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Organization of this Guide

The first chapters of this guide contain introductory information about two different, but not mutually exclusive, management approaches – integrated pest management (IPM) and organic. This is followed by general information on pesticide safety, sprayer use and calibration, and descriptions of the different materials used for pest management in tree fruits. Chapters are in the following order:

Integrated Pest Management
Organic Management
Safe and Legal Use of Pesticides
Effective Spraying
Characteristics of Crop Protectants

Following this are sections on managing diseases, insects and mites, weeds, and nutrient management and fertilizer recommendations for apple orchards.

Next, for each crop, is a section on *General Pest Management Considerations* with numbered comments on biology, cultural notes, monitoring, and pesticide use for each pest, in the following order:

CROP

Diseases

Disease 1

- Biology & Timing
- Monitoring & Forecasting
- Biological & Cultural Management
- Pesticide Application Notes
- Pesticide Resistance

Disease 2, etc.

Insects and Mites

Insect 1, Etc.

Crop Spray Table

Within each group (Diseases, Insects and Mites) pest are discussed in alphabetical order.

This section is followed by a Pesticide Spray Table, which lists specific products for the control of each disease, insect and mite pest of this crop, giving products (alphabetically by trade name), rates, re-entry and pre-harvest intervals, and comments keyed to specific sections of the written notes in the preceding *General Pest Management Considerations*. For each phenological growth and management stage of the crop, pests are addressed in the order of diseases followed by insect and mite pests. Within each pest group, individual pests are listed in alphabetical order. In some cases not every brand name pesticide product with the same active ingredient on the market is listed, and instead representative product(s) for that active ingredient are listed with a note that other products with the same active ingredient are available.

Lastly is an appendix of tables showing pesticide active ingredient common names, preharvest intervals, pesticide product brand names, EPA registration numbers, Restricted Entry Intervals, Personal Protective Equipment guidelines, and spray mixture compatibility suggestions for the materials included in this publication. This is followed by a list of other fruit reference publications, and directories of diagnostic services, Extension faculty and staff in each New England state.

The last page provides a key to the abbreviations and footnotes used in this publication.