

Keeps them Off and Kills Them

Ed. The Dairyman and Farming World.—We have tried a great many so called preparations for keeping the flies off of cattle. With one exception none of them proved satisfactory. A representative of the Dr. Williams Company proved to our entire satisfaction that their remedy would not only keep them off but would also kill them. This they guarantee to do or refund the purchase price.

We have used Dr. Williams' Fly and Insect Fly-destroyer for three years on our cattle and horses. We also use it for lice on stock of all kinds, in poultry houses, for bugs, cockroaches, buffalo moths, and in fact, for every kind of vermin. It does its work thoroughly and quickly. It is put up in gallon, half gallon and quart tins. A gallon will spray 300 cows.

No man with stock can afford to do without it. One cannot afford to feed flies or lice on his stock. It is simply dollars and cents to him. We estimate that if a cow makes a gain of one pound a milking season means 40 pounds a month or 360 pounds in six months. At the present price of cheese, this remedy will more than doubly pay for the outlay. It is a matter of a few moments to make the application, and the increase of the whole herd for a season figures out to a big thing. Horses treated with this remedy crop up quickly as if there were no flies at all. It is also a good disinfectant and is harmless.—Wm. Stewart & Sons, Northumberland Co.

Periodic Ophthalmia

Colt has eye trouble. Sometimes one eye becomes affected, gets better, then the other eye becomes sore. They run water, are intolerant to light and white snow forms over eyes.—T.M.

This is a constitutional disease called "periodic or specific ophthalmia." If you can trace this colt's pedigree on both sides for generations, you will find that the progenitor, more or less remote, suffered from the same trouble. The attacks can be neither foreseen nor prevented, and in all probability the ultimate result will be total blindness from cataracts. All that can be done is treat each attack by placing the patient in a comfortable stall excluded from draughts, and strong light. Give a laxative of a pint of new linseed oil; bathe the eyes well three times daily with hot water, and after bathing put a few drops of the following lotion into each eye: viz., sulphur zinc, 15 grains; fluid extract of belladonna, 30 drops; distilled water, 2 oz.

Provincial Prizes to be Offered

The increased number of societies which are taking part in the Standing Field Crop Competitions this year and the excellent results that have already accrued have been so marked that the Hon. Nelson Monteith, Minister of Agriculture, has consented to extend the competition still further by arranging to have the five prize winners in each of the different agricultural societies competing, enter into a provincial contest at the winter fairs at Guelph and Ottawa. Each exhibitor will be required to forward two bushels of the grain with which he takes a prize in the Standing Field Crop Competition this year. The amounts offered in prizes at each of the above named Winter Fairs will be: 1st, \$35; 2nd, \$30; 3rd, \$20; 4th, \$10; 5th, \$5. All societies west of Toronto will compete at Guelph, and those east of Toronto at Ottawa. Each exhibitor will send his grain by express C.O.D., addressed to the superintendent of the fair at Guelph or Ottawa, and the transportation charges will be paid by the Department of Agriculture.

The grain winning the prizes at these winter fairs will become the pro-

perty of the Department, and will be used for experimental purposes. All grain exhibited, other than that taking prizes, will be sold by auction at 10 a. m., on the morning of the last day of the fair, and the proceeds remitted by the Department to the owners.

An affidavit must be furnished by each exhibitor at the time of making entry, certifying that all of the grain exhibited by him was grown on the plot which was judged by the official sent by the department to judge the grain while standing in the field. Owing to the fact that there were not a sufficient number of societies entered in other kinds of grain we are confining this competition at the Winter Fairs to oats.—Lockie Wilson, Superintendent of Fairs.

Remedy for Crows

Would you kindly publish in your column a good remedy for getting rid of crows?—H.C., Victoria, B.C.

Probably the best method of getting rid of crows in fields of corn or grain is as follows: Take one heaping teaspoonful of strychnine, dissolve in one quart of water, add a dilute in sufficient water to cover about two gallons of corn in a pile. Leave soak 24 hours, then scatter on field being attacked by crows. If any poultry or pigeons are around, it would be well to confine them for a few days after the corn has been scattered over the field as it affects chickens and pigeons the same way as crows. If, however, alcohol is not available, then boiling of corn for a few minutes in a mixture of strychnine and water and afterwards allowing it to soak for 24 hours would prove satisfactory.—H. Grisdale, Agriculturist, Ottawa.

Bacillus of Typhoid in Ice

Is there any danger of one contracting typhoid fever, or other such disease, from using ice in drinking water, the ice having been obtained from the river and stored for summer use?—A.S.M., Peterborough, Ont.

The most extensive experiments upon the effect of freezing, and other low temperatures, upon the vitality of the bacillus of typhoid fever, are those performed by W. T. Sedgwick, Professor of Biology in the Institute of Technology, Boston, and C. E. A. Winslow, of the same Institute. Their conclusions are as follows:

(1) Less than 1 per cent. of the typhoid germs in water can survive 14 days of freezing.

(2) During the first half hour of freezing a heavy reduction takes place, amounting to about 50 per cent. After this brief period of sudden reduction, the destruction of the germs proceeds regularly. As a function of time there is a steadily increasing reduction, with slight variations as the time of freezing is prolonged. Even after twelve weeks some few typhoid bacteria are still resistant.

(3) Different races of typhoid bacteria each have a power of resistance of their own. Some races quickly succumb to freezing, whereas others are much more resistant.

(4) Thawing and re-freezing are somewhat more fatal than simple freezing, but even four consecutive freezings and thawings do not, however, suffice to kill off the most resistant typhoid bacteria.

Reviewing the large number of experiments performed by them, they come to the following conclusions concerning ice as a vehicle of infectious disease, with special reference to the problems of ice supply and the public health.

The main factor determining the reduction of germs in water is time; the time during which light, cold and poor food are allowed to act. In ice we have a food storage of at least weeks, and at best many months, and in nature we should probably find that there was a reduction of over 90 per cent. of typhoid bacilli killed by

the freezing action. Under natural conditions, pathogenic germs in the most highly-polluted streams are comparatively few. Of these 1-10 of 1 per cent. may be present in ice derived therefrom, and even these scattered individuals are weakened by their sojourn under unfavorable conditions, and these few and weakened germs very likely could not produce many, if any, cases of typhoid fever, for vitality and virulence in disease bacteria are probably closely related.

With artificial ice it is consumed quickly. After manufacture, the possibility of purification by time, is excluded, and such ice might therefore conceivably be a menace to public health. With natural ice there must always remain a certain element of doubt. The thickness of a layer of ice is often increased by cutting holes in it and flooding that already formed with water. Ice thus formed might be cut at once and served within a week or two, and in such exceptional cases sufficient of the virus might persist to excite the malady. Such instances must be very exceptional, and the general result of human experience, the absence of epidemics of typhoid traced conclusively to ice, and the fact that cities like New York and Lawrence, Massachusetts, have used the ice of polluted streams and have yet maintained low death rates from typhoid fever all tend to support the conclusion that natural ice can very rarely be the vehicle of typhoid fever.

F. C. Harrison,
Macdonald College, Quebec.

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Breeders' Directory

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