



A Well Loaded Tree

Orchard of T. W. Palmer, Victoria, B.C.

you intend giving the first or dormant spray with lime and sulphur it is advisable under some conditions to defer that spray until the buds are bursting, adding the Black Leaf 40 to this spray. This combination is an excellent control for the aphids, besides the good it may do in controlling scab.

Black Leaf 40 may, moreover, with equally good results be added with the next application, i.e., just before the blossoms open and when the petals begin to show pink at the tips. This is probably the more important spray for aphids and scab as well. Lead arsenate for biting insects may likewise be added without impairing the value of the wash, as far as we have determined, for aphids or scab. If necessary the Black Leaf may again be added to the codling moth spray, applied just after the blossoms fall. In these sprays, Black Leaf 40 is used in the strength of one-third of a pint to forty gallons of the wash. When used alone a pound of good laundry soap should be added as well.

Soap must never be added to a spray containing lime-sulphur.

Another spray that has been in use for many years and has been used with success for all kinds of sucking insects is Kerosene Emulsion. It is made as follows: Soap, one-half pound; kerosene, two gallons; water, one gallon.

Dissolve the soap in hot water, add oil

and churn violently until a creamy emulsion is produced. This gives a stock solution that may be kept for some time. For use against aphids, dilute every three gallons of stock solution with ten gallons of water.

The disadvantages of kerosene emulsion are:

First, it cannot be used in combination with other insecticides or with fungicides; second, if a good emulsion is not secured the spray will be sure to burn the foliage. The oil will collect on the top of the mixture and some of the trees will receive a pure oil spray. I have seen so much damage done in this way that I am reluctant to urge the general use of kerosene emulsion.

There is another spray that is very popular with some orchardists. For use one pound is dissolved in five of water. It may be used with Black Leaf 40, but must not be added to lime-sulphur. There are several brands on the market, differing in cost and efficiency.

Quassia chips are often added to whale oil soap and improves it as an aphidicide. The following is the formula: Soap, three pounds; quassia chips, three pounds; water, forty gallons.

Soap sprays are usually fairly satisfactory and are easily prepared.

The soap or emulsion sprays can be used at the same time as has been recommended for Black Leaf 40. All woolly aphids is harder to kill owing to

its protective covering of wax, and accordingly the sprays must all be used somewhat stronger. It is usually most easily destroyed by a spray applied in the fall when the aphids are out on the terminal shoots.

Hardy Apples and Plums

August Dupuis, Director of Fruit Stations, Village de Aulnoies, Que.

The varieties of apples and plums here mentioned have been cultivated in the north-west part of the province of Quebec for twenty-five to fifty years with success. The severest winters have not injured them. I could add to this list several varieties which are doing well, but they have not been tested long enough by the orchardists and at the Experimental Station to warrant me in recommending them as yet for general plantation.

Nurserymen having agents to sell stock in Quebec province, east of Montreal, ought to offer to their customers only the varieties that have proved hardy and productive after several years of culture. The nurserymen having at heart the success of the fruit industry ought not to sell Baldwin, R. I. Greening, King, Newton, and Pippin trees in this northern part of Canada. All attempts to cultivate them have failed. Their wood does not mature, our season of growth being too short.

HARDY PLUMS FOR QUEBEC*										
	Vigor.	Hardiness.	Fruit.	Season.	Use.	Size.	Qual.	Cooking.	Shipping.	Dessert.
Bradshaw	75	75	75	Sept.	d.	vl	g	75	50	50
Coo's Golden D. ..	75	90	90	Sept.	d.c.	ml	g	75	90	15
Guell	80	75	90	End Sept.	d.	l	g	75	75	75
Grand Duke	75	75	90	Oct.	d.	vl	vg	90	75	90
Hudson River										
Quackeboss	90	90	90	Oct.	d.c.	vl	g	90	90	90
Imperial Gage ..	80	75	75	Sept.	d.	m	vg	90	50	90 Extra for canning
Lombard	90	90	100	S. & Oct.	d.c.	ml	g	90	90	75 v. g. for canning
Mirabelle (native)..	75	90	90	Aug.	d.c.	sm	vg	90	90	90 v. g. for preserves
Moor's Aretio ..	75	90	90	Sept.	d.c.	m	f	90	90	50
Pond's Seedling ..	75	75	75	Oct.	d.c.	vl	f	90	90	50 Varietioslm.
Agen	75	55	75	Oct.	d.	m	g	75	90	90 reported from Franco 1630
Reine Claude										
Montmorency	90	90	90	Sept.	d.	ml	vg	90	90	90 and the most generally cultivated n
Damas bleu	75	90	90	Sept.	d.	s	vg	90	90	90 North-Eastern Quebec
Shipper's Pride ..	75	75	75	Sept.	d.c.	vl	f	75	90	90
Green Gage	75	75	75	Sept.	d.	m	vg	90	75	90
Washington	75	50	75	Sept.	d.	vl	g	90	75	90 on ownroot.

HARDY APPLES FOR QUEBEC*										
	Vigor.	Tree-Hardy.	Prolific.	Season.	Use.	Size.	Quality.	Cook.	Ship.	Dessert.
Astrachan	75	75	50	Sept.	d.c.	m	f	50	50	75
Y. Transparent ..	90	90	90	Aug.	d.c.	l	g	90	25	75
Peach of Montreal.	90	90	90	Sept.	d.	m	f	75	25	50
Duchesse	75	90	90	Sept. & Oct.	d.c.	l	f	75	90	50
E. Strawberry ..	50	60	50	Sept.	d.	m	f	75	75	50
Alexander	75	90	60	Oct.	c.	vl	f	50	90	50
Longfield	75	90	75	Nov.	c.	m	f	50	90	50
St. Lawrence ..	50	75	50	Oct.	d.	l	vg	50	90	90
Wolfe River ..	75	75	75	Nov.-Dec.	d.	vl	f	75	90	75
Wealthy	90	90	90	Dec.-Feb.	d.c.	l	f	75	90	75
Am. Gold. Russet..	75	75	75	Nov.-May	d.	m	f	25	90	75
Bethel	75	75	50	Nov.-Feb.	d.	ml	f	50	90	75
Fameuse (Snow) ..	90	90	90	Oct.-March	d.	m	vg	75	90	90
McIntosh Red ..	90	90	90	Oct.-Feb.	d.	ml	vg	75	75	90
Rox. Russet	75	90	75	Oct.-May	d.	m	f	25	90	90
Scott's Winter ..	75	75	75	Oct.-May	d.	m	f	25	90	75
Winter Arabka ..	50	75	75	Nov.-Feb.	c.	l	f	75	90	50
Ben Davis	75	60	75	Nov.-May	c.	l	f	50	90	40

*In the foregoing tables, in the column headed "use" the letter "d." stands for dessert and the letter "c." for culinary. In the column for size "m" denotes a medium size, "l" a large size and "vl" a very large size. Under the heading quality "g" stands for good and "f" for fair.