

(From Home Correspondence of the *Agricultural Gazette*.)

FAILURE IN THE WHEAT CROP.—Your correspondent "R. Arthur," describes what he supposes a new cause of failure in the wheat crop, but which is, and long has been, too well known; it is caused in the manner he describes by the wire-worm. Frequently in March, patches of withering Wheat plants may be seen, which on examination will be found to contain the worm in the centre of the stem; it is hard and very tough, requiring a sharp pinch with the finger and thumb to crush it; it is of a dirty yellow colour, with a black head, is about six inches in length, and half a line in thickness. I have not heard of any method of destroying them; perhaps the rooks and starlings are the farmers' best assistants in this case. I have also met with a worm in the gardens, answering the above description in all respects, except in being about thrice as thick.—*Lusor*.

THISTLES.—That troublesome species (*Cnicus Arvensis*) which infests our pastures and is so difficult to keep down, may be extirpated in a couple of seasons, by drawing them. For years I tried the usual method of mowing, spudding, &c., without success, till it occurred to try the effect of drawing; accordingly I employed some women, defending their hands by pieces of old sacking, and taking advantage of a time when the soil was thoroughly softened by a continuance of wet weather; the Thistles were drawn with much ease, bringing up frequently from 12 to 15 inches of the root. The expense was a mere trifle, sometimes under 1s. per acre; and in two years the land was pretty well cleared. I think the part of the root left in the earth was at too great depth to vegetate; other root weeds may be buried; the Couch (*Triticum Repens*), if buried only six inches deep, will not make its appearance again; probably trench-ploughing is the cheapest and best mode of getting rid of it(?) With regard to Thistles, I do not think every farmer considers them injurious. It once was, and probably still is, the practice with some graziers in the rich Somersetshire marshes, when, in the spring, the young grass is succulent and laxative, to let the herdman cut a small portion of the Thistles every morning; which, when withered, are readily eaten by the cattle, and are believed to counteract the too aperient tendency of the young herbage, and improve the health and condition of the cattle.

YEW.—Observing in your last number an inquiry respecting the poisonous effects of the Yew when eaten by cattle, I have been induced to make a few observations on its effects on the animal economy. The Yew (*Taxus Baccata*) is a narcotico-acrid poison, producing in animals that have eaten of it a degree of heaviness, increasing to stupor, from which it is with much difficulty they can be roused, and they ultimately die without any symptoms of pain. It is well known to vegetable physiologists that medical plants possess properties differing in intensity at different periods of the plants' growth; thus the leaves of plants, such as hyoscyamus and digitalis, possess the most active properties when the plants are in bloom, their activity diminishing as the season advances, until they are of little or no value as a medicine when the leaves have reached maturity, and withered on the parent stem. May this not be the case with the Yew? the leaves of which may possibly be eaten by cattle without producing any very serious effects, at one season of the year, while at another they may act as a deadly poison. It is believed, also, that the Yew is more virulent as a poison when in a withering

state, after it has been cut from the tree, than when fresh and growing. May not this possibly occur from the changes going on in the leaf itself? the leaves of plants in the autumn, and also in a dying state, change from a green to a brown colour; this change is accompanied with an absorption of oxygen from the atmosphere, which, acting on the green colouring matter of the leaf (chlorophyll,) slowly oxidise it. May not this action in the leaf of the Yew sharpen the activity of the poisonous matter already contained in it? This is rendered probable, since we know that some plants grown under unfavorable circumstances generate a poison, which disappears when the circumstances are altered: thus, the common Potato, when grown in the dark, contains in its stem a deadly poison (solanine,) which disappears after it has vegetated in the light for a short time. These hints may possibly assist in clearing up the question, showing that the action of the Yew, as a poison, on the animal economy, may be greater at one period of the year than at another, and that the animal may eat it in the green state without producing death, while in the dry state it may prove fatal.

ROOKS.—Observing, in the *Agricultural Gazette* of June 1., an article calculated to aggravate the sufferings of the poor rooks, you will, I trust, excuse my offering a few words in their favour, more especially as I consider them about to be put in fresh jeopardy, in consequence of a mistake as to one of their most valuable acquisitions. Owner of a considerable rookery in a locality where it is the fashion to consider them as pests, I declined joining in the hue and cry against them, at least until I should, by observation and experiment, ascertain whether my predilection for them was merited. Among other tests was the somewhat cruel one of watching them at feed during the spring seed time, and shooting one or two per diem on their return homewards. I commenced this process with the oat-sowing early in April, and during the first ten days found the contents of the stomach to be entirely grub, wire-worm, a worm with two rings round its body, a few earth worms, and now and then a beetle, such as occur in the droppings of cattle. This was the general result until about the 20th of the month, when my faith was staggered by finding in the craw at least a score particles of oats in the husk; but immediately observing a small whitish streak under the envelope of the husk, I examined it, and found inside, embedded on the kernel, a wire-worm extended lengthwise, gorged with its milky substance, and in colour exactly the same as the juice it was feeding on. Every single particle was similarly occupied, and during the next fortnight, during which the corn was in that state of transition, we found this the principal article of their food. After the first week in May, the wire-worm attained its natural size and colour, and from the same time not one particle of grain of any sort has been found in the stomach of a single rook. My rookery exhibited the same appearance as that described by "Facile"—heaps of chaff or husk, every one of which, in my case, and I doubt not in his also, was the winding-sheet of a wire-worm.—*Azer*.

HINTS ON THE USE OF VARIOUS MANURES.—Guano, when good, ought to be of a light-brown, or fawn-colour, dry and powdery, not sticky or clammy to the touch, and the lumps when broken showing numerous small, clear, shining crystals, and giving out a strong smell of ammonia when mixed with a little quicklime, and moistened with water. Guano should be kept quite dry till used,