Interesting Bulletins and Reports

SEVERAL of the colleges and fruit esperiment stations have been more liberal than usual this season in supplying valuable information to the fruit growers by means of bulletins. In addition to those outlined in recent issues of THE HORTICULTURIST, the following bulletins and reports will be found of interest to those engaged in horticultural pursuits:

ONTARIO FRUIT GROWERS

The work done by the Fruit Growers' Association of Ontario is outlined in the 37th annual report of that association. This volume includes the discussion that took place regarding the revision of the constitution, as well as the addresses given by the leading speakers at the various sessions and the discussions that followed. Reports from fruit growers in Algoma regarding fruits that are hardy in northern sections, and from Prof. H. L. Hutt, of the O.A.C., and Mr. W. T. Macoun, of Ottawa, regarding new fruits that promise to be of value, are contained. Spraying, cover crops, cooperation and other subjects of vital interest to orchardists, are carefully discussed by competent horticulturists. This report can be had by applying to the Dept. of Agri., Toronto.

SPRAYING FOR SCALE

Bulletin 273 of the N.Y. Expt. Sta., Geneva, N.Y., contains an outline of tests of spraying mixtures made in treating San Jose scale. These tests confirm the results of previous experiments that the sulphur washes applied in the fall are effective. No advantage was shown by the addition of salt to the sulphur wash. The self-boiled mixtures did not give as satisfactory results as those boiled by fire or steam. The experiments indicated that kerosene-lime sprays were not as efficient nor as uniform in their effects as the sulphur wash. Among the soluble oils, Scalecide was satisfactory, and was said to be promising as a dormant-season treatment for the scale. Spring applications, however, retarded the development of buds, while the summer spraying caused severe injury. The results of the tests did not lead the officials at the station to advise the abandonment of the well-known standard sprays.

SPRAYING AT NEW JERSEY STATION

A valuable compilation of information regarding spraying with the different insecticides and fungicides in treating the enemies of the different crops, and a description of spray pumps is given in bulletin 194 of the N.J. Expt. Sta., New Brunswick, N.J. The crops are arranged alphabetically, and the improved methods of treating each pest carefully outlined. The merits of the various insecticides and fungicides, including formalin, carbon bisulphide and hydrocyanic acid gas, are fully discussed. Spray pumps recommended for small gardens and orchards, as well as power sprayers and the nozzles that are most satisfactory, are described.

A DELAWARE BULLETIN

The results of experiments conducted at Del. College Expt. Sta., Newark, Del., to show the effects of different strengths of kerosene lime emulsion on San Jose scale are given in bulletin 73. It is pointed out that the principal causes of non-success were improper preparation of the mixture and incomplete spraying. Two thorough sprayings, one in late spring and the other in late fall, it is said, should be the minimum. It is claimed that if there is any one best time it is late Oct. or early Nov., as the insects at that time have not glued their scaly covering to the bark and the remedy reaches the tender body beneath the scale very easily. Besides, the trees have ripened their wood and can endure a moderately strong insecticide. The preparation of the kerosene lime is outlined as follows: Stir the kerosene and lime in a barrel thoroughly; add 10 to 20 gals. of water, and stir to loosen the kerosene and lime from the bottom and sides of the barrel; pour in water until the barrel is more than three-fourths full, then with a hoe splash and pound the mixture for 4 or 5 mins. to emulsify it, and fill the barrel with water. Where carefully made and thoroughly applied it is claimed that this mixture is equal to any of the standard remedies. The 20% mixture, which consisted of 10 gals. kerosene, 40 lbs. lime and 38½ gals. water, was more effective than lime, sulphur and salt, or kerosene emulsion. As a general rule nothing stronger than 25% strength is advocated, but in spring, when the trees are crusted with the scale, it is said to be more economical to use 30% on peach trees and 30 to 35% on other trees. The 25% K.-L. mixture is composed of 12½ gals. kerosene, 50 lbs. lime and 34½ gals. water, while the 30% mixture consists of 15 gals. kerosene, 60 lbs. lime and 30½ gals. water.

MAINE ORCHARD NOTES

Bulletin 128 of the Me. Expt. Sta., Orono, Me., contains notes on spraying for scale insects, caterpillars, apple scab and pink rot, results of unbalanced ration on fruit, winter injury from freezing and from mice, and suggestions regarding handling fruit and pruning. A canvass of the orchards in Wayne and Orleans counties showed that 66 sprayed orchards, representing 626 acres, yielded at the rate of 280 bus. per acre in 1903, while 107 unsprayed orchards, representing 673 acres, yielded at the rate of 253 bus. per acre. For the sprayed fruit the average price was $2.02 per bbl., while the unsprayed fruit brought only $1.80. The value of spraying is clearly shown by the following figures: Trees unsprayed, average income per acre, $103; trees sprayed once, average income, $139; trees sprayed twice, average income, $143; trees sprayed three times, average income, $184; trees sprayed four times, average income, $211.

In spraying for the apple scab it was clearly demonstrated that even in a bad season there was a difference of 50% in the amount of fruit on sprayed and unsprayed trees. The best results were obtained from the use of Bordeaux mixture. When there was no crop of fruit the increased vigor of the trees, resulting from clean, healthy foliage, more than repaid the cost of spraying. Applications just before the buds burst and immediately after the blossoms fall give the best results. On a wet season at least four treatments, at intervals of two or three weeks, are recommended.

HORTICULTURAL SOCIETY REPORT

A report of the 51st annual meeting of the Western N. Y. Horticultural Society contains much that is of interest to fruit growers. Among the subjects discussed are: "The Formation of Fruit Buds," "The Blight Canker of Apple and Pear Trees," "Relation of Tillage to Improvement of Orchards," and "The Prospect for Education in Horticulture." Garden vegetables, shrubs, flowers and bedding plants also are discussed. These subjects are handled by such horticultural authorities as Prof. L. H. Bailey, of Cornell; G. T. Powell, of Ghent, N.Y.; W. H. Jordan, of the N. Y. Expt. Sta., and others. A copy of the report can be had by writing to Jno. Hall, Sec., Rochester, N.Y.

BULLETIN ON CRANBERRIES

Varieties of cranberries, cultural methods, insect pests, grasses usually troublesome in cranberry bogs, and various other information of interest to those engaged in growing cranberries is to be found in bulletin 119 of the Agri. Expt. Sta., Madison, Wis. Flooding, and other means of preventing frost, are fully outlined. Various methods of planting, the care of the young plants, and the methods of harvesting adopted in the leading cranberry districts, are described. Those interested in the cultivation of cranberries should secure this valuable bulletin

SPRAYING FOR POTATO BLIGHT

Results of experiments conducted in spraying for potato blight during the season of 1905, are given in bulletin 236 of the Mich. Agri. Expt. Sta. Correspondence with potato growers throughout the state showed that a large number did not know what Bordeaux mixture was, and most of them believed the blight to be incurable. The reasons for so few growers spraying were attributed to: (1) Ignorance as to the cause of the disease, (2) Not knowing there is anything that will prevent it, and (3) A belief that the results will not repay for the time and trouble required to do the spraying. The bulletin attempts to set the growers right on these points. After outlining the cause of the disease and describing it fully, the results of numerous experiments conducted at the college are given. Unsprayed potatoes gave a gross gain of $20.50 per acre; those sprayed with lime water every four days, from July 22, netted $26.25; those sprayed with Bordeaux mixture (4 lbs. copper sulphate, 4 lbs. lime, 50 gals. water) netted $34.40; those sprayed with Bordeaux mixture every 15 days netted $36.75; those sprayed with Bordeaux mixture every 10 days netted $40.25; and those sprayed with Bordeaux mixture every four days netted $40.75. The cost per acre per application was found to be about 72 cts., but it would be much less on large field operations. It is claimed that two acres or more could be sprayed thoroughly at a total outlay of 55 cts. per acre.

ONTARIO VEGETABLE GROWERS

The first annual report of the Ont. Vegetable Growers' Assn. contains the history of the formation of the assn. and an account of the valuable work done during the short time since its organization. The report of the first annual convention includes the following addresses: Truck Farming in Delaware, by A. N. Brown; Growing Vegetables at Guelph, by H. S. Peart, B.S.A.; Fertilizers for the Vegetable Grower, by Prof. R. Harcourt; Growing Vegetables under Glass, by J. L. Hilborn; Experiments in Potato Growing, by Prof. C. A. Zavitz; Injurious Insects and Fungii of the Garden Crops and How to Combat Them, by T. D. Jarvis, B.S.A.; The Growing and Marketing of Cauliflower, by A. McMeans; and Experiments in Vegetable Growing at the Central Expt. Farm, by W. T. Macoun. Many interesting discussions, also, are included.

The Outlook in the West

J. J. Philp, Winnipeg, Man.

To one standing on the high ground in the centre of the continent and looking toward the east and the west, and then withdrawing his gaze for a look at his more immediate surroundings, those surroundings being the city of Winnipeg, there must come a feeling of intense satisfaction at the prospect for this season's business. And to no line of business activity is the prospect more encouraging than to the fruit interests of Ontario fruit growers.

Meeting at the Dominion Fruit Conference in Ottawa, as we did, the principal men from the several provinces, one could not help but admire the unlimited optimism and the exhilarating breeziness of the B.C. contingent. Granting, however, all they claim that they can grow fruit without spot or blemish, there is this to be remembered that the western provinces are becoming populated with such rapidity that it will take the B.C. growers all their time to attend to the wants of those nearer home than is Man.

As a result of the labors of the convention and the improved legislation in connection with the Fruit Marks Act. This act in the future, will take higher ground than it has ever done in the past. One may search in vain during the course of an extended trip, as I did,