

Spergula (*Spergula Arvensis*), might be profitably cultivated in British America.—One light ploughing is sufficient, and as the grain is very small, it is but very lightly covered. About eight pounds of seed to the acre will be sufficient. Its growth is so rapid, that in about five or six weeks, it acquires its full height, which seldom exceeds fifteen to eighteen inches. The crop is generally a light one, but as it will grow on poor and sandy soils, it may be a profitable crop, as it is of rapid growth, and would supply, at trifling cost, a considerable quantity of food for milch cows in the latter end of the summer and harvest, when grass often becomes scarce. It will remain good until the frost sets in. It is sometimes made into hay; but from the watery nature of the plant, it dries in considerably, and is, therefore, more advantageously consumed as green food. Spurry may be sown any time in June, or even the first week of July.—Early sowing, however, is best.



OBSERVATIONS ON THE DISEASED STATE OF RYE, (CALLED) ERGOT, AND THE CONSEQUENCES TO WHICH IT GIVES RISE AS FOOD.

For the British American Cultivator.

MR. EDITOR,

Rye is the prevailing grain in the greater part of the northern temperate zone, Sweden, Norway, Denmark, and on the shores of the Baltic sea, the north of Germany, and part of Siberia. In these countries it furnishes an agreeable kind of flour, which is made into bread. The distribution of this family is not determined merely by climate, but depends much on the civilization, traffic, and industry of the people; while on the one hand it extends from the frozen region of Kamskatka on the other, it is cultivated under the burning sun of an Indian clime, and from the low damp shores of the German ocean, to the soaring summits of the South American mountains, where one species (rice) is cultivated in sufficient quantities to supply the numerous hordes of inhabitants; and, indeed it may be said to furnish support to the greatest number of the human race.

Rye is subject to a disease, in which the pickle is changed into a long black substance resembling a spur, hence the name spurred rye. It has been known to attack several plants of this order,—as wheat, oats, and barley. A difference of opinion exists as to its cause. Some suppose the disease is produced by undue moisture combined with warmth, and the spur is simply a diseased process from the juices of the plant. Decandolle maintains it to be a *Sclerotium clavus*, or the growth of a fungus, which vegetates in place of the germ on others; and it appears from the observation of Field, in America—where it is very numerous,—that the glumes are punctured by a species of butterfly, from which puncture the juice exudes and gradually becomes a spur.

Reid, who published a treatise on the Ergot in 1771, embraced nearly the same views, as likewise Fontana, Tillet, and

others, who say they have found the ovum and larva of the insect in the spur. Field, who having observed flies puncturing the glumes of the rye, during its milky state, by puncturing them with a needle; and found in both cases the juice exuded, and the peduncle exhibited in four days a little black point, which gradually became a spur.

An elaborate research was made by the Abbé Tessier in 1777, deputed by the Royal Medical Society of Paris, from the results of his investigation it appears to depend upon moisture, by damp lowlands, or fogs. He observed, the diseased rye was more prevalent in the damp part of a field, and principally in lands that were not long cultivated, being formerly forest. It does not appear to propagate by contagion; and to substantiate this, Hertwig in 1824, made some experiments to that effect, which appears conclusive, although Fontana has alleged to the contrary.

The spur is about one inch in length, of a dull whitish gray tint, covered by a violet blackish husk, has an acid taste, and a peculiar smell. Its specific gravity is generally lighter than water, tough and flexible when moist, brittle when dry. It imparts its properties to water and to alcohol.—Bread baked from spurred rye, becomes moist, and cracks and crumbles after being taken from the oven.

Its analysis consists of gum, osmazine, salts of soda, and ammonia, fewels, colouring matter, a thick and slightly acrid oil, a thick reddish fluid, camphreatic odour, nauseous taste, composed more especially of resin, colouring matter, and extractive.

Its action upon man when taken as food gives rise to two diseases, one of which appears an active stage of the other; the first is described by Faule, as it occurred in the north of Germany in 1770. It commenced with dimness of sight, giddiness, loss of sensibility, followed by dreadful cramps and convulsions of the whole body, excessive thirst, great pains in the limbs and chest, small pulse, and generally proved fatal in 24 to 48 hours, at other times scattered abscesses and eruptions took place, accompanied by dropsy, looseness and convulsions. The milder form called the creeping sickness, has shown itself in Switzerland, Germany, France, Sweden, and Denmark, and most formidable distempers have appeared in 1597, 1709, 1716, and indeed since the commencement of the present century. It came on with general weakness, a feeling as though insects were creeping over the body; in a few days the extremities became cold, white, stiff, and so insensible, that deep incisions were not felt; afterwards fever, headache, fingers, toes, arms, and legs shrunk up and dropped off at the joints, and nature became exhausted. Frequently it came on with contraction of the limbs, weakness of the mind, and mortification in the limbs.

Dogs and cats generally vomit it and escape unhurt, but swine, moles, geese, ducks, fowls, sparrows, as well as leeches and flies are killed by it: the symptoms being giddiness, dilated pupil and palsy, followed by looseness, gatherings, mortifications, and the toes frequently drop off.

Yours, &c.

C. SMALLWOOD, M. D. D.

St. MARTIN, L. C.,
March 24th, 1842.

To the Editor of The British American Cultivator

Sir,

In the second number of *The Cultivator*, I observe an article under the head of "Cure for Scratches in Horses," in which you recommend that the part affected be

first washed with "soapsuds," and after being thoroughly dried, have a mixture of "white lead and oil" applied to it. Without questioning the efficiency or utility of that application, which I have not had the opportunity of testing, I would take the liberty of submitting to your notice, and through the medium of your very useful paper, to that of the public, the trial of one which I have used for that disease in my horse, not less than three times within the space of the last three years, and in each case with success. It consists in the application, to the diseased part of tar combined with a little tallow or axenge. The tallow being dissolved in the tar renders it more easy of application. My usual mode of preparing it is to put about two gills of tar into a tin vessel, to set it on live coals, or the cooking stove, and to add about the size of a hocky nut of tallow; after the ingredients are thoroughly dissolved and combined I take it off, and after allowing to cool to such a degree of temperature as not to burn, I apply it to the affected part, after removing the hair. I have invariably found one application to be quite sufficient, and always efficacious; and am firmly persuaded that it will not fail in a single instance, if properly applied. The idea of using it in the cure of scratches in horses was suggested to my mind, by observing its wonderful effects in a very singular case of scurvy on the human body. The case to which I refer, occurred in North Britain. The entire surface of the body of the patient was covered with the loathsome disease, to such a degree as to prevent the appearance of sleep, and to threaten the extinction of life. After receiving the best medical advice that could be procured, and using various medicines, to no good or useful purpose, the one which I have just described was advised, and had recourse to; which in a short time effected a complete cure; and by removing the disease, restored the patient at once to health and beauty as of oldtime. I may also state, that a similar application of the same remedy to the human body, under the same disease, although not so entire, nor so inveterate, was made in this neighbourhood not many years ago, and with equally happy and beneficial results. In such cases the application should be made only to a part of the body at one time, in order to prevent any bad consequences that might otherwise ensue from undue irritation.

These facts I consider to be of much importance, not only to farmers, or the public at large, but also to the medical profession, who may be called upon for advice in cases similar to those last specified. It is with this conviction that I embrace the opportunity, which you so generously offer in your Monthly Periodical to make them known; and although not a farmer myself, yet as I wish well to the comfort and prosperity of farmers—as every man in Canada ought to do—I would thus show my desire, as a stimulus to others, to contribute my "mite" to the general fund of useful and entertaining knowledge which *The British American Cultivator* contains, and is so eminently fitted to communicate.

Esquimaux, 9th March, 1842.

* * We extract the foregoing from a communication signed "A Subscriber," and would recommend it to the notice of our readers. We would have been happy to have had it in our power to have placed the author's signature at the foot of his communication, being satisfied that it would have had double the effect upon the public mind. Our views have been so frequently expressed upon the practice of publishing anonymous articles on agriculture, and its sister arts, that we hope none such will have occasion to be dissatisfied, or charge us with neglect, if their communications do not appear in our columns.