

In China, the *Urtica nivea* is since very many years a valued plant, and its fibres are known by us as China grass, and in England as *Grass Cloth*. This name dates from the time when the native country of the Nettle was unknown, since the earliest times, and spread over the whole of the tropical East in China, cultivated with greatest care.

In the fine and transparent products, the individual fibres are there, by a kind of gum, stuck together, instead of being woven. What labour! Authoress thanks Professor Reulaux for a sample of the dressed fibres of plant, which look like spun white glass; and the Yarn Factory of Selmar Heilbrun in Berlin, Frederick St., 56, had sent her a sample of coloured China grass, which was in no respect inferior to the finest silk and distinguished by softness, and notwithstanding this, toughness, which renders it almost superior to silk. Especially adapted to fine ladies handiwork is this Nettle fibre. Author is convinced that much of the silk from England is of this material made. Mentions other kinds likely to be cultivated in Germany.

Urtica cannabina, native to Siberia, and *Urtica Laportea Canadensis* from Canada. These suit German climate and have better fibre than the German. As yet, the cultivation of these too little experimented upon, to make any assertions respecting them. By next Fall this will be possible. If cultivation of Nettle be taken up again, these kinds of Nettle will be also planted. The chief ones with which Germany has at present to do are:

Urtica urens.

Urtica dioica.

URTICA URENS.

The little stinging Nettle,—a common weed,—overspread our fields, uncultivated gardens, etc. Has an angular stem, somewhat red sometimes, and about 1 foot high.

Most stinging of German Nettles, hence name.

Leaves oval, bright green, on the edge long pointed teeth, thin stems growing opposite.

Blossoms abundant, of greenish yellow colour. Whole stem covered with fine stings, observable through microscope. Offers fibres, which being short are not so valuable as fibre of others. In some districts in North, a food for fowls is made from this Nettle. This Nettle was the one most in use formerly for its medicinal qualities. As material for weaving it has no special worth.

URTICA DIOICA.

This is the one of especial value,—found in Europe, America, Asia, in every

climate,—one of most common, most hated of weeds, and most difficult to root out.

Two kinds in Europe,—one red brown stem, other a green. Both tall, sometimes over 7 ft., if soil well adapted. Grow wild along fences, compost heaps, ruins, walls, barns, hedges, gardens, open spaces, in woods, and on edges of woods, even on piles of rubbish. Stalk fourcornered. Leaves corlate, long, pointed, strongly serrate, opposite, on separate stalks.

The green blossoms hang in pairs of clusters around the leaf-stalk, and upon the one plant the male, and upon the other the female. Whole plant covered with very fine stinging nettles, which under the microscope appear as little tubes. Besides, there is a variety of this Nettle which does not sting.

Not certain which of the two above mentioned the best adapted for weaving purposes. Authoress gives preference from her own experiences to the greenstalked, rather than the red. Fibres appear finer and softer. The red has a harder fibre,—better adapted to rope making, etc.

To be noticed also that the Roman or Pillnettle, *Urtica pilulifera*, is found in Germany.

STINGING OF NETTLE.

Long a question whence the stinging sensation from touching Nettle, whether from the fact that fine needles or hairs remain embedded in the skin, or from some corrosive fluid they contain. Answer of microscope:—Every hair a cell which terminates above in a head. Below an enlargement—a sack filled with a corrosive liquid. Head of sting easily broken off; this sting penetrates, and in consequence of compression, liquid flows into wound,—hence the pain. So long as dew upon plants they may without danger be pulled, for the stings then pliable and not easily broken. Roughly grasped at any time there is little danger.

Ammonia or wood ashes laid upon wound alleviates immediately the pain, and proves that the fluid in sting not Ammonia nor Ammonium Carbonate as formerly supposed. According to recent investigations, the liquid seems same as that which causes itchiness on touching ants. Water not to be applied, as it only intensifies pain. In India—consequences of Nettle wounds so serious that pain lasts for years, and sometimes cause amputation. Dry, they lose their stinging power.

CHARACTER OF SOIL.

Nettle prospers in all soils. Wild, on heaths, in sandy and boggy soils, around houses, hedges, graves, edge of copse, compost heaps, rubbish heaps, etc., under most varied circumstances of heat and moisture. Bouché found Nettles two metres high upon a peat-moor, sur-

rounded by a pine forest,—soil of same was sand, covered with a quantity of humus 30 centimetres thick.

Not necessary to be very particular in selection of plot for planting Nettles. Best adapted to their growth is a soil not too dry and not too moist, not too much in shade, but also not too much exposed to sun. Soil may be a loam or sandy, stony, or rich with humus.

Deep ploughing of ground advantageous, because thus the manure and the soil, formerly exposed to atmosphere, comes into greater nearness to roots. Many plants thus able to withstand the drought. Advantageous to plant,—the wash-land on edge of highways,—with Nettles. Soon from a soil over a rocky spot, roots hold earth and prevent being washed away. Nettles growing on such soil, suitable to provide fodder to cattle.

MANURING OF THE SOIL.

Soil, before planting, had better be deeply ploughed and well manured, as the plants remain 10 to 12 years upon the same spot and start up every year afresh. Wherever the Nettle grows wild, and stems and leaves rot upon ground, it shoots up yearly stronger and higher. If harvested and leaves used for fodder, the soil must be aided by manure.

According to Encyclopedia of Krunitz, advantageous to manure with heaps of alder foliage in the Fall, so as to save the regular manure for the fields for other crops. When these not to be had, spruce and pine needles, or juniper or brushwood, or even straw may be used. But if this used, then in third year must apply the alder foliage. Wood ashes should be good, as the Nettle is found to grow luxuriantly in sides of old charcoal kilns. What the most advantageous manure, not yet experience enough to say. Probably Nettle not very fastidious in this respect as not in others. After two or three years growth however, is much advantaged by adding suds or some other manure.

ENEMIES OF NETTLE.

Nothing to fear from animal parasites. Only one vegetable of danger, the *Cuscuta Europaea*, *Clover-silk* or *Flax-silk*. This covers stalks of corn too, and wheat and others, besides clover and flax. This parasite regarded as very noxious one, and in some places legally enacted against. This plant covers a Nettle bed with its yellow-red stringlike stems in 24 hours, and twines itself around the Nettle. It may in 24 hours choke the plant entirely. This parasite annual, has no roots, got rid of by burning before goes to seed. If thrown merely to one side it requires only raw or moist weather to bring the plant again to full life. But means to destroy it is to strew salt upon the ground,