

were most common in the alkaline soil areas. Experimental plots in several districts showed increased growth and healthy plants where 10 to 20 pounds of Borax per acre was applied with the fertilizer."

NEWS AND VIEWS

THE 73RD ANNUAL MEETING OF THE ENTOMOLOGICAL SOCIETY OF ONTARIO

The annual meeting of the Entomological Society of Ontario was held on November 19th and 20th, 1936, at the Dominion Parasite Laboratory at Belleville, Ontario. The president, Mr. L. S. McLaine, was in the chair. The following papers were presented:

- "The 1936 Grasshopper Outbreak in Ontario"—H. A. Gilbert and R. W. Thompson.
 "The Corn Borer in Ontario in 1936"—L. Caesar.
 "The Actual Corn Borer Distribution in Quebec"—P. Lagloire.
 "Preliminary Field Experiments in the Control of the European Corn Borer, *Pyrausta nubilalis* Hüb., by *Beauveria bassiana* Vuill"—G. M. Stirrett, G. Beall, and M. Timonin.
 "On the Phototropism of the June Bugs"—Geo. Maheux and Geo. Gauthier.
 "Further Notes on the Flight of Phyllophaga"—Messrs. Hudson, Wood and Pritchard.
 "Some Facts Regarding the Distribution of the Pea Moth, *Laspeyresia nigricana* Steph., on the Gaspé Coast"—A. D. Baker.
 "Resistance of Some Varieties of Peas to the Pea Aphid, *Illinoia pisi* Kalt."—J. B. Maltais.
 "A Brief Report on Certain Mercury Salts used Experimentally against the Onion Maggot"—A. G. Dustan.
 "The Sweet Clover Weevil"—H. W. Goble.
 "Four Years Experience with 'Electracide' Light Traps"—D. F. Patterson.
 "Some Interesting Captures from Electric Lights"—H. F. Hudson and A. A. Wood.
 "An Occasional Outbreak of *Myzus persicae* around Quebec City"—Geo. Maheux.
 "Life History and Habits of the Dusky Leaf Roller, *Amorbia humerosana* Clem. in Nova Scotia"—F. C. Gilliatt.
 "The Muscles of the Head Stomodeum of an Odonate Nymph, *Ischnura verticalis*"—(Mrs.) Evelyn Grieve.
 "The Biology of *Microplectron fuscipennis*, a parasite of the Spruce Sawfly"—W. A. Reeks.
 "Preliminary List of Aquatic Insects of the Quebec District"—Geo. Gauthier.
 "Further Observations on the Life History and Habits of the Columbine Borer, *Papaipema purpurifascia* G. & R."—W. G. Matthewman.
 "Occurrence of the Potato Beetle in Three New Quebec Districts"—Geo. Maheux.
 "Some Factors influencing the control of Greenhouse Aphids by Parasites"—J. H. McLeod.
 "Biological Notes on the *Chrysopidae*"—Wm. L. Putnam.
 "Fruit Insects of the Season"—W. A. Ross.
 "The Grasshopper Situation in Manitoba in 1936"—A. V. Mitchener.
 "Some Problems in the Control of the Alfalfa Snout Beetle, *Brachyrhinus ligustici* Linn."—Charles E. Palm.
 "Some Observations on the Biology of the Apple Maggot"—J. A. Hall.
 "Results from Organized Apple Maggot Control in Nova Scotia"—A. Kelsall.
 "A Review of Some Recent Experimental Work with Derris and Pyrethrum"—J. P. Barrett.
 "Pyrethrum and Derris Dusts"—A. Kelsall and H. T. Stultz.
 "A Laboratory Apparatus for Determining the Relative Toxicity of Contact Dusts"—S. H. Payne & H. T. Stultz.
 "Some Observations on the European Pine Shoot Moth"—A. H. MacAndrews.
 "Recent Developments in the Administration of the Agricultural Pests Control Act"—G. E. Grattan.
 "Developments in Vacuum Fumigation Practice at the Port of Montreal"—L. S. McLaine & H. A. U. Monro.

The Annual Dinner was served at the St. Thomas Parish Hall, Bridge Street. All members, together with their wives and lady friends, attended.

A Public Meeting was held in the Auditorium of the Belleville Collegiate Institute. The guest speaker was Dr. W. C. O'Kane, Professor of Entomology, New Hampshire State University, Durham, N.H., who chose as his subject, "Looking Ahead."

SAP STREAM CARRIES POISON TO CONTROL BEETLES IN TREES.

A recent press release from Washington, D. C., informs us that, searching for new and better control measures, entomologists of the U. S. Department of Agriculture have worked out promising methods for introducing into the sap stream of an infested tree chemicals poisonous to bark beetles. The rising sap carries these chemicals—zinc chloride and copper sulphate—all through the tree, impregnating the tissues much more simply and at far less cost than could be done with an outside force.

Besides killing all insect life in the tree, the injected fluid makes the wood immune to further insect attack. Treated trees, therefore, may be left standing for several years, until it is convenient to start logging operations in their vicinity. Furthermore, posts, poles, and logs in the round from the treated trees will resist insect attack and decay that soon ruin untreated timber in contact with the ground. As a method of preserving forest products, the entomologists say, these treatments can not take the place of commercial dipping and pressure processes. They are, however, practical for farmers and foresters needing rough timber for fences or for rustic furniture, cabins, or bridges on the land where the trees grew. Nor can these methods of destroying insect pests be used on trees to be kept alive. They are bound to kill the tree, as well as the beetles in it.

A tree to be treated must be green and its crown must be left intact during the treatment. The simplest method—adapted to small trees—is to cut the tree off at its base, lodging the top in the crown of another tree, or in some other support to keep it upright, and set it in a pail of the solution. With trees too large to handle this way, the bark is removed from around the base. Then a notch is sawed through several annual layers of wood in the centre of the smooth, bark-free strip and a wide rubber band is stretched around the notch. The solution is run under the band into the notch.

Zinc chloride and copper sulphate have given best results in the department's tests for the last 10 years. Concentrations of 1 pound of the powdered chemical to $\frac{1}{2}$ gallon of water for each cubic foot of wood in the tree stem have proved most satisfactory. The time required for the treatment varies with the physiological activity of the tree, particularly the rate of transpiration.

CHANGES IN U. S. MEXICAN FRUIT FLY QUARANTINE.

The Mexican Fruit Fly Quarantine No. 5 (Foreign) which has prohibited the entry into the United States of oranges, grapefruit, sweet limes, mangoes, achras, sapotes, peaches, guavas, and plums since 1913 will be lifted December 1, 1936, according to an announcement by the United States Department of Agriculture. On that date the entry of these fruits from Mexico automatically falls under the provisions of the Fruit and Vegetable Quarantine No. 56 (Foreign) which provides that they may enter only when so treated as to eliminate pest risk.

The Department also announced a revision of the regulations under the Fruit and Vegetable Quarantine No. 56 to take effect at the same time the Mexican Fruit Fly Quarantine is lifted. These changes clarify provisions on the entry of certain products so treated as to eliminate the risk of introducing injurious pests or of products which may be admitted subject to prescribed safeguards.

The new regulations contain no specific limitations as to ports of entry, leaving them to be prescribed in the permits.

U. S. REVOKES SATIN MOTH QUARANTINE.

A press release from the Department of Agriculture at Washington, D. C., under date of November 4th, 1936, states that the satin moth quarantine (Federal plant quarantine No. 53) which became effective January 1, 1922, to prevent the spread of the satin moth (*Stilpnotia salicis* L.), has been revoked, effective November 2, 1936. This quarantine affected parts of all the New England States and the state of Washington.

Lee A. Strong, Chief of the Bureau of Entomology and Plant Quarantine, says that when the quarantine was placed by the Department the known infested area lay within the area regulated by the gypsy moth and brown-tail moth quarantine and there was an organization at hand, therefore, for quarantine enforcement purposes. This condition has ceased to be true and at the present time there are no Federal facilities for the enforcement of quarantine regulations in Oregon and Washington, where the insect has become established, in Oregon only recently. Mr. Strong also states that because of the effectiveness of several native and introduced insect parasites in reducing the intensity of infestation and because of the relatively minor commercial economic value of the host plants,—principally the poplars and willows—it is doubtful if the satin moth will ever become a very serious pest in this country, although local control measures for the protection of foliage of shade or ornamental host plants may be required from time to time.

The revocation of the quarantine will leave States free to take such action as they may desire to prevent the further spread of the satin moth.