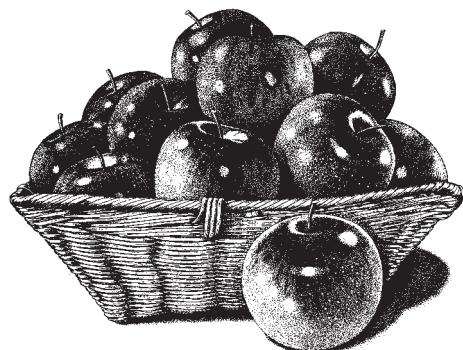
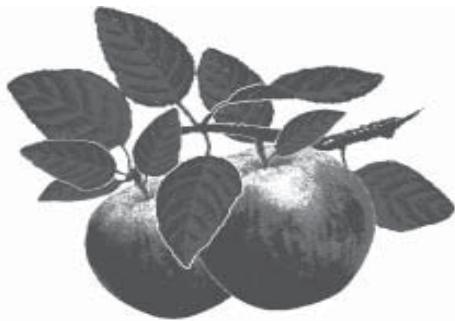


2003 – 2004 NEW ENGLAND APPLE PEST MANAGEMENT GUIDE



CONTENTS

Part I

Pest Biology, Monitoring, and Management

Integrated Pest Management (IPM)	2
Apple Pest Management Calendar (Table 1)	4–5
Apple Pest Chronology for Southern New England	6
Apple Scab Biology and Epidemiology (Tables 2, 3; Chart 1)	7–11
Scab Management Strategies (Charts 2,3)	12–17
Scab-Resistant Cultivars (Table 4)	18
Other Apple Diseases (Tables 5, 6, 7a, 7b).....	19–27
Insect and Mite Pests	28–46
Apple IPM Resources.....	47
Biological Control Agents (Table 8)	48–49
Nematodes	50–51
Orchard Vole Management.....	52–54
Deer	55–56
Rabbits	56
Trunk Painting for Bark Protection	56
Disease, Insect and Mite pest photographs	57–68

Part II

Pesticide Safety, Selection, and Application

Pesticide Safety	69
Acute Toxicity of Pesticides (Table 9)	70–72
Label Compliance	72
Protecting Water Quality	72
Restricted Entry Interval, Pesticide Residue Tolerance, & Preharvest Interval (Table 10)	72–75
Worker Protection Regulations	76–77
Pesticide Storage and Disposal	78
Winter Pesticide Storage (Table 11)	79
Abbreviations key	80
Notes on Fungicides and Bactericides	80–86
Activity Spectrum: Apple Fungicides (Table 12)	85
Characteristics of Scab Fungicides (Table 13) ..	87
Fungicide Options for Flyspeck/Sooty Blotch (Table 14)	88
Notes on Insecticides and Miticides	89–95
Activity Spectrum of Apple Insecticides (Table 15)	96

Poisoning Hazard to Honey Bees (Table 16) ..	97
--	----

Pesticide Toxicity to Predators (Table 17).....	98
---	----

Notes on Rodenticides	99
-----------------------------	----

Fruit Finish and Phytotoxicity (Table 18)	100–101
--	---------

Spray Mixture Incompatibility (Table 19)	102–103
---	---------

Sprayer Calibration	104–109
---------------------------	---------

Tree Row Volume and Sprayer Setup	102–104
--	---------

Measuring Sprayer Output	106
--------------------------------	-----

Adjustments for Different Blocks	107–108
--	---------

Spray Strategies	108–109
------------------------	---------

Common Problems in Spray Programs	110–113
---	---------

Groundcover Management and Herbicides ...	114–124
---	---------

Groundcover Management	114–115
------------------------------	---------

Herbicides and their use	116–117
--------------------------------	---------

Notes on Herbicides	119–121
---------------------------	---------

Calibration for Herbicide Sprayer	122
---	-----

Herbicide Selection (Tables 20, 21, 22)	123–126
---	---------

Protection for Non-Bearing Trees	127
--	-----

Measurement Conversions	128
-------------------------------	-----

Pesticide Options for Bearing Trees	128–144
---	---------

Part III

Growth Regulator, Thinning, Calcium, and Postharvest Treatments

Chemical Thinning (Tables 23, 24, 25, 26)....	145–149
---	---------

Fruit Elongation for Delicious	150
--------------------------------------	-----

Increasing Repeat Bloom After Thinning	150
--	-----

Reduction in Russetting of Golden Delicious	151
---	-----

Ethepron to Control Vegetative Growth	151
---	-----

Apogee to Control Vegetative Growth	151–152
---	---------

Calcium Application (Tables 27, 28)	152–155
---	---------

Chemical Control of Water Sprouts,	
------------------------------------	--

Root Suckers	155
--------------------	-----

Ethepron to Promote Red Color and Ripening	155
---	-----

Preharvest Drop Control	156
-------------------------------	-----

Storage Scald Prevention (Table 29)	157–159
---	---------

Use of 1-MCP to Slow Ripening in Storage	159
--	-----

INDEX	inside back cover
-------------	-------------------

EMERGENCY telephone numbers	back cover
--	------------