

# SPRAY CALENDAR.

REVISED UP TO DATE FOR "THE FARMER'S ADVOCATE" BY L. CAESAR, O.A.C., GUELPH.

PLANTS AND PEST.	1st APPLICATION.	2nd APPLICATION.	3rd APPLICATION.	REMARKS.
<b>APPLE.</b> Scab or black spot, canker, leaf spot, codling moth and other biting insects, scale insects, blister mite and aphids.	Shortly before the buds burst. Use A1 or B.  For San Jose Scale prune severely, scrape off loose bark, and drench the whole tree, paying special attention to outer twigs.	Just before the blossoms open. Use A2 or D, with 2 or 3 lbs. arsenate of lead to each 40 gals. of the liquid.	Immediately after the blossoms have all or nearly all, fallen, and before the calyxes close. Use A3 or D, with 2 lbs. arsenate of lead to each 40 gals. This is the application for codling moth.	For scab, if the first half of June is wet or foggy and cool, give a 4th application with the same mixture as the 3rd, about ten days later than it; also if the latter half of August is wet, spray at once with A3 or D to prevent late attacks of scab and sooty fungus. If aphids are annually troublesome, delay 1st application till buds begin to burst, then add Black Leaf 40 to A1 or B and cover every bud. For Cankers cut out diseased bark, disinfect and cover with white lead paint or gas tar. For Blight on young trees keep suckers rubbed off trunk and main branches and cut out promptly any diseased branches or twigs well below the diseased bark. Always disinfect both cuts and tools with corrosive sublimate.
<b>PEAR.</b> Scab or cracking, blight, codling moth, other biting insects, scale insects, blister mite, psylla and slug.	Shortly before the buds burst. Use A1 or B. For San Jose Scale see above under apple.	Just before the blossoms open. Use A2 or D, with 2 or 3 lbs. arsenate of lead to 40 gals. of the liquid.	Just after blossoms have fallen. Use A3 or D, with 2 lbs. arsenate of lead to 40 gals.	Pears subject to Scab should always receive a 4th application 10 days later than 3rd with same mixture. For Blight cut out carefully in winter all blighted branches and twigs, cutting a foot or more below the diseased part. Also remove and burn trees too severely blighted to save. Throughout growing season watch for and remove promptly in the same way all blighted twigs or branches. Disinfect at once tools and all cuts with corrosive sublimate (1 to 1,000). For Psylla delay 1st spraying with A1 or B until leaf buds have burst and add Black Leaf 40 to Codling Moth spray if necessary. Arsenate of lead will kill Slugs (3 lbs. to 40 gals).
<b>PLUM AND CHERRY.</b> Black-knot, brown rot, leaf blight or shot-hole fungus, curculio, slug and aphids, and cherry fruit-flies.	Just before the buds burst. Use A1 or B. For San Jose Scale see above under apple.	Just after fruit is set. Use A2 or D, with 3 lbs. arsenate of lead to 40 gals.	About two weeks later. Use A3 or D, with 3 lbs. arsenate of lead to 40 gals.	For Cherry Fruit-flies (the cause of the little white headless maggots in cherries) use 3 lbs. arsenate of lead, 1 gal. molasses and 39 gals. water. Apply to all cherry trees just as Early Richmonds are getting a reddish blush, and again to only Montmorency and late varieties about 10 to 12 days later. For leaf-spot give a 4th application with same mixture as 3rd just after cherries are picked. Cut out and burn all Black Knots in winter and whenever seen in summer. For Slugs see under Pear above. Examine sweet cherries for aphids after blossoms fall, and, if present, add Black Leaf 40 to 2nd application. Good pruning with resulting increase of sunlight and air circulation help against Brown Rot.
<b>PEACH.</b> Leaf-curl, scab or black spot, yellows, little peach, curculio, borer, San Jose scale, shot-hole borer.	Before the buds begin to swell. (All must be done before any sign of bursting of buds.) Use A1 or B. This is usually the only spraying peach trees receive.	Soon after fruit is set. Use 2 or 3 lbs arsenate of lead, and 1 or 2 lbs. freshly slaked lime to 40 gals. of water for curculio. Omit if curculio is not troublesome.	About one month after fruit is set. Use C, if troubled by brown rot. Good pruning and thinning the fruit help to control this disease.	If brown rot is likely to be troublesome use C again about one month before fruit ripens. Destroy mummied fruit in autumn. Remove at once and burn any tree attacked by yellows or little peach and also all suspected trees. Dig out borers at base of tree with knife in May and again in October. For shot-hole borer cut down and burn before April all dead or dying trees or branches, and leave no brush heaps near orchard.
<b>GRAPES.</b> Black rot, powdery mildew, downy mildew, anthracnose, flea-beetle, leaf hopper.	When 3rd leaf is appearing. Use D.	Just before the blossoms open. Use D.	Just after fruit sets. Use D.	Spray again whenever wet weather threatens. It should always be done before, not after rain. At first sign of powdery mildew dust with sulphur or spray with C. For flea-beetles use poison whenever they appear. For leaf-hoppers or "thrips" use Black Leaf 40 or whale oil soap in July to destroy nymphs. Clean cultivation is very important and destruction of all old mummied grapes and prunings.
<b>CURRENT, GOOSEBERRY.</b> Mildew, leaf-spot, currant worm and aphids, red spider and San Jose Scale.	Shortly before buds burst. Use A1 or B. For San Jose Scale prune and spray heavily.	Just before blossoms appear. Use A2, with 2 lbs. arsenate of lead to 40 gals.	Just after fruit is formed. Use A2, with 2 lbs. arsenate of lead to each 40 gals.	For worms when fruit is ripening, use hellebore. Look for aphids just as buds burst; if present spray with Black Leaf 40 or kerosene emulsion or whale-oil soap, or postpone 1st application till then and add Black Leaf 40 to A1 or B.
<b>RASPBERRY AND BLACKBERRY.</b> Anthracnose, red rust crown gall.	Before growth begins. Use D. Omit if not troubled by anthracnose.	When shoots are 6 or 8 inches high. Use D. Omit if no anthracnose.	If caterpillars are attacking the leaves use 2 lbs. arsenate of lead to 40 gals. water if no danger of poisoning the fruit; otherwise use 1 oz. hellebore to 1 gal. water.	If anthracnose is very severe, set out new plantation of healthy shoots. If disease begins, cut out old canes as soon as fruit is picked, also badly-attacked new ones, and burn. For red rust, remove and burn plants at once. No other remedy. For crown gall set out plants in fresh soil, rejecting any plant with a gall on root or crown.
<b>STRAWBERRY.</b> Leaf-spot and white grub	For leaf-spot set out only healthy plants with no sign of disease. First season spray with D before blossoms open and keep plants covered with mixture throughout the season. Second year spray before blossoming with D and again soon after picking; or mow and burn over after picking. Do not take more than two crops off. Plow down at once after second crop. For white grubs dig out as soon as injury is noticed. Do not plant on land broken up from old meadow or pasture for at least three years after breaking. Mowing, burning over and plowing down just after the second crop is a great aid against pests.			
<b>BEAN.</b> —Anthracnose and bacteriosis.	Get seeds from pods showing no signs of disease. Do not work among the plants if they are wet with rain or dew. Spraying scarcely pays as a rule.			
<b>CABBAGE AND TURNIP.</b> Flea-beetles, caterpillars, root maggots, aphids.	For flea-beetle on turnip sow after June 21st, or dust plants as soon as they appear above ground with Paris green, or spray with Bordeaux and a poison and a sticker. Repeat in two days. For caterpillars dust with Paris green until heads begin to form on cabbage and cauliflower, then spray with fresh pyrethrum, 1 ounce to 1 gallon water. For root maggots use medium thick tarred felt-paper discs, putting on as soon as plants are set out, or set out plants after July 1st. For aphids use kerosene emulsion as soon as they appear, or 1 lb. common laundry soap dissolved in 4 gallons water. Hit them hard.			
<b>POTATO.</b> Tip burn, early blight, late blight, scab, Colorado beetle, flea-beetle.	Keep foliage covered with D from time plants are about 5 inches high. Take special precautions to see this is well done if weather is at all damp after about 15th July, as late blight begins about this time. Add a poison to each application when necessary. For scab, soak tubers before cutting 2 hours in 1 pint of formalin to 30 gallons of water. Spread out on grass to dry. Wash all boxes, bags or other vessels to be used in same liquid. Plant none but perfectly healthy tubers.			
<b>TOMATO.</b> —Leaf blight, black rot, flea-beetle.	Spray plants in seed-bed with D. Keep foliage in field covered with D until danger of straining fruit. Add a poison if necessary for flea-beetles.			
<b>ASPARAGUS.</b> Rust, beetles.	For rust, let no plants, not even wild ones, mature during cutting season. Late in fall when growth is about over, cut and burn old plants. For beetles, let poultry run in the plantation. After cutting season is over spray with arsenate of lead; repeat in two weeks. May add sticker and a little lime.			

Note.—A1—Concentrated lime-sulphur, strength 1:030 specific gravity (1:035 for San Jose Scale) (1:030=1 gal. commercial to 9 gals. water and 1:035=1 gal. commercial to 7 gals. water.)  
 A2—Concentrated lime-sulphur, strength 1:010 or 1:009 specific gravity=commercial 1 gal. to from 30 to 35 gals. water.  
 A3—Concentrated lime-sulphur, strength 1:009 or 1:008 specific gravity=commercial 1 gal. to from 33 to 40 gals. water.  
 B—The old home-boiled lime-sulphur, 20.15.40 formula. C—Self-boiled lime-sulphur. D—Bordeaux mixture, 4.4.40 formula.