses, and even as a treatment for senility: "And, a person who is unwillingly forgetful should pound stinging nettle to a juice, and add a bit of olive oil. When he goes to bed, he should thoroughly anoint his chest and temples with it. If he does this often, forgetfulness will diminish."

Nowadays, it's increasingly possible to buy hemp cloth and hempseed oil, though hempseed oil for consumption may or may not be available in the U.S. Nettlecloth is not so easy to get, but ramie, a cloth made from the fibers of an Asian nettle (*Boehmeria nivea*), is a reasonable substitute. Books like Eugene Gibbons' *Stalking the Healthful Herbs* will help you find nettle in the wild, either for consumption or textiles. Have fun expanding your knowledge of these plants!

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