

Problems of the Farm

Contributed by Grey County Department of Agriculture

In some sections of Grey County, apple and elm trees have been denuded of their foliage. This is done by Canker Worms. A few notes on this insect pest are here appended:

Two species of canker worms infest our orchards and forests. These are the fall canker worm and the spring canker worm. The terms "fall" and "spring" are given because the moths of the former emerge chiefly in the fall, while those of the latter emerge in the spring.

The larvae of both species are slender and of a general blackish or brownish or sometimes green color, with lighter stripes down the back and sides. When full grown they are about an inch long. Both species move from place to place with a looping gait, due to the fact that they have fewer hind legs (prolegs) than most caterpillars. When disturbed both species drop down on a silken thread. The moths of the two species are a light grayish brown color with slender bodies. They resemble each other closely. The male moths have wings but the females are wingless.

It is only once in a long time that we have a very bad outbreak of these pests, but when they do become numerous they sometimes remain so for about five years, after which they become scarce again. In years of great abundance they are very destructive and not frequently completely defoliate whole orchards and numerous forest trees as well. They feed on most orchard trees and also on many deciduous forest trees, but their favorite seems to be the apple, elm and basswood.

The moths of the Fall Canker Worm appear for the most part in fall, in November, and the eggs are then laid in close regular clusters on the trunks and branches. Each egg is set on its end and looks like a diminutive pill or flower pot. The cluster is nearly the color of the bark and the eggs are not covered over with any protecting substance. A few moths of this species do not emerge and lay eggs until early spring. The spring canker worm moths emerge in March and April and lay their eggs in more concealed places, on the bark, such as under loose bark, or in crevices. These are in a looser cluster and are oval in shape. The eggs of both species hatch about the time the apple buds are bursting and the young larvae feed on the foliage as soon as it appears. They are full-grown early in June and then drop to the ground where they pupate in the soil. There is only one brood a year.

Natural Enemies.

Birds play a considerable part in the control of these pests. There are also many parasites and other natural foes that help.

Methods of Control.

Experience shows that clean cultivation extending as far into June as is safe, has a great effect in lessening the numbers of these insects.

Thorough spraying with arsenate of lead, about 3 pounds of paste or 1½ pounds of powder to 40 gallons of water will destroy the young larvae. The best method, however, is to postpone the usual first apple spray until the leaves are about half an inch long and then add to it the arsenate of lead or arsenate of lime, 1 pound to 40 gallons of liquid. This should be followed by the regular spray just before the blossoms open and immediately after they fall.

Shade trees may be protected from infestation by putting a band of tanglefoot on the trunk a foot or so above the ground. A band of cotton batting about six inches wide fastened with a string around the centre and the upper half turned down will also prove effective excepting in very hot weather. These bands should be put on about the middle of October for the fall canker worms and about the end of February for the spring canker worms. They prevent the wingless females from climbing the trees after they emerge from the ground. They also keep down any

larvae that hatch from eggs laid below the band.

Lime and Phosphoric Acid.

The Department of Chemistry, Ontario Agricultural College, reports very satisfactory results promised by the experiments laid down last fall with fall wheat seeded with clover last spring. The experiment consisted of four plots, limestone alone, limestone and acid phosphate, a complete fall wheat fertilizer and a check plot (untreated). During the past week these plots have been visited by the field men and the following points have been noted:

1. In most cases results from acid phosphate plot are estimated at one-third above check.
2. Lime does not show any noticeable difference on the wheat, although increase may be shown on harvesting.
3. Where winter killing is in evidence, the acid phosphate plot did not suffer nearly as severely as the checks.
4. The individual wheat heads are longer, larger and better filled on plots where acid phosphate was used.
5. The clover catch in some instances is remarkably good, indicating the benefit clover received from lime to neutralize acidity and phosphoric acid to produce a good healthy plant with a strong root system.

Variogated Alfalfa.

Common alfalfa has a violet flower

which differs in degree of density from a very pale to a comparatively deep color. The flowers of the Variogated Alfalfa, however, include shades of blue, green and yellow, as well as violet and also blends of these colors with each other. The July blossoms in a series of 34 plots of different varieties and strains being tested in the Field Husbandry Department at the O.A.C. show a variegation of from one to 85 per cent. In past experiments at the College, the common alfalfa of Ontario has proven tender and the variegated hardy. This variegated alfalfa is being grown successfully in a number of counties in Ontario, such as Welland, Lincoln, Peel and Haldimand. In Peel County an alfalfa club has been organized and this season over 100 fields of variegated alfalfa have been entered and inspected for seed production. Several carloads of hardy alfalfa seed was shipped from Peel County in 1922, in addition to a considerable amount, which was sown locally.

Last week a field belonging to Mr. J. H. Manary, Euphrasia Township, was inspected. It proved to be 65 per cent. variegated. Undoubtedly more shall be heard of this later.

Alfalfa Hay in Demand.

A letter has been received from the West Branch Co-operative Seed Growers' Association, Williamsport, Pa., asking for hay, as the crop in their district is very short. Alfalfa hay is preferred. Perhaps some of our Grey County farmers would like

to get in touch with these people. We believe it would be good business to do so.

Poultry Culling.

Next week poultry culling experts will be in the County. There is considerable work on hand. As the cullers remain in the County for one week only the demonstration work, which is free, must be done during that time. Applications are being received up to time of culling.

Plowing Matches.

Some time ago this Department sent to several Agricultural Societies a brief account of assistance which it was possible to obtain for the development of plowing matches in the County. Nothing has been heard at time of writing except from Markdale Agricultural Society re the decision arrived at by the various organizations notified.

If plowing matches are going to be held this year, a start should be made in the preliminary work. It is well to organize at the earliest convenience and opportunity so that when the season opens all will be in readiness. What Society will be the first to organize a plowing match?

A Good Proposal.

The London Advertiser proposes that all insane chatter by telephone should cease, such as, "Do you know who is speaking? No, guess again! Surely you know who it is," and so on. This is a great nuisance and should be cut out. Agreed!

JUST ARRIVED. A SHIPMENT OF Aylmer Force and Lift Pumps

Renfrew Cream Separators
"The Best on the Market"

A Full Line of
SPRING FARM MACHINERY

WILLIAM STONE FERTILIZER "None Better"

J. SCHUTZ

COCKSHUTT AGENT - - DURHAM

"EVERYTHING IN FARM MACHINERY"

Come With the Crowd & Make Your Dollars Come Back WEDNESDAY & WEDNESDAY NIGHT, AUGUST 8 Remember!-----These Bargains Hold Good for Wednesday Only

SEE OUR LINE OF MEN'S FINE SHIRTS. THEY ARE REAL CLASSY.

WE STILL HAVE THE "HATCHWAY" UNDERWEAR; ALSO LEATHER LABEL OVER-HAULS.

G. S. BURNETT

- Parker-Hunter Bug Killer..... 28 lbs. for \$1.00
- 1-inch Hayfork Rope, per foot..... 25c.
- Granite Preserving Kettles, each..... 49c.
- Fruit Jar Rubbers, per package..... 8c.
- Granite Water Dippers, each..... 25c.
- Hand Hay Rakes, each..... 39c.
- Sweet Pads, each..... 49c.
- Large Pail Axle Grease, each..... 39c.
- 7-inch Stovepipe Elbows, each..... 19c.

A. S. HUNTER & CO.

- Cocoa, in bulk..... 10c. lb.
- Heather Toilet Soap..... 6 bars for 25c.
- Laundry and Corn Starch..... 2 boxes for 25c.
- Lux..... 2 boxes for 25c.
- Panshine..... 2 boxes for 25c.

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Why have your Cattle suffering with the flies when Zenoleum Fly Skoot will give them comfort?

1-gal. tins, reg. \$1.50 for \$1.00 (Wednesday only.)

CROSS & SUTHERLAND HARDWARE CO.

- FRUIT SALINE, reg. 75c..... 49c.
- Gin Pills, reg. 50c..... 39c.
- TANLAC, reg. \$1.00..... 89c.
- ELECTRIC LINIMENT, reg. 35c..... 29c.

MacBETH'S DRUG STORE

SPECIAL FOR WEDNESDAY, AUG. 8

- Misses White Canvas Strap Slippers, leather soles and heels, sizes 11 to 2; reg. \$1.75 for..... \$1.00
- Children's White Canvas Strap Slippers, leather soles and heels, sizes 8 to 10½; reg. \$1.50, for..... \$1.00
- Infants' White Canvas Strap Slippers; regular \$1.35 for..... \$1.00

J. S. McILRAITH The Cash Shoe Store

Follow the Crowd to Durham FREE BAND CONCERT

Every Wednesday evening, at 8 p.m., by DURHAM CITIZENS' BAND

M. WILSON, Conductor.

BARGAINS

- Holeproof Silk Hose, all shades, elastic top.... 98c. pr.
- Single-mesh Cap-shape Hair Nets..... 5 for 25c.
- 3 only 21-piece China Tea Sets..... \$3.79
- Ladies' Summer Vests, reg. 35c., for..... 25c.

THE VARIETY STORE

- 16 bars Comfort Soap..... \$1.00
- 3 lb pail Lard..... 55c.
- Nabob Tea, reg. 75c., for..... 65c.
- Eggo Baking Powder, per lb..... 35c.
- Canned Peaches, reg. 40c..... 30c.
- Corn Flakes..... 3 for 25c.

J. & W. McLACHLAN

Work Shirt Specials

- Black and White, reg. \$1.35 for..... \$1.00
- Heavy Blue Duck, reg. \$1.35, for..... \$1.00
- Khaki, reg. \$1.25, for..... \$1.00

H. MORLOCK & SONS

- Ladies White Canvas Oxfords, low heel..... \$2.29
- Patent One-strap Slippers, low heel..... \$3.75
- Patent One-strap Slippers, Cuban heel, grey calf trim, for..... \$4.00
- Sterling's Heavy Work Shoes for Men..... \$4.69

J. McKECHNIE

MEN'S, BOYS' AND CHILDREN'S CANVAS FOOTWEAR, Rubber Soles. SPECIAL DISCOUNT, 15 %

BOYS' COTTON JERSEYS..... 39c.

NINE POUNDS GRANULATED SUGAR FOR \$1.00

J. & J. HUNTER

Bargain Sales Still Continue

at THE McINTYRE HARDWARE STORE

J. H. HARDING

- Eno's Fruit Salt, reg. \$1.00..... 85c.
- Bu-Ju Kidney Pills, reg. 50c..... 35c.
- Milburn's Rheumatic Pills, reg. 50c..... 39c.
- Italian Balm, reg. 40c..... 29c.
- "Sweetest Maid" Chocolate Bars, reg. 5c. each Very Special..... 7 for 25c.

McFADDEN'S DRUG STORE

- 20 prs. Lace Curtains, 2½ by 38 in., reg. \$2.50, \$2.00 pr.
- Remnants of Voile at one-third off regular price.
- Men's Rubber Belts, reg. 60c., for..... 40c. ea.
- Ever Ready Dandee Cocoa, 20c. tin, for..... 15c. tin
- Polly Prim Cleanser..... 3 tins for 25c.

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REAL NICE LOW-PRICED GIFTS

Old Cups and Saucers of the finest china \$1.25 to \$3.75
Cut Glass in all the odd pieces. Butter Tubs, Spoon Trays, Celery Trays, Compotes and many other pieces all cut in the beautiful Corn Flour Design, priced from \$1.25 upwards.

All the newest pieces in Silver flatware from 75c. up.

D. C. TOWN, Watchmaker & Optician

- Jewel Flour, per cwt..... \$3.49
- Comfort Soap..... 13 bars for \$1.00
- Corn Starch..... 48c. pkg.
- Gold Medal Tea (with free cup and saucer)..... 72c. lb.
- Puritan Baking Powder..... 24c. per lb tin
- Hayhoe's Jelly Powders..... 41c. pkg.
- Raspberries, fresh every day.

BEGGS' STORE

- One White Enamel Writing Desk..... \$9.00
- One White Enamel Dressing Table..... \$14.00

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Will spoil your summer and make your company distressing to your friends unless you get relief. Get a box of RAZ-MAH today. Most people feel better from the first dose. Your druggist will refund your money if a \$1 box does not bring relief. Absolutely harmless. Generous sample for 4c in stamps. Templetons, Toronto.

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