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# Home Fruit Spray Schedule

## Pest Fact Sheet

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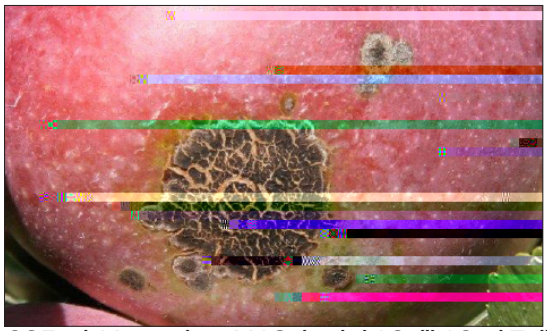
### Introduction

Disease and insect control measures suggested in this guide are recommended only for home fruit production. When this program is followed, trees and small fruit plants should be reasonably free from insect and disease injury. is spray schedule is developed for the average conditions existing in New Hampshire.

e weather is the greatest variable related to pest control. Warm, wet weather in spring favors the development of apple scab, cedar apple rust, 8 (o)12 b. 11hele ruha htmifo(u)3 (h)4 .085 Tm085 Tm0 .085 <hHang (en U13 (e in)19 (j)10 p)7 (l)23ie g



Apple scab. Credit: A. T. Eaton.

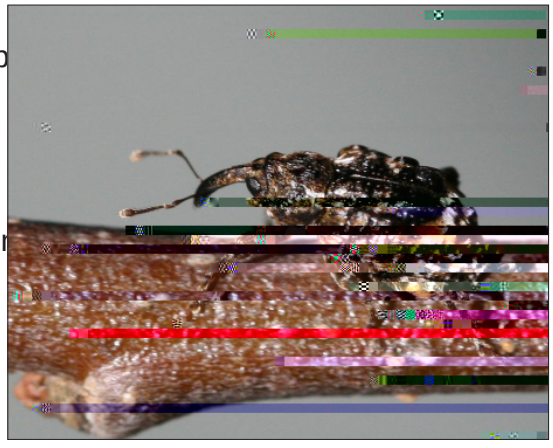
infection. Dry, hot weather is o en more favorable for insect population buildup, so it may be more di cult to control insects during hot, dry weather. If surface blemishes on fruit do not bother you, you may follow a less intensive schedule. One such minimal spray schedule for apples is indicated in the chart.

e weather is the greatest variable related to pest control. Warm, wet weather in the spring favors the development of apple scab, cedar apple rust, re blight, mildew, rots, and many other diseases.

### General Purpose Spray Mixtures

General purpose spray mixtures are useful for the control of common pathogens and insects that attack fruit except plum curculio, peach tree borers, and pathogens that cause black knot of plum, cedar app rust, re blight, and peach leaf curl. Some mixes are labeled for tree fruit only. Check the label before you buy. e ingredients usually include one or more insecticides (such as carbaryl, permethrin, malathion) and one or more fungicides, usually captan, sometimes sulfur. Captan is generally considered a good choice for managemer of many fruit diseases. Sulfur is particularly good for powdery mildew, and is somewhat e ective for scab, rust, and brown rot.

Reliance on a mixture simpli es spraying fruit. Since all pests do not always threaten your crop in combination, use of the mixture results in some unnecessary spraying. e choice is yours — total reliance on general-purpose mixtures is simple and convenient but can be



Adult plum curculio, a major, serious tree fruit pest. Credit: A. T. Eaton.

wasteful at times, may harm non-target species and may increase the risk of pests and pathogens developing resistance to pesticides. Combining insecticides and fungicides in your sprayer tank as needed is more complex, but uses only what is required, when it is required.

Garden supply stores sell general purpose mixtures under a variety of names.  e ingredient pesticides can also be purchased separately and mixed when used. Refer to the labels for precautions before mixing any pesticides.

## Supplemental Spray Materials

 e proper use of supplementary spray materials can increase the yield of usable fruit*Bacillus thuringiensis* (Biobit, Dipel, Javelin, Sok-BT, B.t.) is e ective on foliage-feeding caterpillars. Sevin is registered for all of the listed crops. It is e ective for many pests, including apple and blueberry maggots, Japanese beetles, spittlebugs and tent caterpillars. Some backyard products contain permethrin. It can be somewhat e ective on plum curculio (a major, serious tree fruit pest), but not in the low concentrations available to backyard growers. To really control plum curculio, adding a supplemental spray (like carbaryl) is necessaryatrri7D

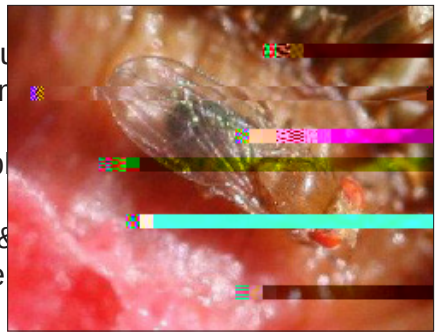
Brown Rot of Cherry, Peach and Plum  e fungus that causes this disease overwinters on mummi ed fruits hanging on the tree or on the ground. Clean up fallen fruit before, during, and a er harvest. Remove and destroy all unharvested fruits and mummi ed fruits from trees a er harvest. Captan, propiconazole,  chlorothalonil, or myclobutanil (Immunox – Do not use Immunox Plus, it is not labeled for use on fruit) are registered.

Cedar Apple Rust  e fungus causing this disease overwinters on red cedar trees or junipers growing nearby.  ese trees should be removed, where practical, or remove galls in late winter to reduce infection on apple leaves and fruit. Rust can be controlled by applying copper soap (copper octanoate) prior to pink bud, or myclobutanil from half-inch green through pink.

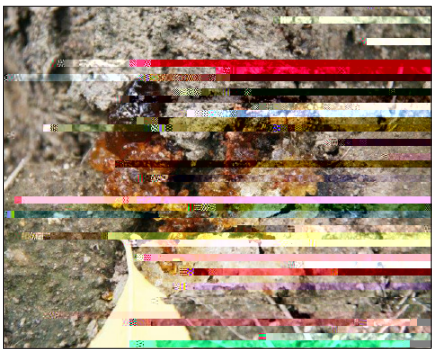
Cherry Leaf Spot  e fungus causing this disease overwinters in infected leaves from the previous season. Raking fallen leaves in the autumn is essential for control. Myclobutanil and Captan are e ective for control.

Fire Blight on Apple and Pear  is disease primarily a ects spurs and twigs. It is controlled by cutting out and burning blighted branches as soon as they are seen. Cut at least 6-12 inches below any sign or

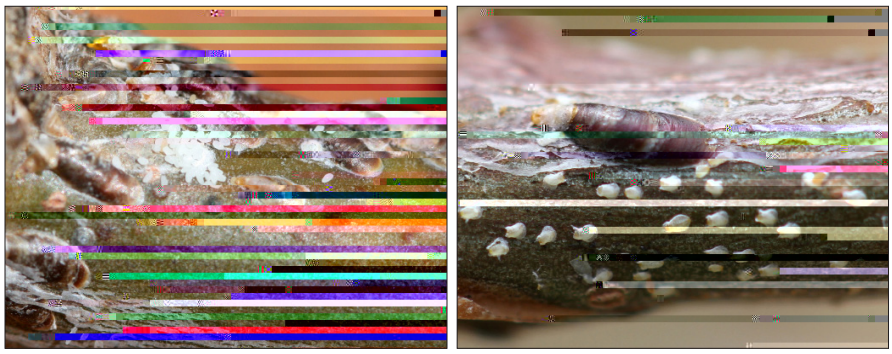
Spotted Wing Drosophila (Drosophila suzukii)  Spotted wing drosophila attacks ripe raspberries and blackberries, blueberries, plu currants, some grapes (especially dark varieties with thin skins), sor peaches and August-October maturing strawberries. Late-maturing varieties are the most heavily hit. Early maturing varieties of bramb and blueberries may escape signi cant attack. Attacked fruit turn sour and quickly rot.  e most severe problems are in Rockingham & Hillsborough counties. Coös, Gra on and Carroll counties have the lowest problems. E ective insecticides include Entrust, Malathion (high rate), Exirel and others.



Adult spotted wing drosophila adult. Credit: A. T. Eaton.



Peach tree borer evidence: gum mixed with “sawdust”. Credit: A. T. Eaton.



Scales: Eggs exposed from under adult scale cover (top) and nymphs next to a shell (bottom). Credits: W. Cranshaw, CSU, Bugwood.org.

Table 2: Spray Schedule for Apple Trees

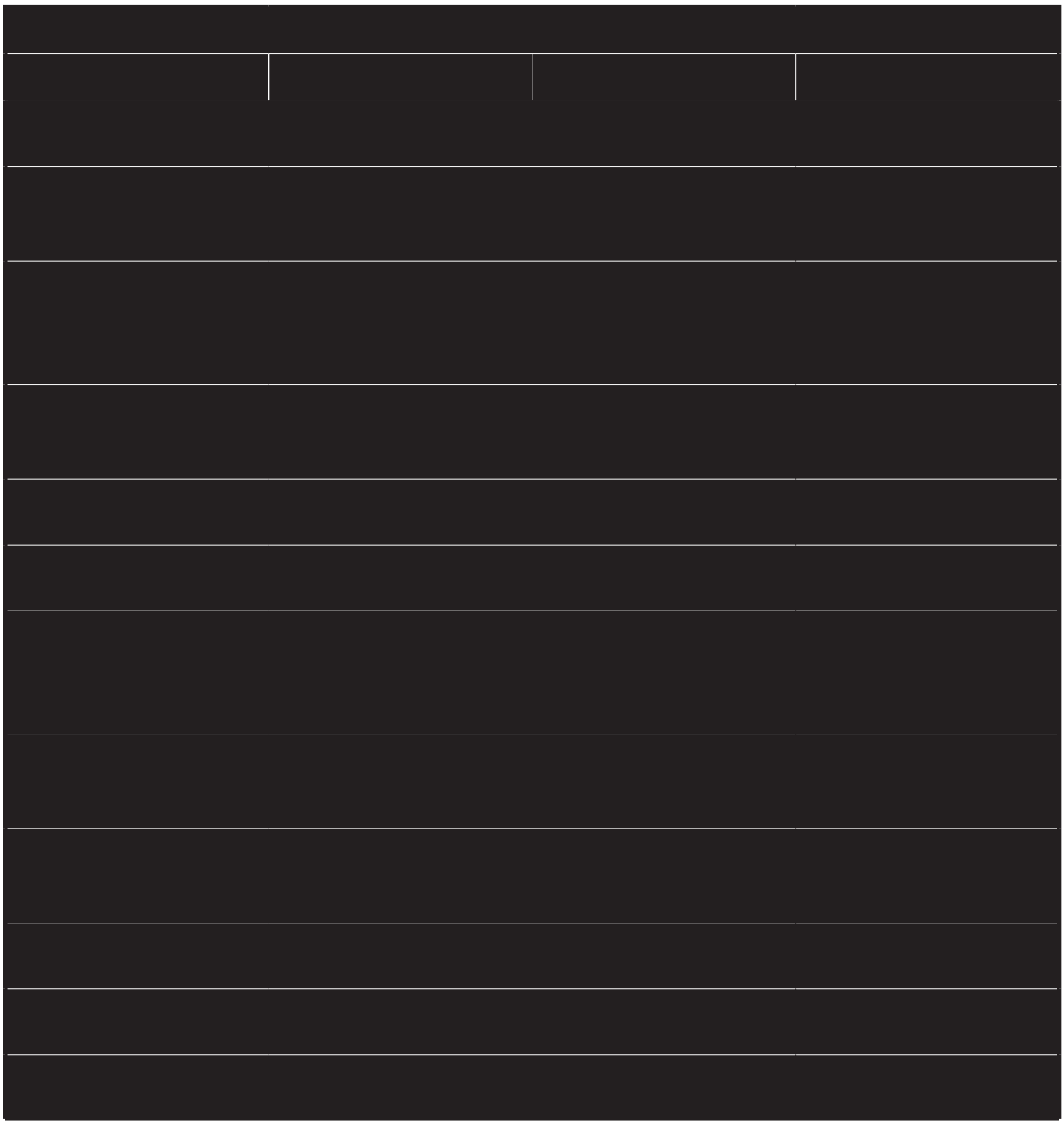


Table 3: Spray Schedule for Cherries, Peach, and Plum Treeslossom budsID9Artq 1 w 1qS198q /G1 k /G44Ds5.6ur1676511C

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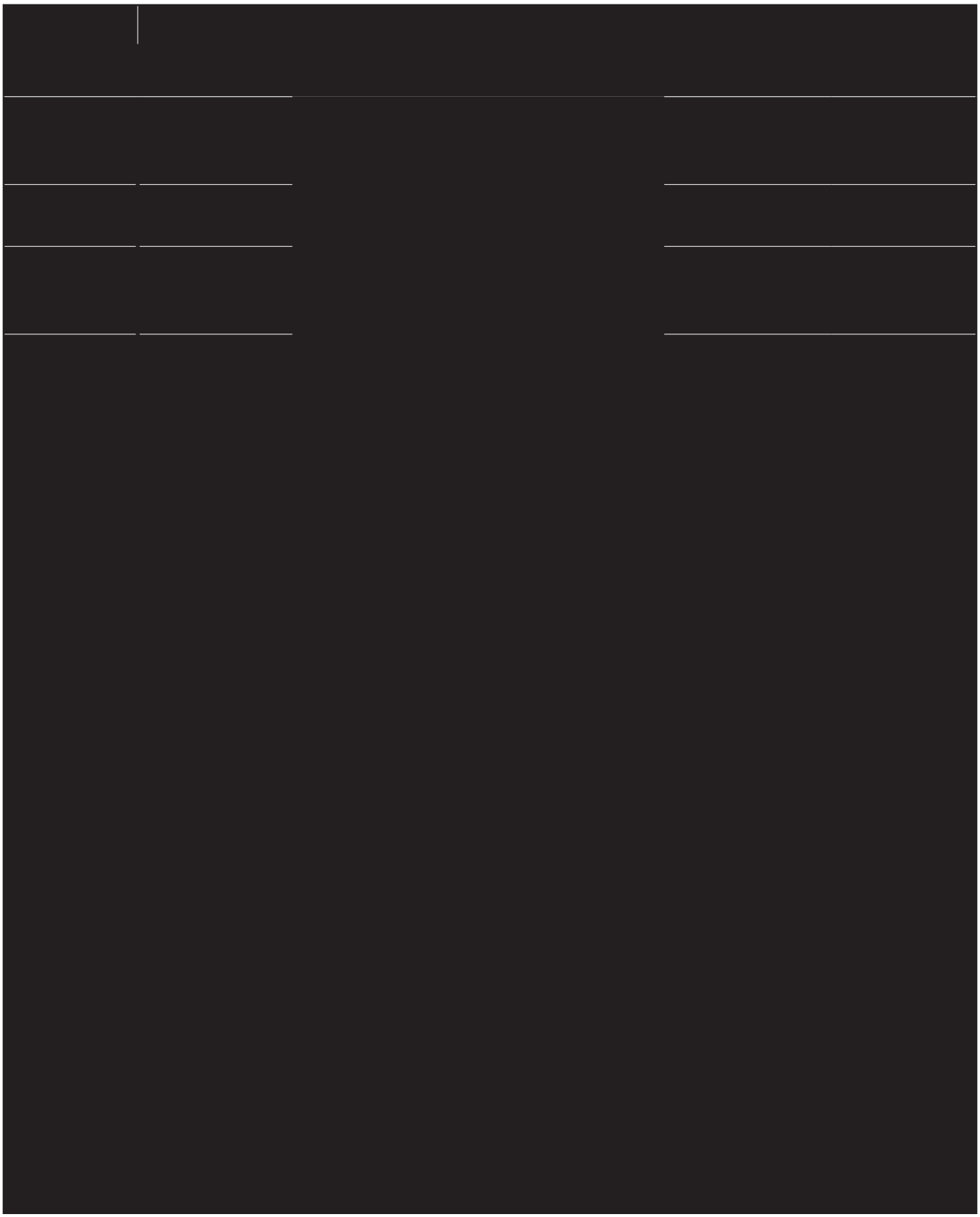
Table 4: Spray Schedule for Pears, Strawberries, and Grapes



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