

This is a strong-scented, repulsive plant, exceedingly meritorious of the name it bears.

The root is large and abrupt, with numerous, crowded, fleshy fibres. The spathe or flower which emerges from the ground some time before the leaves, is ovate, swelling, spotted, and sometimes nearly covered with dull brownish purple. The leaves make their appearance after the flowers; they are numerous, large, and crowded, oblong, heart-shaped, acute, smooth, with numerous veins of a paler colour. They continue to increase in size for a month or two after the flowering period is over, and are conspicuous in summer in every meadow, swamp or brook.

The colour depends on a volatile principle, not separable by distillation, besides which there is an acrid principle, which remains in the root when dried, and to which the plant owes its dangerous qualities when taken in over doses.

10th. *Hyosциamus Niger*.—Henbane. Class V. Order I., Nat. Ord. Luridæ.

This plant is not indigenous to this country, but within the last five or six years it has become naturalized in the immediate neighbourhood of this city, the only place where I have as yet found it, is on Front Street, near the Bay, and to the westward of Simcoe Street.

It belongs to the poisonous Nat. Order Luridæ, and like most of them, equally useful in medicine.

The whole plant has a glaucous or sea green colour, is hairy and viscid, and emits a rank and offensive smell.

The first leaves spread on the ground, and have some resemblance to a young thistle. The flowers are funnel shaped, irregular, with five spreading, obtuse segments, of a pale yellow or straw colour, with a beautiful network of purple veins. They are followed by a row of capsules, two celled, and covered with a lid—which is invested by its rigid prickly and persistent calyx.

The Medicinal as well as the poisonous effects of this plant are too well known to require any comment from me, particularly as the lurid aspect and the nauseous smell would in all probability ever prevent its been eaten in its natural state.

I have now, as briefly as I could, given a description of most, if not all, the noxious or poisonous plants growing near this City; yet, I should consider the list incomplete, were I to omit the mention of one which, although not generally looked upon as a poison, yet, I believe it to be the cause of more deaths in the human family than all the others put together. I mean the *Secale Cornutum*, or Ergot of Rye.

A good deal of uncertainty prevails as to the exact nature of this substance;—it is generally thought to arise under the influence of undue moisture, damp soils, and a rainy or misty atmosphere, especially at the time the ear is coming into flower.

The Ergot or Spur will, occasionally, in unfavourable seasons, affect all the Graminacæ, more rarely the Cyperacæ, and sometimes even the Palmæ; but it is found much more frequently, and of larger size, in rye.

Its action on the animal economy is very peculiar, and the most remarkable of these effects are those produced by its free and long continued use with the food.

Amongst cattle, it has frequently been known to produce 'black foot' and 'rot,' in other instances a cachectic state of the

system has been observed, indicated by 'extreme wasting and weakness, loss of appetite, frequent pulse, fetor of the secretions and excretions, contraction of the spleen, and enlargement of the liver.' I had an admirable opportunity of observing these effects some years ago, where a large and good stock of cattle, horses, and sheep, were wintered on the straw of rye, some of which was *slightly* diseased.

In the spring of the year, the whole of the stock, without a single exception, was in the most abject state of misery; although the winter had been short and not severe, and the cows and sheep well fed with hay, the barn-yard was always kept covered with the rye straw, at which the cattle were constantly picking. The result was the loss of about  $\frac{1}{3}$  of the sheep, and  $\frac{2}{3}$  of the lambs; and both the cows and sheep brought forth their young prematurely.

In the human race two distinct diseases have been referred to its protracted use, and both of them have been observed to prevail as epidemics in various parts of the Continent, where rye constitutes a considerable proportion of the food of man.

One of these diseases, termed Convulsive Ergotism, is distinguished by the characters of an acute comatose affection, giddiness, dimness of vision, insensibility, convulsions, imperceptible pulse, and death within two days.

The other, and more common disorder, termed Gangrenous Ergotism, which commences with weariness, fever, a tendency to hemorrhage, pains in the arms and limbs, and at length dry gangrene, commencing in the fingers or toes, which drop off by the joints, and the patient either recovers slowly, or expires, worn out under the process of repair.

When given in single and large doses its effects are different, and it does not appear to be an active poison, as it required three ounces to kill a dog; and in man one ounce has only occasioned vomiting, colic pains, headache and stupor.

It is, however, for a criminal purpose that this substance is most frequently made use of; from its well known action upon the womb, it is very often had recourse to for the purpose of procuring abortion; and I am convinced that, viewing it in this light, it is without doubt the cause of more infantile deaths than the whole of the other poisons put together.—Here Dr. H. gave a short account of a visit he paid to the Rice Lake Indians; and spoke of their medicines, superstitions, cause of their great decrease amongst the Christian Tribes. 1st. Abortion very common; 2d. spirits; 3rd. want of proper food.

I feel, gentlemen, that I have trespassed too long upon your kind indulgence, and wearied you with details in which many can have felt but little interest.

It was my wish to have offered a few remarks on the advantages to be derived from the study of Natural History; but I find that I have already far exceeded the time allotted to me. It is to be hoped, however, that the time is not far distant when instruction on this subject shall occupy its true place, and receive its due share of attention in all our schools and seminaries of learning.

The celebrated Linnæus, in his 'Reflections on the Study of Nature,' observes:—'He who does not make himself acquainted with God from the consideration of nature, will scarcely acquire knowledge of Him from any other source; for, if we have no faith in the things which are seen, how should we believe those things which are not seen?'