



Pesticide Health Care

Resource Information



Pesticide Health Care

A Resource Information Guide

EPA Region 10

Prepared by:

Glenn Shannon
EPA Region 10
Pesticides and Toxic Substance Branch

Acknowledgements

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This document has been prepared to aid the pesticide health care physician, health care clinic or other medical personal that might be treating pesticide related illnesses. The information in this book is by no means meant to be a substitute for professional medical help. At times trade names have been used for certain pesticides only to aid you in using information found in the book when treating pesticide illnesses.

Introduction

This book was originally prepared by Alice Larson, Ph.D and presented by Yakima Valley Farmworkers Clinic in cooperation with Migrant Health Clinics in Idaho, Oregon and Washington and St. Elizabeth Medical Center, Yakima, Washington. Original funding was provided by The Public Health Service, U.S. Department of Health and Human Services, Region X, Seattle, Washington.

This book is designed to be used in conjunction with **"Recognition and Management of Pesticide Poisonings"** fourth edition, author Donald P. Morgan, M.D., Ph.D.

The resource information contained in this book is formatted to assist health care providers in recognizing a patients illness symptoms and correctly diagnosis them as pesticide related incidents. Below is a brief summary of the type of information found in each of the chapters.

How to use this Book

Chapter 1.

This chapter is a quick reference to telephone numbers of state poison control centers, cooperative extension services, chemical manufactures, federal and state agencies that deal with pesticides, and their use, government agencies and private organizations interested in pesticide regulations and other concerns for agricultural workers. These organizations can be contacted for information on enforcement of laws and regulations; investigation of pesticide misuse, pesticide exposure of animals and humans, use recommendations, and private organizations concerned with the health of workers and the environment we live in.

Chapter 2.

Chapter two outlines the responsibilities of the above organizations, their mailing address, the current contact person for information and the organizations telephone number.

Chapter 3.

In Chapter 3 you will find the major crops grown in Pacific Northwest States. Listed under each crop heading are those pesticides recommended, by Idaho, Oregon and Washington Cooperative Extension Services, for control of insects, weeds or plant diseases pests on that crop. It is possible that additional pesticides may be used on the crop that are not listed in this chapter. When this happens one of the agencies or organization listed in Chapter 1 or 2 will be able to aid you in obtaining information about that pesticide.

Also listed in Chapter 3 are principle methods of application such as; soil, foliar, seed treater; that will aid you in identifying a pesticide. Listed will be the TRADE/common name and page reference number for quickly locating emergency information in **"Recognition and Management of Pesticide Poisonings"** fourth edition.

Chapter 4.

Chapter 4 will give additional information about those pesticides found in Chapter 3. You will find more information about a TRADE NAME/common name pesticides relative toxicity, how the chemical is usually applied and a to which crop group the chemical is registered by the EPA to be used. A reference page number will guide you to emergency medical information about the pesticide in the reference book **"Recognition and Management of Pesticide Poisonings"** fourth edition. Also listed are the manufacturers name, business and emergency telephone number for that particular pesticide.

Table of Contents

Chapter Number	Contents	Page
	INTRODUCTION	ii
	HOW TO USE THIS BOOK	ii
1	TELEPHONE DIRECTORY.	1
	In this chapter you will find telephone numbers for Poison Control Centers, County Extension Offices and chemical manufacturers. Federal and State agencies that regulate and/or investigate pesticide use. Health, environmental, worker safety, hospitals, medical laboratories and other public or private groups.	
2	RESOURCE ORGANIZATIONS.	7
	This chapter outlines the support that is available from the many federal, state and private resource organizations. These organizations can assist you in understanding pesticide toxicology, exposure symptoms, worker safety, crop use recommendations, pesticide use or misuse and provide other information that will aid you in your treatment of a pesticide related illness.	
3	PESTICIDES USED ON CROPS IN THE NORTHWEST	25
	When you ascertain the crop a patient has been working in you can turn to that crop and quickly substantiate a possible provoking pesticide. Under each crop heading you will find recommended chemicals used to control pests in that crop. Following the chemical TRADE NAME/common name is a notation that guides you to reference information found in the resource book Recognition and Management of Pesticide Poisonings , fourth edition.	
4	A GUIDE TO CHARACTERISTICS OF THE MAJOR PESTICIDES USED IN THE NORTHWEST	70
	This chapter provides information on specific pesticides, listed in chapter 3, including the chemicals Trade name, common name, exposure toxicity, application use, emergency treatment information and the pesticide manufacturers business and/or emergency telephone number. Information in this chapter will aid you in a proper diagnosis and treatment of a pesticide related illness.	
	INDEX	108

Chapter 1

TELEPHONE NUMBERS

The following organizations can be contacted for information concerning pesticide related health care. The first listed is the national emergency Chemtrec number followed by state Poison Control Centers. Additional help can be obtained through your local county extension office, chemical manufacturer, and various organizations as listed in Chapter 2. Feel free to call one of the numbers below, and if they can not help they can direct you to an organization that can.

1. POISON CONTROL CENTERS, NATIONAL

Chemtrec national toll free number 1 800 424 9300

National Pesticide Telecommunications Network 1 800 858 7378

POISON CONTROL CENTER, STATE

Idaho	208 378 2707	ID toll free 1 800 632 8000
Oregon	503 219 8968	OR toll free 1 800 452 7165
Washington	206 526 2121	WA toll free 1 800 732 6985
St. Alphonsus Hospital, Boise, ID	208 378 2707	ID toll free 1 800 632 8000
Sacred Heart Medical Center, Eugene, OR	503 686 6931	
Deaconess Medical Center, Spokane, WA	509 474 1077	
Toll free in Washington		1 800 572 5842
Toll free outside Washington		1 800 541 5624
Mary Bridge Childrens Health Center, Tacoma, WA	206 594 1414	WA toll free 1 800 542 6391
Yakima Valley Memorial Hospital, Yakima, WA	509 248 4400	WA toll free 1 800 572 9176

The Cooperative Extension Service is an excellent source for information on pesticide use in your area. Following are the location and phone number for the county extension office nearest you. Your county extension agent will be glad to answer your questions about a particular pesticide use, the crops or target pests that it is registered to control and other information that will aid you in treating pesticide related illnesses.

IDAHO COUNTY EXTENSION OFFICES

COUNTY	CITY	PHONE	COUNTY	CITY	PHONE
Ada	Boise	208 377 2107	Gem	Emmett	208 365 6363
Adams	Council	208 253 4279	Gooding	Gooding	208 934 4401
Bannock	Pocatello	208 236 7310	Idaho	Grangeville	208 983 2390
Bear Lake	Paris	208 945 2266	Jefferson	Rigby	208 745 6685
Benewash	St. Maries	208 245 2422	Jerome	Jerome	208 324 8811
Bingham	Blackfoot	208 785 5005	Kootney	Coeur d'Alene	208 667 6426
Blaine	Hailey	208 788 3451	Latah	Moscow	208 882 8580
Bonner	Sand Point	208 263 8511	Lemhi	Salmon	208 756 2824
Bonneville	Idaho Falls	208 529 1390	Lewis	Nezperce	208 937 3211
Boundry	Bonnors Ferry	208 267 3235	Lincoln	Shoshone	208 886 2406
Butte	Arco	208 527 8587	Madison	Rexburg	208 356 3191
Camas	Fairfield	208 764 2230	Minidoka	Rupert	208 436 9331
Canyon	Caldwell	208 459 1654	Nez Perce	Lewiston	208 799 3096
Caribou	Soda Springs	208 547 3205	Oneida	Malad	208 766 2243
Cassa	Burley	208 678 9461	Owyhee	Marsing	208 896 4104
Clark	Dubois	208 374 5405	Payette	Payette	208 624 9397
Clearwater	Orofino	208 476 4434	Power	American Falls	208 226 2077
Custer	Challis	208 879 2344	Tieton	Driggs	208 354 2961
Elmore	Mountain Home	208 587 4826	Twin Falls	Twin Falls	208 734 3300
Franklin	Preston	208 852 1097	Valley	Donnelly	08 325 8566

Fremont	St. Anthony	208 624 3102	Washington	Weiser	208 549 0415
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OREGON COUNTY EXTENSION OFFICES

COUNTY	CITY	PHONE	COUNTY	CITY	PHONE
Baker	Baker	503 523 6418	Lake	Lakeview	503 947 2279
Benton	Corvallis	503 757 6750	Lane	Eugene	503 687 4243
Clackamas	Oregon City	503 655 8631	Lincoln	Newport	503 265 6611
Clatsop	Astoria	503 325 8573	Linn	Albany	503 967 3871
Columbia	St Helens	503 397 3462	Malheur	Ontario	503 881 1417
Coose	Coquille	503 396 3121	Marion	Salem	503 588 5301
Crook	Prineville	503 447 6228	Morrow	Heppner	503 676 9642
Curry	Gold Beach	503 247 7011	Multnomah	Portland	503 254 1500
Dechutes	Redmond	503 548 6088	Polk	Dallis	503 623 8395
Douglas	Roseburg	503 672 4461	Sherman	Moro	503 565 3230
Gilliam	Condon	503 384 2271	Tillamook	Tillamook	503 842 3433
Grant	Canyon City	503 575 1911	Umatilla	Pendleton	503 276 7111
Harney	Burns	503 573 2506	Umatilla	Hermiston	503 567 8321
Hood River	Hood River	503 386 3343	Umatilla	Miltonfreewater	503 938 5597
Jackson	Medford	503 776 7371	Union	La Grand	503 963 1010
Jefferson	Madris	503 475 3808	Wallowa	Enterprise	503 426 3143
Wasco	Warm Springs	503 553 1161	Wasco	The Dalles	503 296 5494
Josephene	Grants Pass	503 476 6613	Washington	Hillsboro	503 681 7007
Klamath	Klamath Falls	503 883 7131	Wheeler	Fossil	503 763 4115
			Yamhill	McMinnville	503 472 9371

WASHINGTON COUNTY EXTENSION OFFICES

COUNTY	CITY	PHONE	COUNTY	CITY	PHONE
Adams	Ritzville	509 659 0090	Klickitat	Goldendale	509 773 5817
Asotin	Asotin	509 243 4118	Lewis	Chehalis	206 748 9121
Benton	Prosser	509 786 5609	Lincoln	Davenport	509 725 4171
Chelan	Wenatchee	509 664 5540	Mason	Shelton	206 427 9670
Clallam	Pt Angeles	206 452 7831	Okanogan	Okanogan	509 422 3670
Clark	Vancouver	206 463 8411	Pacific	South Bend	206 875 9331
Columbia	Dayton	509 382 4741	Pend Oreille	Newport	206 447 3325
Cowlitz	Kelso	206 577 3041	Pierce	Tacoma	206 591 7180
Douglas	Waterville	509 745 8531	San Juan	Friday Harbor	206 378 4414
Ferry	Republic	509 775 3161	Skagit	Mt. Vernon	206 336 9322
Franklin	Pasco	509 545 3511	Skamania	Stevenson	206 427 5141
Garfield	Pomeroy	509 843 3701	Snohomish	Everett	206 338 2400
Grant	Ephrata	509 754 2011	Spokane	Spokane	509 456 3651
Gray Harbor	Montesano	206 249 4332	Stevens	Colville	509 684 2588
Island	Coupeville	206 679 7327	Thurston	Olympia	206 786 5445
Jefferson	Pt Townsend	206 385 3581	Wahkiakum	Cathlamet	206 795 3278
King	Seattle	206 679 7327	Walla Walla	Walla Walla	509 527 3261
Kitsap	Pt Orchard	206 876 7157	Whatcom	Bellingham	206 676 6736
Kittitas	Ellensburg	509 962 6811	Whitman	Colfax	509 379 3401
			Yakima	Yakima	509 575 4242

Below you will find a list of chemical companies that manufacture the pesticides listed in Chapter 3, Pesticides Used on Northwest Crops, and Chapter 4, Major Pesticides Used in the Northwest. Information about a particular pesticide can be obtained by contacting the manufacturer at its business telephone number during normal working hours. Emergency information about the product can be obtained 24 hours a day by dialing the emergency telephone number.

COMPANY	BUSINESS	EMERGENCY
Abott Laboratories	312 934 0201	312 937 6100
AgBioChem Inc.	415 254 0789	415 254 0789
American Cyanamid Company	201 831 2000	
BASF Corporation	201 316 3000	201 316 3000
Ciba Geigy Corporation	919 292 7100	914 478 3131
Drexel Chemical Company	901 774 4370	
Dow Chemical Company	517 636 1000	517 636 4400
DuPont Chemical Company	800 441 7515	800 441 3637
Elanco Products Company	317 276 2000	317 276 2000
FMC Corporation	215 299 6000	716 735 3765
Helena Chemical Company	901 761 0050	901 761 0050
Hoechst-Roussel Agri-Vet	201 231 2000	210 231 2244
ICI America Inc.	302 575 3000	800 456 3669
C.H. Lilly Company	503 256 4600	
Loveland Industries Inc.	303 356 8920	
Merk & Company	201 574 4000	
Mobay Chemical Corporation	816 242 2000	816 242 2582
Monsanto Chemical Company	314 694 1000	314 694 1000
MSD Agvet, Merck & Co.	201 855 3800	215 661 7300
Nor-Am Chemical Company	302 575 2000	800 424 9300
PBI Gordon	816 421 4070	913 342 8783
Pennwalt Corporation	409 779 0060	409 846 2993
Rohm and Hass Company	215 592 3000	215 592 3000
Rhone-Poulenc Incorporated	919 549 2000	800 334 7577
Sandoz Crop Protection	321 699 1616	321 699 1616
SDS Biotech K.K.	Painesville, Ohio	
Shell Chemical Company	713 473 9461	713 473 9461
Sierra Chemical Company	314 275 7561	
Stoller Chemical Company	713 461 2910	731 466 1975
Union Carbide Company	304 744 3487	212 551 4785
Uniroyal Chemical Company	203 537 2000	203 723 3670
United Agri-products Inc.	303 356 4400	303 356 4400
Valent USA Corporation	209 224 2513	415 233 3737
Velsicol Chemical Company	312 698 9700	800 621 3254
Wilbur Ellis Company	415 772 4000	415 772 4000

2. PRIVATE AND HOSPITAL LABORATORIES

IDAHO

Mercy Medical Center Nampa, ID	(208) 467-1171
Treasure Valley Laboratory, Inc., Boise, ID	(208) 376-8585
Magic Valley Regional Medical Center, Twin Falls, ID	(208) 737-2000
Eastern Idaho Pathologist Laboratory, Pocatello ID,	(208) 232 6740
Physicians Laboratory, Twin Falls ID,	(208) 733 4887
Pathologist Regional Laboratory, Lewiston ID,	(208) 746 0516

OREGON

Metropolitan Hospitals Laboratory, Inc., Portland, OR	(503) 280-3318
Medical Central Laboratory, Portland, OR	(503) 284-9491
Capitol Medical Laboratory, Salem, OR	(503) 364-6821
Oregon Medical Laboratory, Eugene, OR	(503) 687 2134

WASHINGTON

University of Washington Hospitals, Seattle, WA	(206) 223-3311
Harborview Medical Center:	(206) 223-3451
University Hospital:	(206) 543-3666
St. Elizabeth Medical Center, Yakima, WA	(509) 575-5035
Sacred Heart Hospital, Spokane, WA	(509) 455-3065

3. ENFORCEMENT AGENCIES (PESTICIDES)

Enforcement/Licensing

Environmental Protection Agency Region X, Seattle, WA	(206) 442 8574
Michael Watson, Toxicologist	(206) 442 1070
Environmental Protection Agency Region X, Boise, ID	(208) 334 1450
Environmental Protection Agency Region X, Portland, OR	(503) 326 3250
Environmental Protection Agency Region X, Olympia, WA	(206) 753 9437
Division of Plant Industries, Idaho Department of Agriculture, Boise, ID	(208) 334-3243
Plant Division, Oregon Department of Agriculture, Salem, OR	(503) 378-3776
Washington Department of Agriculture, Pesticide Management, Olympia, WA	(206) 753-5064
Washington Department of Agriculture, Pesticide Management, Yakima, WA	(509) 575-2746

4. ENVIRONMENTAL HAZARDS

Waste/Spills/Accidents

Chemtrec-CMA, Washington, D.C.,	Toll free:(800) 424-9300; or	(202) 887-1255
Idaho Department of Health and Welfare, Boise, ID		(208) 334 5839
Oregon Dept. of Environmental Quality, Portland, OR	Toll free OR: (800) 452-7813	(503) 229 5102
Washington Department of Ecology, Olympia, WA		(206) 459 6299
Washington Department of Ecology, Redmond, WA		(206) 885-1900
Washington Department of Ecology, Yakima, WA		(509) 575-2490
Washington Department of Ecology, Olympia, WA		(206) 753-2353
Washington Department of Ecology, Spokane, WA		(509) 456-2926

5. UNIVERSITY EXTENSION SERVICES

Information on Chemicals/Training

University of Washington, Dept. of Environmental Health, Seattle, WA	(206) 545 3785
Cooperative Extension Service, University of Idaho, Moscow, ID	(208) 885 7541
Cooperative Extension Service, Oregon State University, Corvallis, OR	(503) 737 2907
Department of Agricultural Chemistry, Oregon State University, Corvallis, OR	(503) 737 2907
Washington State University, Cooperative Extension Service, Pullman, WA	(509) 335 2511
Puyallup Research Center, Cooperative Extension Service, Puyallup, WA	(206) 840 4577

6. HEALTH
Effects of Pesticides on Humans

National Institute of Occupational Safety and Health (NIOSH), Region X, Denver, CO	(303) 844 6166
Division of Health, Idaho Department of Health and Welfare, Boise, ID	(208) 334 5936
Office of Health Status Monitoring, Oregon Health Division, Portland, OR	(503) 229 5821
Health Services Division, Washington Department of Health, Olympia, WA	(206) 586 4501
Washington Department of Social and Health Services Laboratory, Wenatchee, WA	(509) 662 0484
Pesticide Incident Reporting (Washington State)	1 (800) 356 2323

7. STATE COORDINATING GROUP
Emergency Response/Advice on Pesticides

Pesticide Analytical Response Center (PARC), Salem, OR	(503) 378 3793
Oregon Emergency Response System (OERS), Portland, OR	Toll free OR:(800) 452-0311 (503) 373 7457
Washington State Pesticide Advisory Board, Olympia, WA	(206) 753 5062
Pesticide Incident Reporting, and Tracking Panel (PIRT), WA	(206) 586 4501

8. STATE PESTICIDE LABORATORY
Analytical Services State:

Idaho Department of Health and Welfare, Boise, ID	(208) 334-2233
Oregon Department of Agriculture, Salem, OR	(503) 378-3793
Agric. Chemical and Hop Laboratory Wash. Dept. of Agric., Yakima, WA	(509) 575-2759
Pesticides and Chemical Laboratory, Wenatchee, WA	(509) 662-0484

9. WORKER HEALTH AND SAFETY
Work Place Enforcement

Occupational Safety and Health Administration (OSHA), Seattle, WA	(206) 442-5930
Occupational Medicine Clinic, Harborview Medical Center, Seattle, WA	(206) 223-3005
Occupational Safety and Health Administration (OSHA), Boise, ID	(208) 334-1867
Oregon Occupational Safety and Health, Salem OR	(503) 378 3272
Washington Department of Labor and Industries, Olympia, WA	(206) 753 4473
Division of Industrial Safety and Health, WISHA, Seattle, WA	(206) 281 5470
Division of Industrial Safety and Health, WISHA, Spokane, WA	(509) 456 5003
Technical Services Section, WISHA, Olympia, WA	(206) 753-6381

10. INSPECTION AGENCY
Inspects Food and Dairy Products for Pesticide Residues

Bureau of Dairying, Idaho Department of Agriculture, Boise, ID	(208) 334-2149
Food and Drug Administration (FDA), Bothel, WA	(206) 486 8788
Food and Drug Administration (FDA), Boise, ID	(208) 334-1319
Food and Drug Administration (FDA), Pocatello, ID	(208) 236-6858
Food and Drug Administration (FDA), Blaine, WA	(206) 332 4032
Food and Drug Administration (FDA), Spokane, WA	(509) 456-4698
Food and Drug Administration (FDA), Yakima, WA	(509) 575-5925
Food and Dairy Division, Oregon Department of Agriculture, Salem, OR	(503) 378-3790
Dairy and Food Division, Washington Department of Agriculture, Olympia, WA	(206) 753-5043

11. FORESTRY
Chemicals on Forestlands

U.S. Forest Service, U.S. Department of Agriculture, Portland, OR	(503) 326 2727
U.S. Forest Service, U.S. Department of Agriculture, Missoula, MT	(406) 329-3277
Idaho Department of Lands, Coeur D'Alene, ID	(208) 664-2171
Oregon Department of Forestry, Salem, OR	(503) 378-2554
Oregon Department of Forestry, Salem, OR	(503) 378-2537
Washington Department of Natural Resources, Olympia, WA	(206) 753-0671
Central Area Office, Chehalis WA	(206) 748-8616
South Puget Sound Area Office, Enumclaw, WA	(206) 825-1631
Northeast Area Office, Colville, WA	(509) 684-5201
Southeast Area office, Ellensburg, WA	(509) 925 6131
Northwest Area Office, Sedro Wolley, WA	(206) 856-0083
Southwest Area office, Castle Rock, WA	(206) 577-2025
Olympic Area Office, Forks, WA	(206) 374-6131

12. LEGAL SERVICES
Represents Field Workers Injured by Pesticides

Legal Services, Caldwell, ID	(208) 454-2591
Idaho Legal Aid, Twin Falls ID	(208) 734-7047
Oregon Legal Services Corporation, Hillsboro, OR	(503) 640-4770
Oregon Legal Services Corporation, Ontario, OR	(503) 889-3121
Oregon Legal Services Corporation, Pendleton, OR	(503) 276-6685
Oregon Legal Services Corporation, Woodburn, OR	(503) 981-5291
Evergreen Legal Services, Everett, WA	(206) 258-2681; toll free in WA 1 (800) 822-0225
Evergreen Legal Services, Granger, WA	(509) 837-4520; toll free in WA 1 (800) 572-9466

13. PEST MANAGEMENT PRACTICES
Pro Pesticide Use/Educates Public

Consulting Associates, Boise ID	(208) 342-5939
Oregonians for Food and Shelter, Salem, OR	(503) 370-8092
Washington Friends of Farms and Forests, Olympia, WA	(206) 524-4396

14. ALTERNATIVES TO PESTICIDES
Against Pesticide Misuse/Promotes Alternatives

National Coalition Against the Misuse of Pesticides (NCAMP)	(202) 543 5450
Northwest Coalition for Alternatives to Pesticides (NCAP), Eugene, OR	(503) 344-5044
Inland Regional Council, Moscow ID	(208) 882 9532
Headwaters NCAP, Grants Pass, OR	(503) 474-6034
SALUD, Phoenix OR	(503) 535 7164
Washington Toxic Coalition, Seattle, WA	(206) 632 1545
Inland Regional Council, Astin WA	

15. PESTICIDE HEALTH and SAFETY EDUCATION

Work Group on Pesticide Health and Safety, Vashon Island, WA	(206) 463-9000
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Chapter 2

RESOURCE ORGANIZATIONS TO CONTACT FOR ASSISTANCE

This chapter contains a listing of national, state and private resources that can be contacted for information or help related to pesticide illnesses.

1.	Poison Control Center:	advice on poisonings	pg 8
2.	Private and Hospital Laboratories:	cholinesterase testing	pg 9
3.	Enforcement:	enforcement/licensing of pesticides	pg 10
4.	Environmental Hazards:	waste/spills/accidents	pg 11
5.	University Extension Service:	research/training	pg 12
6.	Health Agencies:	public health investigation	pg 13
7.	State Coordinating Group:	public investigation	pg 14
8.	State Pesticide Laboratory:	analytical service	pg 15
9.	Worker Health and Safety:	workplace enforcement	pg 16
10.	Inspection Agencies:	residue tolerance food	pg 18
11.	Forest Agencies:	public/private forest lands	pg 20
12.	Legal Services:	private legal representation	pg 21
13.	Pest Management:	private safe use/management	pg 22
14.	Alternatives to Pesticides:	private coalition	pg 23
15.	Pesticide Health and Safety Education:		pg 24

1. POISON CONTROL CENTER
Advice on Poisons/Poisonings

Chemical Transportation Emergency Center, Chemtrec, provides immediate advice for those at the scene of an emergency or toxic spill. This is the contact organization for emergency spill response teams throughout the country. Response teams are sponsored by the National Agricultural Chemicals Association and supported by member companies.

NATIONAL

Chemtrec-CMA
2501 M St., N.W.
Washington, DC 20037

(202) 887-1255 toll free: 1 (800) 424-9300

National pesticide Telecommunications Network is a toll-free 24 hour telephone number that provides emergency information about pesticide poisoning, toxicology, referrals for laboratory analysis, treatment and safety information, health and environmental effects and cleanup and disposal procedures.

National Pesticide Telecommunications Network
Texas Tech University Health Science Center
Department of Preventative Medicine and Community Health
Lubbock, TX 79430

1 (800) 858 7378

Poison Control Centers answer questions regarding any aspect of poisoning. Each state has a Poison Control Center network with toll free telephone numbers. Centers can help identify symptoms, advise treatment or will refer you to a proper source for answers regarding a specific pesticide poisoning.

IDAHO

Poison Control Center
St. Alphonsus Hospital
1055 N. Curtis Rd.
Boise, ID 83704

(208) 378-2707
toll free in Idaho: 1 (800) 632-8000

OREGON

Poison Control Center
Oregon Health Sciences University
3181 S.W. Sam Jackson Park Rd.
Portland, OR 97201

(503) 279-8968
toll free in Oregon: 1 (800) 452-7165

Emergency Department
Sacred Heart Hospital
1255 Hilyard
Eugene, OR 97401

(503) 686-6931

WASHINGTON

Poison Control Center
Childrens Hospital and Medical Center
4800 Sandpoint Way, N.E.
Seattle, WA 98105

(206) 526-2121
toll free in WA: 1 (800) 732-6985

Spokane Poison Control
Deaconess Medical Center
South 715 Cowley, Suite 132
Spokane, WA 99202

(509) 747-1077
toll free in WA: 1 (800) 572-5842
toll free outside WA: 1 (800) 541-5624

Poison Control Center
Mary Bridge Childrens Health Center
311 South K St.
Tacoma, WA 98405

(206) 594-1414
toll free in WA: 1 (800) 542-6319

Poison Control Center
Yakima Valley Memorial Hospital
2811 Tieton Dr.
Yakima, WA 98902

(509) 248-4400
toll free in WA: 1 (800) 572-9176

2. PRIVATE AND HOSPITAL LABORATORIES

Cholinesterase Testing

The following laboratories conduct tests to measure blood cholinesterase levels. Fees are charged for administering these tests. Some of the laboratories have courier routes to collect samples from medical treatment facilities throughout their service area. Samples can also be sent via mailing packets supplied by many of the laboratories. Contact each laboratory for instructions on how to prepare samples for shipment.

IDAHO

Eastern Idaho Pathologist Laboratory
Pocatello ID, (208) 232-6740
Contact: Kathy Spegal

Magic Valley Regional Medical Center
650 Addison Ave. West
Twin Falls, ID 83301 (208) 737-2000
Contact: Sue Stanley

Mercy Medical Center
1512 - 12th Avenue Road
Nampa, ID 83686 (208) 467-1171
Contact: Joe Tycz, Chemistry
Supervisor

Pathologist Regional Laboratory
Lewiston ID, (208) 746-0516
Contact: Lee Baker

Treasure Valley Laboratory, Inc.
5475 Bethel Street, 83706
P.O. Box 78, 83707
Boise, ID (208) 376-8585
Contact: Skip Pierce

Physicians Laboratory
Twin Falls ID, (208) 733-4887
Contact: John Sexton

OREGON

Capitol Medical Laboratory
3878 Beverly Avenue N.E., Suite 11
Salem, OR 97305 (503) 364-6821
Conduct a pseudo-cholinesterase test.

Medical Central Laboratory
220 Russell N.E.
Portland, OR 97212 (503) 284-9491
Contact: Client Service

Metropolitan Hospitals Laboratory, Inc.
235 N. Graham St.
Portland, OR 97227 (503) 280-3318
Contact: Marketing Representative

Oregon Medical Laboratory
722 East 11th Ave, 97401
P.O. Box 972, 97440
Eugene, OR 97401 (503) 687-2134
Contact: Marketing Department

WASHINGTON

Community Services
Department of Laboratory Medicine
University of Washington Hospitals
P.O. Box 15246
Seattle, WA 98115 (206) 223-3311

Tests actually conducted at:
Harborview Medical Center: (206)
223-3451

University Hospital: (206) 543-3666

St. Elizabeth Medical Center
110 S. 9th Avenue
Yakima, WA 98902 (509) 575-5035

Sacred Heart Hospital
West 101-8th
Spokane, WA 99201 (509) 455-3065
Conduct a pseudo-cholinesterase test.

3. ENFORCEMENT AGENCIES (PESTICIDES)
Enforcement/Licensing

REGIONAL

The Environmental Protection Agency (EPA) monitors enforcement of federal pesticide regulations through agreements with cooperating state agencies. The EPA pesticide section is responsible for enforcement of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and regulations. EPA Region 10 offices are located in Seattle Washington, with branch operations offices in Alaska, Idaho, Oregon and Washington.

FIFRA authorizes EPA to develop procedures for registration of pesticides and other activities relating to the testing, manufacturing, labeling and use of pesticides. This includes determining the toxicity of a chemical and its effect on the environment. FIFRA also sets standards for worker safety and establishes field reentry requirements.

Environmental Protection Agency Region X
1200 Sixth Avenue, AT-083
Seattle, WA 98101
Contact: Rick Parkin, Chief Pesticide Section
Michael Watson, Toxicologist

(206) 442 8574
(206) 442 1070

State Operation Offices:

Environmental Protection Agency Region X
Idaho Operations Office
422 W. Washington St.
Boise, ID 83702

Contact: Lynn McKee, Director

(208) 334 1450

Environmental Protection Agency Region X
Oregon Operations Office
811 S.W. 6th Avenue
Portland, OR 97204

Contact: Kenneth Brooks, Director

(503) 326 3250

Environmental Protection Agency Region X
c/o Department of Ecology, PV-11
Olympia, WA 98504

Contact: Julie Hagensen, Director

(206) 753 9437

The state lead agency is responsible for certification and licensing private and commercial pesticide applicators that purchase and/or use restricted and general use pesticides. They certify and license pesticide dealers that distribute or sell pesticides. The state is responsible for certifying other categories of applicators as well as consultants that make pesticide and fertilizer recommendations. The states investigate pesticide misuse, and other label violations. The states are responsible for developing local regulations pertaining to the distribution and use of pesticides.

IDAHO

Division of Plant Industries Idaho, Department of Agriculture
P.O. Box 790
Boise, ID 83701

Contact: Rodney Awe, Chief of the Bureau of Pesticides

(208) 334-3243

OREGON

Plant Division, Oregon Department of Agriculture
635 Capital NE
Salem, OR 97310

Contact: Christopher Kirby, program Executive

(503) 378-3776

WASHINGTON

Washington Department of Agriculture, Chemical Division
406 General Administration Building, AX-41
Olympia, WA 98504

Contact: Ted Maxwell, Program Manager, Pesticide Enforcement

(206) 753-5064

Washington Department of Agriculture, Chemical Division
2015 S. First St.
Yakima, WA 98903

Contact: F. Clarke Brown, Chief Compliance, Eastern Washington

(509) 575-2746

4. ENVIRONMENTAL HAZARDS
Waste/Spills/Accidents

NATIONAL

Contact Chemtrec for aid or emergency information regarding small and large spills, leaks or fires involving hazardous chemicals. (Contact the local Poison Control Center for human or animal exposure to hazardous chemicals).

Chemtrec will answer pesticide related questions or refer you to the proper agency for help. Chemtrec is also a contact point for over 40 emergency spill response teams throughout the country. Chemtrec and the Pesticides Safety Team Network are sponsored by the National Agricultural Chemicals Association and supported by member companies.

Chemtrec-CMA
2501 M St., N.W.
Washington, D.C. 20037

toll free: 1 (800) 424-9300; or (202) 887-1255

The following state agencies can offer technical assistance and interpretations of laws and regulations for those organizations or individuals that generate, transport, store, treat, dispose or otherwise handle hazardous wastes. These agencies are also responsible for inspecting hazardous waste generators, transporters, users, storage and disposal facilities as well as assisting in the training of people who handle or manage hazardous wastes.

IDAHO

Participates in EPA enforcement program, however, as of December, 1982, the Idaho Division of Environment was not authorized by EPA to operate the hazardous waste program under the Resource Conservation and Recovery Act (RCRA).

Division of Environment
Idaho Department of Health and Welfare
Statehouse
Boise, ID 83720

(208) 334 5839

Contact: Hazardous Materials Bureau

Provides direct assistance in vector control when there is a disaster or an outbreak of vector-borne disease. In consultation with the Idaho Department of Health and Welfare, answers complaints and offers advice and assistance.

Division of Environment
Idaho Department of Health and Welfare
Statehouse
Boise, ID 83720

(208) 334-4107

Contact: Wayne Heiskari, Vector Control Biologist

OREGON

Only trains people who handle or manage hazardous wastes within the department. County public health departments may conduct investigations into pesticide misuse or vector control. Exact activities vary per county.

Oregon Department of Environmental Quality
522 S.W. 5th Avenue
P.O. Box 1760
Portland, OR 97207

(503) 229-5102; toll free in Oregon: 1 (800) 452-7813

Contact: Mike Eyer, Supervisor, Hazardous Waste Section

WASHINGTON

Does not maintain a state hazardous materials and emergency response plan but is responsible for a contingency plan for spills and hazardous substances. Does not provide training of people who handle or manage hazardous wastes nor does it involve itself in vector control.

Washington Department of Ecology
Mail stop PV-11
Olympia WA 98504 (206) 459 6299
Contact: Tom Cook Hazardous Waste Information

Washington Department of Ecology
Northwest Regional office
4350-150th Avenue, N.E.
Redmond, WA 98052 (206) 885-1900

Washington Department of Ecology
Central Regional Office
3601 W. Washington
Yakima, WA 98903 (509) 575-2490

Washington Department of Ecology
Southwest Regional Office
7272 Cleanwater Lane LV-11
Olympia, WA 98504 (206) 753-2353

Washington Department of Ecology
Eastern Regional Office
N. 4601 Monroe Suite 100
Spokane, WA 99205 (509) 456-2926

5. UNIVERSITY EXTENSION SERVICES
• Information on Chemicals/Training

REGIONAL

Provides basic information on fate and effects of pesticides.

University of Washington
Department of Environmental Health
Mail Stop SC-34
Seattle, WA 98195 (206) 545-3785
Contact: Sheldon Murphy, Chairman

IDAHO

In cooperation with the Idaho Department of Agriculture, provides training for the certification of private and commercial applicators, agricultural chemical dealers and crop consultants. Provides technical information to the state Department of Agriculture for special local need registrations.

Cooperative Extension Service
Department of Plant, Soil and Entomological Sciences
University of Idaho
Moscow, ID 83843
Contact: Gene Carpenter, Extension Pesticide Coordinator (208) 885-7541
Hugh Homan, Extension Entomologist (208) 885-7542

OREGON

In cooperation with the Oregon State Department of Agriculture provides training for the certification of private and commercial applicators, agricultural chemical dealers and crop consultants. Provides information to the state Department of Agriculture for certain special local need registrations.

Department of Agricultural Chemistry
Oregon State University
Corvallis, OR 97331 (503) 737-2907
Contact: Terry Miller, Extension Pesticide Coordinator

Also advises on toxicity, chemistry, and the environmental fate of distribution and uses of pesticides.

Department of Agricultural Chemistry
Oregon State University
Corvallis, OR 97331 (503) 737-2907
Contact: James Witt, Professor Emeritus, Environmental Chemistry
Frank Dost, Professor Agricultural Chemistry

Clinical toxicology, teaching and research regarding pesticide- related health problems.

Department of Agricultural Chemistry
Oregon State University
Corvallis, OR 97331 (503) 757-5086
Contact: Sheldon Wagner, M.D.

WASHINGTON

In cooperation with the Washington Department of Agriculture, provides training for the certification of private and commercial applicators, agricultural chemical dealers and crop consultants. Provide information to the state Department of Agriculture for special local need registration.

Cooperative Extension Service
Washington State University
Johnson Hall
Pullman, WA 99164-6412 (509) 335-2995
Contact: Dick Maxwell, Agricultural Chemical Specialist

Puyallup Research Center
Pioneer Way East
Puyallup, WA 98371 (206) 840 4577
Contact: Gary Thomasson, Pesticide Education Specialist

6. HEALTH
Effects of Pesticides on Humans

Provides information on health effects of pesticides.

National Institute of Occupational Safety and Health (NIOSH)
U.S. Department of Health and Human Services, Region X
1961 Stout Street, Room 1185
Denver, CO 80294 (303) 844 6166
Contact: Charles McCammon, Regional Program Consultant

IDAHO

Investigates suspected cases of pesticide poisoning in humans and animals. If the poisoning relates to a human illness; collects information needed to determine the nature or cause of the poisoning; and recommends whatever actions are necessary to correct a hazardous situation. Provides information on pesticide toxicity and assistance with spills, decontamination and disposal.

Division of Health
Idaho Department of Health and Welfare
450 W. State
Boise, ID 83720 (208) 334 5936
Contact: Fritz Dixon, State Epidemiologist

Samples Grade A milk on a regular basis to test for pesticide residues. Samples food products for pesticide residues if a complaint is received. (Bureau of Dairy, Idaho Department of Agriculture samples manufactured milk on a regular basis for residues. The Food and Drug Administration, U.S. Department of Health and Human Services samples food on a regular basis for residues.)

Division of Health
Idaho Department of Health and Welfare
450 W. State
Boise, ID 83720 (208) 334 5936
Contact: Burke Cannon, Food and Drug Coordinator

OREGON

Has jurisdiction over safe drinking water. Advises on contamination of water due to pesticides, including removal or treatment of the chemical.

Oregon has a mandatory reporting of pesticide related illnesses or poisoning of humans or animals. Through the Oregon Accident Response System (OARS), the agency is contacted if reports are found to be pesticides related. In Oregon, investigation of pesticides relative to effects on humans is conducted by the State Department of Agriculture, the Accident Prevention Division or through other member agencies of the Pesticide Analytical Response Center and OARS.

Office of Health Status Monitoring
Oregon Health Division
1400 S.W. 5th Avenue, Room 205
Portland, OR 97201
Contact: Margot Barnett (503) 229 5821

Water Systems
Oregon Health Division
1400 S.W. 5th Avenue
Portland, OR 97201
Contact: Jim Boydston, Manager (503) 229 5954

WASHINGTON

Responsible for mandatory reporting of pesticide related illnesses by health care people. Provides information on pesticide toxicity and hazards. Investigates suspected cases of pesticides poisoning in humans and animals if the poisoning relates to a human illness; has the authority to collect information needed to determine the nature or cause of the poisoning; and may take whatever actions are necessary to correct a hazardous situation.

Health Services Division
Washington Department of Health LD-11
Olympia, WA 98504 (206) 586 4501 or (206) 753-5965
Contact: Lynden Baum, Program Manager
Toll free Pesticide Incident Reporting Number 1 (800) 356 2323

Regional Pesticides and Chemical Laboratory Washington Department of Social and Health Services 1719 Springwater
P.O. Box 190
Wenatchee, WA 98801 (509) 662-0484
Contact: David Nash, Pesticide and Vector Control Consultant

7. STATE COORDINATING GROUP
Emergency Response/Advice on Pesticides

IDAHO

The Idaho Department of Agriculture investigates pesticide misuse. Other state agencies act in an advisory capacity to the Department of Agriculture, but no formal state pesticide advisory body exists.

OREGON

PARC is a response system to pesticide related complaints from the public regarding health problems. PARC does not respond to pesticide misuse problems unless they are health related. The Oregon Department of Agriculture is the lead agency in PARC, with complaints being investigated by appropriate member agency and response made through PARC.

Pesticide Analytical Response Center (PARC)
Oregon Department of Agriculture
Agriculture Building
635 Capital St., N.E.
Salem, OR 97310 (503) 378-3793
Contact: Mike Wehr, Administrator, Laboratory Services

OARS is an agreement between state agencies for communication and coordination in regard to spills, accidents or natural disaster. Like a 911 number OERS decides each agency's responsibilities in regard to such situations.

Oregon Emergency Response System (OERS)
811 S.W. 6th Avenue
Portland, OR 97207: toll free in Oregon: (800) 452-0311
Contact: Dave Yandell, Supervisor, (503) 373 7457

WASHINGTON

Advisory Board to the Director of the State Department of Agriculture on laws governing pesticide use. The Board may also advise the Department of Agriculture on state-wide complaints concerning pesticide use.

Washington State Pesticide Advisory Board
Washington Department of Agriculture
Chemical and Plant Division
406 General Administration Building, AX-41
Olympia, WA 98504 (206) 753-5062
Contact: Art Losey, Secretary of Advisory Board

8. STATE PESTICIDE LABORATORY
Analytical Services State

Provides analytical and laboratory services for physicians and other agencies to determine pesticide levels in human or animal tissue as well as levels in appropriate environmental samples. Prior approval for samples must be made to assure proper collection and shipping protocol is followed and that the desired test can be conducted by the laboratory.

IDAHO

Tests on samples submitted through the Idaho Division of Environment or District Health Departments which relate to public health problem are conducted at no charge. A fee is charged for tests run on samples submitted directly to the lab. The lab currently does not run cholinesterase level tests. These samples are referred by the lab to area hospitals for testing. Staffing at the lab was recently decreased making it difficult to continue operation at previous levels.

Toxicology Laboratory
Bureau of Laboratories
Idaho Department of Health and Welfare 2220 Old Penitentiary Rd.
Boise, ID 83702 (208) 334-2233
Contact: Joe Gabica, Toxicology Supervisor

OREGON

Samples submitted under the Pesticide Analytical Response Center (PARC) are conducted with no charge. A fee may be charged for samples submitted directly to the laboratory. Tests are conducted for pesticide residue or metabolites in blood or urine, but not for cholinesterase levels.

Laboratory Services Division
Oregon Department of Agriculture
Agriculture Building
635 Capital St., N.E.
Salem, OR 97310 (503) 378-3793
Contact: Mike Wehr, Administrator

WASHINGTON

Laboratory used by investigators employed by the Department of Agriculture regarding pesticide misuse. Serves as a back-up to the Department of Social and Health Services Laboratory in Wenatchee. (Health problems should first be referred to the Wenatchee Lab.)

Agricultural Chemical and Hop Laboratory Washington Department of Agriculture
2017 S. First St.
Yakima, WA 98903 (509) 575-2759
Contact: Burton Ginther, Director

Regional Pesticides and Chemical Laboratory
Washington Department of Social and Health Services
1719 Springwater
P.O. Box 190
Wenatchee, WA 98801 (509) 662-0484
Contact: Al Robbins, Director
Jim Davis

6. HEALTH
Effects of Pesticides on Humans

Provides information on health effects of pesticides.

National Institute of Occupational Safety and Health (NIOSH)
U.S. Department of Health and Human Services, Region X
1961 Stout Street, Room 1185
Denver, CO 80294 (303) 844 6166
Contact: Charles McCammon, Regional Program Consultant

IDAHO

Investigates suspected cases of pesticide poisoning in humans and animals. If the poisoning relates to a human illness; collects information needed to determine the nature or cause of the poisoning; and recommends whatever actions are necessary to correct a hazardous situation. Provides information on pesticide toxicity and assistance with spills, decontamination and disposal.

Division of Health
Idaho Department of Health and Welfare
450 W. State
Boise, ID 83720 (208) 334 5936
Contact: Fritz Dixon, State Epidemiologist

Samples Grade A milk on a regular basis to test for pesticide residues. Samples food products for pesticide residues if a complaint is received. (Bureau of Dairy, Idaho Department of Agriculture samples manufactured milk on a regular basis for residues. The Food and Drug Administration, U.S. Department of Health and Human Services samples food on a regular basis for residues.)

Division of Health
Idaho Department of Health and Welfare
450 W. State
Boise, ID 83720 (208) 334 5936
Contact: Burke Cannon, Food and Drug Coordinator

OREGON

Has jurisdiction over safe drinking water. Advises on contamination of water due to pesticides, including removal or treatment of the chemical.

Oregon has a mandatory reporting of pesticide related illnesses or poisoning of humans or animals. Through the Oregon Accident Response System (OARS), the agency is contacted if reports are found to be pesticides related. In Oregon, investigation of pesticides relative to effects on humans is conducted by the State Department of Agriculture, the Accident Prevention Division or through other member agencies of the Pesticide Analytical Response Center and OARS.

Office of Health Status Monitoring
Oregon Health Division
1400 S.W. 5th Avenue, Room 205
Portland, OR 97201
Contact: Margot Barnett (503) 229 5821

Water Systems
Oregon Health Division
1400 S.W. 5th Avenue
Portland, OR 97201
Contact: Jim Boydston, Manager (503) 229 5954

Division of Industrial Safety and Health
WISHA TAFC33
3102 East Trent
Spokane, WA 99202

(509) 456 5003

Contact: High Higinbotham, Industrial Hygiene Regional Supervisor

Provides employer requested assistance for the areas mentioned.

Division of Industrial Safety and Health
Technical Services Section
WISHA
814 E. 4th Avenue
P.O. Box 207
Olympia, WA 98504

(206) 753-6381

10. INSPECTION AGENCY
Inspects Food and Dairy Products for Pesticide Residues

REGIONAL

Enforces pesticide residue tolerance levels in food and feed as set by the EPA. Collects samples and measures pesticide residues on a regular basis. Works with state Food and Dairy Divisions in sampling. In Idaho, conducts regular sampling of food products.

Food and Drug Administration (FDA)
U.S. Department of Health and Human Services 5009
22201 23rd. Drive S.E.
Bothel, WA 98021 (206) 486 8788
Contact: John Wiskerchen, Laboratory Director (206) 483 4901

IDAHO

Samples and tests manufactured milk on a regular basis to check for pesticide and drug residues. The Idaho Health Services Division tests Grade A Milk for residues and responds to complaints on pesticide residues in foods. The Food and Drug Administration monitors pesticide residues in food.

Bureau of Dairying
Idaho Department of Agriculture
P.O. Box 790
Boise, ID 83701 (208) 334-2149
Contact: Marv Patten, Chief

Food and Drug Administration (FDA)
U.S. Department of Health and Human Services
3100 North Lakeharbor Lane, Suit 110
Boise, ID 83703 (208) 334-1319
Contact: Dennis Hudson, Resident in Charge

Food and Drug Administration (FDA)
U.S. Department of Health and Human Services
250 S. 4th, Room 212
Pocatello, ID 83204 (208) 236-6858
Contact: Edward Edmiston Resident in Charge

OREGON

Licenses and regulates food processing plants in the state. Samples milk and other food products for pesticide residues. Takes action if illegal residues are found.

Food and Dairy Division
Oregon Department of Agriculture
635 Capital St., N.E.
Salem, OR 97310 (503) 378-3790
Contact: James Black, Administrator

Maintains a work share agreement with the State Dairy and Food Division to divide responsibilities for sampling food products for pesticide residues.

Food and Drug Administration (FDA)
U.S. Department of Health and Human Services
511 N.W. Broadway Room 694
Portland, OR 97209 (503) 221-2031
Contact: Donald Voeller, Supervisor in Charge

WASHINGTON

Licenses and regulates food processing plants in the state. Samples milk and other food products for pesticide residues. Takes action if illegal residues are found.

Dairy and Food Division
Washington Department of Agriculture
406 General Administration Building
Olympia, WA 98504 (206) 753-5043
Contact: Dick White, Dairy Chief
Vern Hedlund, Chief Pesticide Section

Maintains a work share agreement with the State Dairy and Food Division to divide responsibilities regarding sampling food products for pesticide residues.

Food and Drug Administration (FDA)
U.S. Department of Health and Human Services
9901 A Pacific Highway
Blaine, WA 98230 (206) 332 4032
Contact: George F. Long, Resident in Charge

Food and Drug Administration (FDA)
U.S. Department of Health and Human Services
920 W. Riverside # 580
Spokane, WA 99201 (509) 456-4698
Contact: Bob Williams, Resident in Charge

Food and Drug Administration (FDA)
U.S. Department of Health and Human Services
3803 W. Nob Hill Blvd.
Yakima, WA 98902 (509) 575-5925
Contact: Robert Paul, Resident in Charge

11. FORESTRY
Chemicals on Forestlands

REGIONAL

Responsible for chemical or other methods to control forest pests on federal forestlands. Conduct survey of forest pest problems and make recommendations for solutions. Carries out recommended action on federal lands.

U.S. Forest Service
U.S. Department of Agriculture
Forest Pest Management
319 S.W. Pine St., P.O. Box 3623
Portland, OR 97208 (503) 326 2727
Contact: William Ciesla, Director
Fay Shon, Group Leader

U.S. Forest Service
U.S. Department of Agriculture
Cooperative Forestry and Pest Management
PO Box 7669
Missoula, MT 59802 (406) 329-3277
Contact: Bill Stewart, Regional
Pesticide Specialist (Idaho)

IDAHO

Responsible for use of pesticide application on state forest land only. Does not require mandatory action from owners of private forest lands.

Idaho Department of Lands
P.O. Box 671
Coeur D'Alene, ID 83814
Contact: Walter Clark, Chief Bureau of Forest Management.

(208) 664-2171

OREGON

Coordinates chemical use on state forest lands through review and recommendations of district plans for use of pesticides. Recommends, reviews and issues permits to private land owners.

Oregon Department of Forestry
2600 State St.
Salem, OR 97310
Contact: LeRoy Kline, Director, Insect and Disease Programs
Ray Craig, Director Forest Practice Programs

(503) 378-2554

WASHINGTON

Washington Department of Natural Resources
Division of forest Land Management MQ-11
Olympia, WA 98504

(206) 753-0671
toll free in WA: 1 (800) 562-6010

Contact: Ken Russell, Pathologist, Fungicides
Rick Johnson, Entomologist, Insecticides
Doug Belz, Vegetation Management Specialist.

Coordinates herbicide usage on state forest lands through advising and reviewing district plans for use of herbicides.

Department of Natural Resources
Central Area Office
1405 Rush Road
P.O. Box 104
Chehalis, WA 98532 (206) 748-8616

Department of Natural Resources
Northeast Area Office
Box 190
Colville, WA 99114 (509) 684-5201

Department of Natural Resources
Northwest Area Office
919 N. Township St.
Sedro Woolley, WA 98284 (206) 856-0083

Department of Natural Resources
Olympic Area Office
Route 1, Box 1375
Forks, WA 98331 (206) 374-6131

Department of Natural Resources
South Puget Sound Area Office
28329 S.E. 448th St.
Enumclaw, WA 98022 (206) 825 1631

Department of Natural Resources
South West Area Office
601 Bond Dr.
P.O. Box 798
Castle Rock, WA 98611 (206) 577 2025

Department of Natural Resources
South Area Office
731 East Bowers Rd.
Ellensburg, WA 98926 (509) 925 6131

12. LEGAL SERVICES
Represents Field Workers Injured by Pesticides

Represents farm workers in possible action against farmers, sprayers or crew leaders for damages caused by pesticide abuse.

IDAHO

Legal Services
P.O. Box 1116
Caldwell, ID 83605 (208) 454-2591

Idaho Legal Aid
P.O. Box 1296
Twin Falls ID, 83303 (208) 734-7047

OREGON

Oregon Legal Services Corporation
Hillsboro Farmworker Office
107 S.E. 2nd, Room 5
Hillsboro, OR 97213 (503) 640-4770

Oregon Legal Services Corporation
Ontario Regional Office
772 North Oregon Street
Ontario, OR 97914 (503) 889-3121

Oregon Legal Services Corporation
Pendleton Regional Office
P.O. Box 1327
Pendleton, OR 97801 (503) 276-6685

Oregon Legal Services Corporation
Woodburn Farmworker Office
475 North First St.
Woodburn, OR 97071 (503) 981-5291

WASHINGTON

Evergreen Legal Services
1721 Hewitt Ave
Everitt, WA 98201 (206) 258-2681
Contact: Erin Moore, Attorney toll free in WA: 1 (800) 822 0225

Evergreen Legal Services
P.O. Box 430
120 Sunnyside Ave. (509) 837-4520
Granger WA, 98932 toll free in WA: 1 (800) 572 9466

13. PEST MANAGEMENT PRACTICES
Pro Pesticide Use/Educates Public

Private organizations providing information on proven safe pest management practices. Instrumental in working with public agencies and private pest management groups in such areas as the use of herbicides in aquatic weed control, the use of herbicides in forest management, the use of pesticides and other management techniques in agriculture. Works to retain pest management tools used in forests, farming and urban communities.

NATIONAL

National Coalition Against the Misuse of Pesticides (NCAMP)
530 Seventh St., S.E.
Washington, DC 20003

(202) 543 5450

IDAHO

Consulting Associates
1843 Broadway, Suite 102
Boise ID 83706
Contact: Helen Chenoweth

(208) 342-5939

OREGON

Oregonians for Food and Shelter
567 Union Street N.E.
Salem, OR 97301
Contact: Terry Witt, Director

(503) 370-8092

WASHINGTON

Maintains close contact with the press, conducts seminars on pesticide awareness and the human health effects of pesticides.

Washington Friends of Farms and Forests
P.O. Box 7644
Olympia, WA 98507
Contact: Duncan Wurm Director

(206) 524-4396

14. ALTERNATIVES TO PESTICIDES
Against Pesticide Misuse/Promotes Alternatives

Coalition comprised of groups and individuals concerned about the increasing overuse and misuse of synthetic pesticides and other toxic substances and who wish to be united in an effort to work towards alternatives. Serves a network/communications function. Collects and disseminates information particularly related to specific pesticides and ecologically sound alternatives to pesticides. Maintains a list of experts concerned with these topics. Regional coalition works in the Northwest through four area councils. Publishes NCAP News.

REGIONAL

Northwest Coalition for Alternatives to Pesticides (NCAP)
P.O. Box 375
Eugene, OR 97440
Contact: Norma Grier, Executive Director

(503) 344-5044

IDAHO

Inland Regional Council
Box 8633
Moscow, ID 83843
Contact: LuAnn Scott, Regional coordinator
(Covers Eastern Washington and Idaho)

(208) 882 9532

OREGON

Headwaters NCAP
Box 1075
Grants Pass, OR 97526
Contact: Julie Norman, Coordinator

(503) 474 6034

SALUD
PO Box 877
Phoenix, OR 97535
Contact: Sheila Canal, Director

(503) 535 7164

WASHINGTON

Washington Toxic Coalition
4516 University Way, N.E. # 6
Seattle, WA 98105
Contact: Cha Smith, Regional Coordinator

(206) 632 1545

Inland Regional Council
Route 4, Box 2A
Asotin, WA 99402
(Covers Eastern Washington and Idaho)

15. PESTICIDE HEALTH and SAFETY EDUCATION

Promotes teaching of community trainers to educate farmers, farmworkers and their families concerning pesticide health and safety. A train the trainer organization.

Work Group on Pesticide Health and Safety
P.O. Box 801
Vashon Island, WA 98070
Contact: Alice Larson, Coordinator

(206) 463-9000

Chapter 3

PESTICIDES USED ON NORTHWEST CROPS

(Pesticides Listed by TRADE NAME/common name)

The term pesticide encompasses chemicals that will control insects, weeds, plant diseases or other pests that are not wanted in agricultural, forest and ornamental crops. Pesticides can also be used in and around the home, business or other public areas to control unwanted insects, weeds or plant diseases.

This chapter is designed to be used in conjunction with the reference book "**Recognition and Management of Pesticide Poisonings**" fourth edition 1989, author, Donald P. Morgan, M.D., Ph.D.

The following information is a guide to agricultural chemicals used on any of over sixty crops grown in the Pacific Northwest. The pesticides listed here are registered by the Environmental Protection Agency and recommended by your state university Cooperative Extension Service. Crops are listed in this chapter alphabetically starting with Alfalfa Hay.

From time to time you may have a patient that has been working with a crop that does not appear in the following listing. When this occurs additional information about the crop and pesticide involved can be obtained by contacting your state department of agriculture, cooperative extension service, state department of labor and industry, department of health or poison control center. Chapter 1 of this reference lists these and other state, federal or private agencies and organizations that can be contacted for assistance in pesticide related illnesses.

Under the heading "Application" there are three methods listed for application of chemicals; Foliage, Soil and Seed treater.

1. **Foliage:** means an application of a pesticide formulation that is usually diluted in a water or other liquid carrier to make a liquid spray solution. Sometimes pesticides are mixed with a spray oil and the mixture then placed in a water or other liquid carrier. When a pesticides is not diluted in a liquid carrier, that is direct from its container it is referred to as an ultra low volume (ULV) application.

A foliage spray can be applied to a leaf surface, stem, branch or trunk of a plant to control insects or plant diseases either by contact or extended exposure. Herbicide sprays are usually applied as a preplant soil application. However during the growing season many are applied as a foliage spray directly to the weed over the top of the crop. Some times a herbicide spray is applied to the foliage of a crop or weed and then irrigated (incorporated) onto the soil.

Pesticide directed at a crop to control target insects, target weeds or target plant diseases can be either preemergence or postemergence applications.

2. **Soil:** applied pesticides can be a liquid spray or a dry granular.

As with foliar application the liquid pesticide formulation is diluted in a water or other liquid carrier to make a spray solution. Other liquid carriers can be a spray oil or liquid fertilizer which in turn might be suspended in a water carrier.

Soil pesticides can also be formulated as a dry granular or its liquid concentrate form be impregnated on dry fertilizer granules. Care must be taken when handling these dry formulation. Why? The resulting dust from dry materials may be just as injurious to a workers health as a liquid spray.

Pesticides applied to the soil as a liquid or granular can be; preplant, preemergence, post plant or postemergence applications.

3. **Seed treater:** chemical are usually applied by a seed treating warehouse before the seed is sold. These chemicals can also be applied on the farm usually just before planting. Worker exposure, to seed treating chemicals, usually occurs at planting time and is a result of handling treated seed.

Under the heading, "TRADE NAME/common name", you will find a list of chemicals that are registered by the EPA and state department of agriculture and recommended for use by the cooperative extension service for that crop.

The state cooperative extension service annually publishes tri state recommendation handbooks that contain current information on registered chemicals and their use on agricultural, forest, ornamental crops and other sites. These handbooks are helpful tools in understanding which pesticides are currently recommended on each crop.

While the list of chemical recommendations appearing in this chapter is long it does not ensure you that these are the only products being used on these crops.

Under the heading, "Recognition pg #", you will find a chapter and page number that will guide you to useful information concerning a particular pesticide toxicity, illness symptoms and emergency treatment procedures as outlined in "**Recognition and Management of Pesticide Poisonings**" fourth edition. This information should aid you in clinical judgments concerning a pesticide exposure or related illness.

Each chapter in this reference book is devoted to a particular chemical group. The first part of the chapter will give the chemical classification, name and general structure of the pesticide. Next you will find the pesticides TRADE NAME and/or its common name followed by a brief outline of toxicology, symptoms and emergency treatment for chemicals in that group. Occasionally you will find a chemical that is not listed in the Recognition and Management book. When this occurs it will be noted by, "not listed in the fourth edition".


Sub headings will place the pesticide into one of three groups. The pesticides are listed according to the type of pest control they give; that is:

Insecticides: to control insects that damage the crop, Herbicides: to control weeds in the crop and Fungicides: to control plant diseases.

Remember these are only approximate use dates. More detailed information on actual application dates can be obtained from your local agricultural authority.

Pesticide Use Calendar

Crop Type	J	F	M	A	M	J	J	A	S	O	N	D	Example
Field Crops insecticide herbicide fungicide		_____	_____	_____		_____	_____		_____	_____	_____		wheat, mint, barley, oat, potato, hop, corn, bean, peas
Fruit Crops insecticide herbicide fungicide		_____	_____	_____	_____	_____	_____	_____	_____	_____	_____		apple, pear, filbert, cranberry, walnut, cherry, peach
Vegetable Crops insecticide herbicide fungicide		_____	_____	_____	_____	_____	_____	_____	_____	_____	_____		asparagus, snap bean, sweet corn, process pea
Berry Crops insecticide herbicide fungicide		_____	_____	_____	_____	_____	_____	_____	_____	_____	_____		strawberry, raspberry, blueberry, blackberry
Forage & Seed Crops insecticide herbicide fungicide		_____	_____	_____	_____	_____	_____	_____	_____	_____	_____		hay, pasture grass seed, vegetable seed, sugarbeet seed
Ornamental & Nursery Crops insecticide herbicide fungicide	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	public, home, PCO greenhouse, turf

How to Read the Pesticide Use Calendar													
Crop Type	J	F	M	A	M	J	J	A	S	O	N	D	Example
													
	Approximate date activity begins		Peak season					Approximate date activity ends					

Note: The beginning, peak, and ending dates shown on the chart are only approximate. Contact the Cooperative Extension Office for the latest information on actual dates for a specific crop.

ALFALFA HAY

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage/Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	/metaldehyde bait	Chapter 15 pg 146
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 1

Herbicides:

Foliage	AVADEX/triallate	Chapter 11 pg 84
Soil	BALAN/benefin	Chapter 11 pg 85
Foliage	BUCTRIL/bromoxynil	pg ? (phenoxy)
Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	EPTAM/EPTC	Chapter 11 pg 84
Foliage/Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Foliage/Soil	PRINCEP/simazine	Chapter 11 pg 86
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Soil	SINBAR/terbacil	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
Foliage	VELPAR/hexazinone	Not listed in 4th edition

Fungicides:

Seed treater	ARASAN/thiram	Chapter 11 pg 96
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ALFALFA SEED

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CARZOL/formetanate	Chapter 2 pg 12
Foliage	COMITE/propargite	Chapter 5 pg 44
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	/metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxymetetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Soil	BALAN/benefin	Chapter 11 pg 85
Foliage	BUCTRIL/bromoxynil	pg ? (phenoxy)
Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	EPTAM/EPTC	Chapter 11 pg 84
Foliage/Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Foliage/Soil	PRINCEP/simazine	Chapter 11 pg 86
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Soil	SINBAR/terbacil	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides:

Seed treater	ARASAN/thiram	Chapter 11 pg 96
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APPLES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	CARZOL/formetanate	Chapter 2 pg 12
Foliage	COMITE/propargite	Chapter 5 pg 44
Foliage	/diazinon	Chapter 1 pg 1
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MORESTAN/oxythioquinox	Not listed in 4th edition
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	VYDATE/oxamyl	Chapter 2 pg 12
Foliage	ZOLONE/phosalone	Chapter 1 pg 2
<u>Herbicides:</u>		
Foliage	/2,4-D	Chapter 7 pg 63
Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Soil	PRINCEP/simazine	Chapter 11 pg 84
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SINBAR/terbacil	Chapter 11 pg 86
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	/bordeaux	Chapter 12 pg 103
Foliage	/captan	Chapter 12 pg 102
Foliage	CYPREX/dodine	Chapter 5 pg 34
Foliage	DIKAR/mancozeb dinocap	Chapter 12 pg 100
Foliage	DITHANE/mancozeb	Chapter 12 pg 101
Foliage	KARATHANE/dinocap	Chapter 8 pg 68
Foliage	/lime sulfur	Chapter 11 pg 84
Foliage	/sulfur	Chapter 5 pg 48
Foliage	RUBIGAN/fenarimol	Not listed in 4th edition
Foliage	/ziram	Chapter 11 pg 100
Foliage	FUNGINEX/triforine	Chapter 12 pg 113

APRICOTS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	OMITE/propargite	Chapter 5 pg 44
Foliage	/parathion	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 2
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	ZOLONE/phosalone	Chapter 1 pg 2
<u>Herbicides:</u>		
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Foliage	FUSILADE/fluazifop butyl	Not listed in 4th edition
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Foliage	POST/sethoxydim	Not listed in 4th edition
Foliage	SOLICAM/norflurazon	Not listed in 4th edition
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BORDEAUX/	Chapter 12 pg 103
Foliage	BRAVO/	Chapter 12 pg 95
Foliage	ROVRAL/	Chapter 12 pg 112
Foliage	/ziram	Chapter 11 pg 100

ASPARAGUS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH or POUNCE/permethrin	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
<u>Herbicides:</u>		
Foliage	/2,4-D amine	Chapter 7 pg 63
Soil	AMIBEN/chloramben	Chapter 11 pg 84
Foliage	BANVEL D/dicamba	Chapter 7, 11 pgs 64, 84
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	LOROX/linuron	Chapter 11 pg 87
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Soil	SINBAR/terbacil	Chapter 11 pg 86
Soil	SOLICAM/norflurazon	Not listed in 4th edition
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	BENLATE/benomyl	Chapter 12 pg 112
Foliage	/zineb	Chapter 12 pg 100

BARLEY

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Seed treater	/lindane	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	THIMET/phorate	Chapter 1 pg 1
<u>Herbicides:</u>		
Foliage	2,4-D amine	Chapter 7 pg 63
Soil	AVENGE/difenzoquat	Not listed in 4th edition
Foliage	BANVEL D/dicamba	Chapter 7, 11 pgs 64, 84
Foliage	BROMINAL/bromoxynil	pg ? (phenoxy)
Foliage	CARBYNE/barban	Chapter 11 pg 84
Soil	FAR-GO/triallate	Chapter 5 pg 34
Foliage	GLEAN/chlorsulfuron	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage	HOELON/diclofop methyl	Not listed in 4th edition
Foliage	IGRAN/terbutryn	Chapter 11 pg 86
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	LEXONE or SENCOR/metribuzin	Chapter 11 pg 86
Foliage	/MCPA	Chapter 7 pg 64
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BAYLETON/triademifon	pg 113
Seed treater	/captan	Chapter 12 pg 102
Foliage	TILT/propiconazol	Not listed in 4th edition
Seed treater	VITAVAX/carboxin	Not listed in 4th edition

BEANS, DRY

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	COMITE/propargite	Chapter 5 pg 44
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage/Seed	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Soil	TEMIK/aldicarb	Chapter 2 pg 12
Soil	THIMET/phorate	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
<u>Herbicides:</u>		
Soil	AMIBEN/chloramben	Chapter 11 pg 84
Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Soil	DUAL/metolachlor	Chapter 11 pg 84
Soil	EPTAM/EPTC	Chapter 11 pg 84
Soil	LASSO/alachlor	Chapter 11 pg 84
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SONALAN/ethalfluralin	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliage/Seed	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Seed treater	/captan	Chapter 12 pg 102
Seed treater	KOCIDE 101/copper hydroxide	Chapter 12 pg 102
Foliage	/maneb	Chapter 12 pg 100
Seed treater	PEXON/	Not listed in 4th edition
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113
Foliage	ROVRAL/iprodione	Chapter 12 pg 112

BEANS, SNAP

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Soil	THIMET/phorate	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
<u>Herbicides:</u>		
Soil	AMIBEN/chloramben	Chapter 11 pg 84
Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Soil	DUAL/metolachlor	Chapter 11 pg 84
Soil	EPTAM or GENEP/EPTC	Chapter 5 Chapter 5 pg 34
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliage	/captan	Chapter 12 pg 102
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113
Foliage	TOPSIN/thiophanate methyl	Not listed in 4th edition
Foliage	ziram	Chapter 11 pg 100

BEETS, TABLE

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Soil	/metaldehyde bait	Chapter 15 pg 146
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
<u>Herbicides:</u>		
Foliage	ANTOR/diethatyl ethyl	Not listed in 4th edition
Soil	EPTAM/EPTC	Chapter 11 pg 84
Soil	RO-NEET/cycloate	Chapter 5 Chapter 5 pg 34
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Foliage	SPIN-AID/phenmedipham	Not listed in 4th edition
<u>Fungicides:</u>		
Foliage	/copper spray	Chapter 12 pg 102
Foliage/Soil	/boron	pg 39
Seed treater	TERRANEb/chloroneb	Not listed in 4th edition
Foliage	/sulfur	Chapter 5 pg 48
Foliage	/zineb	Chapter 12 pg 100

BEET SEED, TABLE

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	MONITOR/methamidophos	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
<u>Herbicides:</u>		
Soil	EPTAM/EPTC	Chapter 11 pg 84
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Soil	PYRAMIN/pyrazon	Chapter 5 pg 34
Soil	RO-NEET/cycloate	Chapter 11 pg 84
Foliage	SPIN-AID/phenmedipham	pg?
<u>Fungicides:</u>		
Seed treater	APRON/metalaxyl	Chapter 12 pg 113
Seed treater	TERRANEb/chloroneb	Chapter 12 pg 95
Foliage	copper spray	Chapter 12 pg 103
Foliage	/zineb	Chapter 12 pg 100
Foliage	/sulfur	Chapter 5 pg 48

BLACKBERRIES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	/lime sulfur	Chapter 11 pg 84
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
<u>Herbicides:</u>		
Foliage	ACCESS/picloram	Chapter 11 pg 85
Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	ETHREL/ethephon	Not listed in 4th edition
Foliage	FUSILADE/fluazifop butyl	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage	GARLON 3A/triclopyr	Chapter 11 pg 85
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SINBAR/terbacil	Chapter 11 pg 86
Foliage/Soil	SOLICAM/norflurazon	Not listed in 4th edition
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/captan	Chapter 12 pg 102
Foliage	/ferbam	Chapter 11 pg 100
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/lime sulfur	Not listed in 4th edition

BLUEBERRIES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	MESUROL/methiocarb	Chapter 2 pg 12
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	/spray oil	Not listed in 4th edition

Herbicides:

Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PRINCEP/simazine	Chapter 11 pg 84
Soil	SINBAR/terbacil	Chapter 11 pg 86

Fungicides:

Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	/captan	Chapter 12 pg 102
Foliage	/ferbam	Chapter 11 pg 100
Foliage	bordeaux	Chapter 12 pg 103
Foliage	DIFOLATAN/captafol	Chapter 12 pg 102
Foliage	FUNGINEX/triforine	Chapter 12 pg 113

BOYSENBERRIES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12

Herbicides:

Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVRIOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop butyl	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Foliage/Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Foliage/Soil	SINBAR/terbacil	Chapter 11 pg 86
Foliage/Soil	SURFLAN/oryzalin	Chapter 11 pg 85

Fungicides:

Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/captan	Chapter 12 pg 102
Foliage	KARATHANE/dinocap	Chapter 8 pg 68
Foliage	/sulfur	Chapter 5 pg 48

BROCCOLI, BRUSSELS SPROUT, CAULIFLOWER, CABBAGE

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	MONITOR/methamidophos	Chapter 1 pg 1
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	TELONE II/dichloropropene	Chapter 14 pg 132

Herbicides:

Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PREFAR/bensulide	Chapter 1 pg 2
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides

Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113
Foliage/Soil	TERRACLOR/PCNB	Chapter 12 pg 93
Foliage	/zineb	Chapter 12 pg 100

CARROTS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
<u>Herbicides:</u>		
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage/Soil	LOROX/linuron	Chapter 11 pg 87
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	TENORAN/chloroxuron	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliage	/captan	Chapter 12 pg 102
Foliage	DU-TER/triphenyltin hydroxide	Chapter 12 pg 108
Foliage	/mancozeb	Chapter 12 pg 101
Foliage	/maneb	Chapter 12 pg 100
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Foliage	VORLEX/	Not listed in 4th edition
Foliage	/zineb	Chapter 12 pg 100

CARROT SEED

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	COMITE/propargite	Chapter 5 pg 44
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	LORSEBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	SPUR/fluvalinate	Chapter 5 pg 34
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
<u>Herbicides:</u>		
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage/Soil	LOROX/linuron	Chapter 11 pg 87
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
Foliage/Soil	TORDON 22K/picloram	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliage	/captan	Chapter 12 pg 102
Foliage	DU-TER/triphenyltin hydroxide	Chapter 12 pg 108
Foliage	/mancozeb	Chapter 12 pg 101
Foliage	/maneb	Chapter 12 pg 100
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Foliage	VORLEX/	Not listed in 4th edition
Foliage	/zineb	Chapter 12 pg 100

CABBAGE SEED

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MONITOR/methamidophos	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Information not available at this printing

Fungicides:

Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliage/Soil	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113
Foliage/Soil	TERRACLOR/PCNB	Chapter 12 pg 93
Foliage	/zineb	Chapter 12 pg 100

CHEMICAL FALLOW

Herbicides:

Foliage	2,4-D amine	Chapter 7 pg 63
Soil	AATREX/atrazine	Chapter 11 pg 84
Foliage	BANVEL D/dicamba	Chapter 7, 11 pgs 64, 84
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Foliage/Soil	GLEAN/chlorsulfuron	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or Lexone/metribuzin	Chapter 11 pg 86

CHERRIES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MESUROL/methiocarb	Chapter 2 pg 12
Foliage	OMITE/propargite	Chapter 5 pg 44
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 1
Soil	TERR-O-CIDE/chloropicrin	Chapter 14 pg 132
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	VENDEX/	Not listed in 4th edition
Soil	VORLEX/methyl isothiocyanate	Not listed in 4th edition

Herbicides:

Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVROL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop butyl	Not listed in 4th edition
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Soil	GOAL/oxyfluorfen	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SURFLAN/oryzalin	Chapter 11 pg 85

Fungicides:

Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	/bordeaux	Chapter 12 pg 103
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliage	/captan	Chapter 12 pg 102
Foliage	CYPREX/dodine	Chapter 12 pg 112
Foliage	/ferbam	Chapter 11 pg 100
Soil	GALLEX/	Not listed in 4th edition
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Soil/Seed treat	GALLTROL/agrobacterium	Not listed in 4th edition
Foliage	RONILAN/maneb	Chapter 12 pg 100
Foliage	ROVRAL/iprodione	Chapter 12 pg 112
Foliage	/sulfur	Chapter 5 pg 48
Foliage	TOPSIN/thiophanate methyl	Not listed in 4th edition
Foliage	/ziram	Chapter 11 pg 100

CHRISTMAS TREES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	/diazinon	Chapter 1 pg 1
Foliage/Granule	DURSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	/lindane	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	/spray oil	Not listed in 4th edition
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	VENDEX/fenbutatin-oxide	Not listed in 4th edition
<u>Herbicides:</u>		
Foliage	2,4-D amine	Chapter 7 pg 63
Foliage	ASULOX/asulam	Chapter 11 pg 84
Soil	AATREX/atrazine	Chapter 11 pg 84
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Soil	GOAL/oxyfluorfen	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
Foliage	VELPAR/hexazinone	Not listed in 4th edition
<u>Fungicides:</u>		
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliage	bordeaux	Chapter 12 pg 103

CLOVER HAY

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12

Herbicides:

Soil	BALAN/benefin	Chapter 11 pg 85
Foliage	BUTOXONE or BUTYRAC/2,4-DB	Chapter 7 pg 63
Soil	EPTAM/EPTC	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage/Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Soil	KARMEX/diuron	Chapter 11 pg 87
Soil	KERB/pronamide	Chapter 11 pg 84
Foliage/Soil	/MCPA	Chapter 7 pg 64
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85

Fungicides:

Seed treater	ARASAN/thiram	Chapter 11 pg 96
Seed treater	/captan	Chapter 12 pg 102
Seed treater	SPERGON/chloranil	Not listed in 4th edition

CLOVER SEED

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	COMITE/propargite	Chapter 5 pg 44
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12

Herbicides:

Information not available at this printing

Fungicides:

Seed treater	MERTECT/thiabendazole	Chapter 12 pg 113
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CORN, FIELD and SILAGE

Application	TRADE Name/common name	Recognition page #
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Insecticides:

Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	COMITE/propargite	Chapter 5 pg 44
Soil	COUNTER/terbufos	Chapter 1 pg 1
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Seed treater	/lindane	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MESUROL/methiocarb	Chapter 2 pg 12
Soil	/metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Soil	MOCAP/ethoprop	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	THIMET/phorate	Chapter 1 pg 1
Soil	TELONE II/dichloropropene	Chapter 14 pg 132

Herbicides:

Foliage	/2,4-D	Chapter 7 pg 63
Soil	AATREX/atrazine	Chapter 11 pg 86
Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Foliage	BANVEL/dicamba	Chapter 11 pg 84
Soil	BLADEX/	
Soil	DUAL/metolachlor	Chapter 11 pg 84
Soil	ERADICANE/EPTC with safener	Chapter 11 pg 84
Soil	LASSO/alachlor	Chapter 11 pg 84
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Soil	RAMROD/propachlor	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SURPASS/vernolate with safener	Chapter 11 pg 84
Soil	SUTAN+/butylate with safener	Chapter 11 pg 84

Fungicides:

Seed treater	/captan	Chapter 12 pg 102
Foliage/Seed treater	/thiram	Chapter 11 pg 96
Seed treater	VITAVAX/carboxin	Not listed in 4th edition

CORN, SWEET

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMAZE/isofenphos	Chapter 1 pg 1
Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Soil	COUNTER/terbufos	Chapter 1 pg 1
Soil	DASANIT/fensulfothion	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage/Soil	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Soil	/metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Soil	MOCAP/ethoprop	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Soil	THIMET/phorate	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
<u>Herbicides:</u>		
Foliage	/2,4-D amine	Chapter 7 pg 63
Soil	AATREX/atrazine	Chapter 11 pg 86
Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Soil	DUAL/metolachlor	Chapter 11 pg 84
Soil	ERADICANE/EPTC with safener	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	LASSO/alachlor	Chapter 11 pg 84
Soil	RAMROD/propachlor	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SURPASS/vernolate with safener	Chapter 11 pg 84
Soil	SUTAN+/butylate with safener	Chapter 11 pg 84
<u>Fungicides</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliage	/captan	Chapter 12 pg 102
Soil	TERRANEBC/chloroneb	Chapter 12 pg 95
Foliage	/zineb	Chapter 12 pg 100

CRANBERRIES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
<u>Herbicides</u>		
Foliage	2,4-D	Chapter 7 pg 63
Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVRIOL/napropamide	Not listed in 4th edition
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Foliage	FURLOE/chlorpropham	Chapter 11 pg 84
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Foliage/Soil	SOLICAM/norflurazon	Not listed in 4th edition
<u>Fungicides:</u>		
Foliage	bordeaux	Chapter 12 pg 103
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliage	/captan	Chapter 12 pg 102
Foliage	DIFOLATAN/captafol	Chapter 12 pg 102
Foliage	/ferbam	Chapter 11 pg 100
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/maneb	Chapter 12 pg 100
Foliage	PHALTAN/folpet	Chapter 12 pg 102
Foliage	/zineb	Chapter 11 pg 100

CUCUMBERS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Soil	metalddehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
<u>Herbicides:</u>		
Soil	AMIBEN/chloramben	Chapter 11 pg 84
Soil	PREFAR/bensulide	Chapter 1 pg 2
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliar	BENLATE/benomyl	Chapter 12 pg 112
Foliar/seed treater	/captan	Chapter 12 pg 102
Foliar	DYRENE/anilazine	Chapter 12 pg 111
Foliar	KOCIDE/copper hydroxide	Chapter 12 pg 102
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113
Foliar	ziram	Chapter 11 pg 100

CURRANTS, GOOSEBERRY

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	/spray oil	Not listed in 4th edition
<u>Herbicides:</u>		
Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PRINCEP/simazine	Chapter 11 pg 84
Soil	SINBAR/terbacil	Chapter 11 pg 86
<u>Fungicides:</u>		
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	/limesulfur	Not listed in 4th edition

FILBERTS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH or POUNCE/permethrin	Chapter 5 pg 34
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	pg 14
Foliage	ZOLONE/phosalone	Chapter 1 pg 2
<u>Herbicides:</u>		
Foliage	/2,4-D	Chapter 7 pg 63
Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVINOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SOLICAM/norflurazon	Not listed in 4th edition
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
Soil	MOCAP/ethoprop	Chapter 1 pg 1
<u>Fungicides:</u>		
Foliage	bordeaux	Chapter 12 pg 103
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102

GRAPES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage/Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	/spray oil	Not listed in 4th edition
Foliage	VENDEX/fenbutatin oxide	Not listed in 4th edition
Foliage	ZOLONE/phosalone	Chapter 1 pg 2
<u>Herbicides:</u>		
Foliage	2,4-D	Chapter 7 pg 63
Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVRLINOL/napropamide	Not listed in 4th edition
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Foliage/Soil	FUSILADE/fluazifop butyl	Not listed in 4th edition
Soil	GOAL/oxyfluorfen	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Soil	KERB/pronamide	Chapter 11 pg 84
Foliage/Soil	POST/sethoxydim	Not listed in 4th edition
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage/Soil	PROWL/pendimethalin	Chapter 11 pg 85
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SOLICAM/norflurazon	Not listed in 4th edition
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/captan	Chapter 12 pg 102
Foliage	/sulfur	Chapter 5 pg 48
Foliage	ROVRAL/iprodione	Chapter 12 pg 112

GRASS SEED

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	/diazinon	Chapter 1 pg 1
Foliage	DURSBAN/chlorpyrifos	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12

Herbicides:

Foliage	BANVEL D/dicamba	Chapter 7, 11 pgs 64, 84
Foliage	BROMINAL or BUCTRIL/bromoxynil	pg ? (phenoxy)
Foliage	/2,4-D amine	Chapter 7 pg 63
Foliage	FURLOE/chlorpropham	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage	/MCPA	Chapter 7 pg 64
Foliage	/MSDA	Chapter 7 pg 64
Soil	NORTRON/ethofumesate	Not listed in 4th edition
Soil	PREFAR/bensulide	Chapter 1 pg 2
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SINBAR/terbacil	Chapter 11 pg 86

Fungicides:

Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	DITHANE/mancozeb	Chapter 12 pg 101
Foliage	TILT/propiconazole	Not listed in 4th edition

GARLIC

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Soil	TELONE II/dichloropropene	Chapter 14 pg 132

Herbicides:

Foliage	BROMINAL or BUCTRIL/bromoxynil	pg ? (phenoxy)
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage	FUSILADE/fluazifop	Not listed in 4th edition

Fungicides:

Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	DYRENE/anilazine	Chapter 12 pg 111
Foliage/Soil	TERRACLOR/PCNB	Chapter 12 pg 93

HORSE RADISH

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132

HOPS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	OMITE/propargite	Chapter 5 pg 44
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl	Chapter 1 pg 1
Soil	THIMET, RAMPART/phorate	Chapter 1 pg 1
Foliage	/sulfur	Chapter 5 pg 48

Herbicides:

Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
Foliage	DES-I-CATE/endothall	Chapter 15 pg 154

Fungicides:

Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	RIDOMIL/metalaxyl	Chapter 12 pg 113
Foliage	/zineb	Chapter 11 pg 100

LENTILS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Seed treater	/lindane	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1

Herbicides:

Soil	AVADEX/triallate	Chapter 11 pg 84
Foliage	CARBYNE/barban	Chapter 11 pg 84
Soil	FAR-GO/triallate	Chapter 11 pg 84
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Foliage	HOELON/diclofop methyl	Not listed in 4th edition

Fungicides:

Information not available at this printing

LETTUCE

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	TELONE II/dichloropropene	Chapter 14 pg 132

Herbicides

Soil	BALAN/benfin	Chapter 11 pg 85
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PREFAR/bensulide	Chapter 1 pg 2
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85

Fungicides:

Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/maneb	Chapter 12 pg 100
Foliage	ROVRAL/iprodione	Chapter 12 pg 112
Foliage/Soil	TERRACLOR/PCNB	Chapter 12 pg 93
Foliage	/zineb	Chapter 12 pg 100

LETTUCE SEED

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	SPUR/fluvalinate	Chapter 5 pg 34
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Information not available at this printing

Fungicides:

Information not available at this printing

LOGANBERRIES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldcheyde bait	Chapter 15 pg 146
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
<u>Herbicides:</u>		
Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVRIOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop butyl	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Foliage/Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Foliage/Soil	SINBAR/terbacil	Chapter 11 pg 86
Foliage/Soil	SURFLAN/oryzalin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/captan	Chapter 12 pg 102
Foliage	KARATHANE/dinocap	Chapter 8 pg 68
Foliage	/sulfur	Chapter 5 pg 48

MELONS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH or POUNCE/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
<u>Herbicides:</u>		
Soil	ALANAP/naptalam	Not listed in 4th edition
Soil	PREFAR/bensulide	Chapter 1 pg 2
<u>Fungicides:</u>		
Foliage	DIFOLATAN/captafol	Chapter 12 pg 102
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113

MINT (Spearmint, Peppermint)

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	COMITE/propargite	Chapter 5 pg 44
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Soil	TELONE II/dichloropropene	Chapter 14 pg 132

Herbicides:

Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Foliage	BUCTRIL/bromoxynil	pg ? (phenoxy)
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Soil	GOAL/	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Soil	SINBAR/terbacil	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides:

Foliage	/sulfur	Chapter 5 pg 48
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Foliage/Soil	TERRACLOR/PCNB	Chapter 12 pg 93
Soil	VAPAM/metam sodium	Chapter 12 pg 98
Soil	VORLEX/methyl isothiocyanate	Not listed in 4th edition

MUSTARD, TURNIP, RADISH, KALE, SWISS CHAD

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	MONITOR/methamidophos	Chapter 1 pg 1
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	TELONE II/dichloropropene	Chapter 14 pg 132

Herbicides:

Soil	DEVRIOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage/Soil	LOROX/linuron	Chapter 11 pg 87
Soil	PREFAR/bensulide	Chapter 1 pg 2
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides

Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliar	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliar	/captan	Chapter 12 pg 102
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113
Soil	ROCAL (bactericide)	Not listed in 4th edition
Foliage	/zineb	Chapter 12 pg 100

OATS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage/Soil	FURADAN/carbofuran	Chapter 2 pg 12
Seed treater	/lindane	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	SYSTOX/demeton	Chapter 1 pg 1
<u>Herbicides:</u>		
Foliage	/2,4-D	Chapter 7 pg 63
Foliage	BANVEL D/dicamba	Chapter 7, 11 pgs 64, 84
Foliage	BROMINAL or BUCTRIL/bromoxynil	pg ? (phenoxy)
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage	/MCPA	Chapter 7 pg 64
<u>Fungicides:</u>		
Seed treater	/captan	Chapter 12 pg 102
Seed treater	DITHANE/mancozeb	Chapter 12 pg 101
Seed treater	/maneb	Chapter 12 pg 100
Seed treater	TERRACOAT/PCNB	Chapter 12 pg 93
Seed treater	VITAVAX/carboxin	Not listed in 4th edition

ONIONS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DASANIT/fensulfthion	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	VYDATE/oxamyl	Not listed in 4th edition
<u>Herbicides:</u>		
Foliage	BROMINAL or BUCTRIL/bromoxynil	pg ? (phenoxy)
Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Soil	GOAL/oxyfluorfen	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage	MH-30/maleic hydrazide	Not listed in 4th edition
Soil	PREFAR/bensulide	Chapter 1 pg 2
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	/thiram	Chapter 11 pg 87
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/captan	Chapter 12 pg 102
Foliage	DITHANE/mancozeb	Chapter 12 pg 101
Foliage	DYRENE/anilazine	Chapter 12 pg 111
Foliage	/maneb	Chapter 12 pg 100
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Soil	VORLEX/	Not listed in 4th edition
Foliage	/zineb	Chapter 12 pg 100

ORNAMENTAL and TURF

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	Baytex/fenthion	Chapter 1 pg 2
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DYCARB/bendiocarb	Chapter 2 pg 12
Granule	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage/Granule	DURSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	/lindane	Chapter 3 pg 17
Foliage	/lime sulfur	Chapter 11 pg 84
Foliage	/malathion	Chapter 1 pg 1
Paste	MESUROL/methiocarb	Chapter 2 pg 12
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	MORESTAN/	Not listed in 4th edition
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	POUNCE/permethrin	Chapter 5 pg 34
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Granule	TEMIK/aldicarb	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	VENDEX/fenbutatin-oxide	Not listed in 4th edition
<u>Herbicides:</u>		
Foliage	2,4-D amine	Chapter 7 pg 63
Soil	AATREX/atrazine	Chapter 11 pg 84
Foliage	BANVEL D/dicamba	Chapter 7, 11 pgs 64, 84
Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Soil	BETASAN/bensulide	Not listed in 4th edition
Foliage	BROMINAL/bromoxynil	pg ? (phenoxy)
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Soil	KARMEX/diuron	Chapter 11 pg 87
Soil	PROWL/pendimethalin	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or Lexone/metribuzin	Chapter 11 pg 86
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
Soil	VAPAM/metam sodium	Chapter 12 pg 98
Soil	VORLEX/methyl isothiocyanate	Not listed in 4th edition
<u>Fungicides:</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	bordeaux	Chapter 12 pg 103
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	BRAVO, Daconil/chlorothalonil	Chapter 12 pg 95
Seed treater	captan	Chapter 12 pg 102
Foliage	CYPREX/dodine	Chapter 5 pg 34
Foliage	DITHANE/mancozeb	Chapter 12 pg 101
Foliage	/ferbam	Chapter 11 pg 100
Foliage	KARATHANE/dinocap	Chapter 8 pg 68
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/lime sulfur	Not listed in 4th edition
Foliage	PHALTAN/folpet	Chapter 12 pg 102
Seed treater	PHYGON/dichlone	Not listed in 4th edition
Soil	RIDOMIL, SUBDUE/metalaxyl	Chapter 12 pg 113
Foliage	RONILAN/maneb	Chapter 12 pg 100
Foliage	ROVRAL, 26019/iprodione	Chapter 12 pg 112
Foliage	RUBIGAN/fenarimol	Not listed in 4th edition
Foliage	/sulfur	Chapter 5 pg 48
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Foliage/Soil	TERRACLO/PCNB	Chapter 12 pg 93
Soil	VAPAM/metam sodium	Chapter 12 pg 98
Foliage	/ziram	Chapter 11 pg 100

PEACHES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	CARZOL/formetanate	Chapter 2 pg 12
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	OMITE/propargite	Chapter 5 pg 44
Foliage	/parathion	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	/sulfur	Chapter 5 pg 48
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	ZOLONE/phosalone	Chapter 1 pg 2
Foliage	VENDEX/fenbutatin-oxide	Not listed in 4th edition
<u>Herbicides:</u>		
Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Soil	GOAL/oxyfluorfen	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	SINBAR/terbacil	Chapter 11 pg 86
Soil	SOLICAM/norflurazon	Not listed in 4th edition
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	/bordeaux	Chapter 12 pg 103
Foliage	BRAVO/	Chapter 12 pg 95
Foliage	CYPREX/dodine	Chapter 12 pg 112
Foliage	/ferbam	Chapter 11 pg 100
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/lime sulfur	Not listed in 4th edition
Foliage	RONILAN/maneb	Chapter 12 pg 100
Foliage	ROVRAL/iprodione	Chapter 12 pg 112
Foliage	/sulfur	Chapter 5 pg 48

PEARS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH or POUNCE/permethrin	Chapter 5 pg 34
Foliage	CARZOL/formetanate	Chapter 2 pg 12
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KARATHANE/dinocap	Chapter 8 pg 68
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MORESTAN/oxythioquinox	Not listed in 4th edition
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	/sulfur	Chapter 5 pg 48
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	VENDEX/fenbutatin-oxide	Not listed in 4th edition
Foliage	VYDATE/oxamyl	Not listed in 4th edition
<u>Herbicides:</u>		
Foliage	/2,4-D	Chapter 7 pg 63
Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	GOAL/oxyfluorfen	Not listed in 4th edition
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	/bordeaux	Chapter 12 pg 103
Foliage	CYPREX/dodine	Chapter 12 pg 112
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	MYCRO-SHIELD/oxytetracycline	Not listed in 4th edition
Foliage	/streptomycin	Not listed in 4th edition
Foliage	/ziram	Chapter 11 pg 100

PEAS, DRY, GREEN OR PROCESSING

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Seed treater	/lindane	Chapter 3 pg 17
Seed treater	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Soil	AVADEX/triallate	Chapter 11 pg 84
Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Foliage	CARBYNE/barban	Chapter 11 pg 84
Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Soil	FAR-GO/triallate	Chapter 11 pg 84
Foliage	/MCPA	Chapter 7 pg 64
Soil	RAMROD/propachlor	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Foliage	THISTROL or CAN-TROL/MCPB	Chapter 7 pg 64
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides:

Seed treater	ARASAN/thiram	Chapter 11 pg 96
Seed treater	/captan	Chapter 12 pg 102
Seed treater	PHYGON/dichlone	Not listed in 4th edition
Seed treater	SPERGON/chloranil	Not listed in 4th edition

PEA SEED

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	/diazinon	Chapter 1 pg 1
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Seed treater	/lindane	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
<u>Herbicides:</u>		
Soil	AVADEX/triallate	Chapter 11 pg 84
Foliage	BASAGRAN/bentazon	Chapter 11 pg 84
Foliage	CARBYNE/barban	Chapter 11 pg 84
Soil	FAR-GO/triallate	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage	/MCPA	Chapter 7 pg 64
Soil	RAMROD/propachlor	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Seed treater	captan	Chapter 12 pg 102
Seed treater	PHYGON/dichlone	Not listed in 4th edition
Seed treater	SPERGON/chloranil	Not listed in 4th edition

PEPPERS

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	DIBROM/naled	Chapter 1 pg 2
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	ORTHENE/acephate	Chapter 1 pg 2
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Foliage	VYDATE/oxamyl	Not listed in 4th edition
<u>Herbicides:</u>		
Soil	AMIBEN/chloramben	Chapter 11 pg 84
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PREFAR/bensulide	Chapter 1 pg 2
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/maneb	Chapter 12 pg 100
Foliage	/zineb	Chapter 12 pg 100

PLUMS and PRUNES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	/sulfur	Chapter 5 pg 48
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 2
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	VENDEX/fenbutatin-oxide	Not listed in 4th edition
Foliage	ZOLONE/phosalone	Chapter 1 pg 2
<u>Herbicides:</u>		
Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	DEVINOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Soil	SOLICAM/norflurazon	Not listed in 4th edition
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	/bordeaux	Chapter 12 pg 103
Foliage	/lime sulfur	Not listed in 4th edition
Seed treater	PHYGON/dichlone	Not listed in 4th edition
Foliage	/sulfur	Chapter 5 pg 48

POTATO

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	AMBUSH, POUNCE/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	COMITE/propargite	Chapter 5 pg 44
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Soil	DASANT/fensulfothion	Chapter 1 pg 1
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage/Soil	/diazinon	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage/Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	IMIDAN/phosmet	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Soil	MOCAP/ethoprop	Chapter 1 pg 1
Foliage	MONITOR/methamidophos	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Soil	TEMIK/aldicarb	Chapter 2 pg 12
Soil	THIMET/phorate	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Soil	VAPAM/metam sodium	Chapter 12 pg 98
Foliage	VYDATE/oxamyl	Chapter 2 pg 12

Herbicides:

Foliage	DOWPON-M/dalapon	Chapter 11 pg 84
Foliage Desiccant	DES-I-CATE/endothall	Chapter 15 pg 154
Foliage	DIQUAT/diquat	Chapter 10 pg 76
Soil	DUAL/metolachlor	Chapter 11 pg 84
Soil	EPTAM/EPTC	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	LASSO/alachlor	Chapter 11 pg 84
Soil	PROWL/pendimethalin	Chapter 11 pg 85
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides:

Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Seed treater	/captan	Chapter 12 pg 102
Foliage/Seed	DITHANE/mancozeb	Chapter 12 pg 101
Foliage	DIFOLATAN/captafol	Chapter 12 pg 102
Foliage	DUTER/triphenyltin hydroxide	Chapter 12 pg 108
Foliage	DYRENE/anilazine	Chapter 12 pg 111
Foliage	/maneb	Chapter 12 pg 100
Foliage	RIDOMIL/metalaxyl	Chapter 12 pg 113
Foliage	/sulfur	Chapter 5 pg 48
Seed treater	TOPSIN/thiophanate methyl	pg ?(carbamate)
Foliage/Soil	TERRACLOR/PCNB	Chapter 12 pg 93

PUMPKIN

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Soil	AMIBEN/chloramben	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PREFAR/bensulide	Chapter 1 pg 2
Soil	RAMROD/propachlor	Chapter 11 pg 84

Fungicides:

Foliar	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113

RASPBERRIES

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage/Soil	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12

Herbicides:

Soil	CASORON/dichlobenil	Chapter 11 pg 84
Soil	DEVRIOL/napropamide	Not listed in 4th edition
Foliage	FUSILADE/fluazifop butyl	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	KERB/pronamide	Chapter 11 pg 84
Foliage	POST/sethoxydim	Not listed in 4th edition
Foliage/Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Foliage/Soil	SINBAR/terbacil	Chapter 11 pg 86
Foliage/Soil	SURFLAN/oryzalin	Chapter 11 pg 85

Fungicides:

Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	BOTRAN/dicloran	Chapter 12 pg 94
Foliage	/captan	Chapter 12 pg 102
Foliage	KARATHANE/dinocap	Chapter 8 pg 68
Foliage	/sulfur	Chapter 5 pg 48
Foliage	/diazinon	Chapter 1 pg 1

RHUBARB

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Soil	metaldehyde bait	Chapter 15 pg 146
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
<u>Herbicides:</u>		
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
<u>Fungicides:</u>		
Foliage	/captan	Chapter 12 pg 102

SPINACH

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH/permethrin	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
<u>Herbicides:</u>		
Foliage	ANTOR/diethatyl ethyl	Not listed in 4th edition
Soil	BALAN/benefin	Chapter 11 pg 85
Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PREFAR/bensulide	Chapter 1 pg 2
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	/thiram	Chapter 11 pg 87
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113

SPINACH SEED

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	SPUR/fluvalinate	Chapter 5 pg 34
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Foliage	ANTOR/diethatyl ethyl	Not listed in 4th edition
Soil	BALAN/benfin	Chapter 11 pg 85
Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	KERB/pronamide	Chapter 11 pg 84
Soil	PREFAR/bensulide	Chapter 1 pg 2
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85

Fungicides:

Seed treater	/thiram	Chapter 11 pg 87
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113

SQUASH

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Soil	AMIBEN/chloramben	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PREFAR/bensulide	Chapter 1 pg 2

Fungicides:

Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage, Soil	MERTECT/thiabendazole	Chapter 12 pg 113
Foliage	/zineb	Chapter 12 pg 100

STRAWBERRIES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage/Soil	FURADAN/carbofuran	Chapter 2 pg 12
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Soil	metaldehyde bait	Chapter 15 pg 146
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	VENDEX/fenbutatin-oxide	Not listed in 4th edition
<u>Herbicides:</u>		
Soil	DEVIRINOL/napropamide	Not listed in 4th edition
Foliage	/2,4-D amine	Chapter 7 pg 63
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PRINCEP/simazine	Chapter 11 pg 84
Soil	SINBAR/terbacil	Chapter 11 pg 86
Foliage/Soil	TENORAN/chloroxuron	Chapter 11 pg 86
<u>Fungicides:</u>		
Foliage	ARASAN/thiram	Chapter 11 pg 96
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage	bordeaux	Chapter 12 pg 103
Foliage	/captan	Chapter 12 pg 102
Foliage	CYPREX/dodine	Chapter 12 pg 112
Foliage	DYRENE/anilazine	Chapter 12 pg 111
Foliage	KOCIDE 101/copper hydroxide	Chapter 12 pg 102
Foliage	RONILAN/vinclozolin	Not listed in 4th edition
Foliage	/sulfur	Chapter 5 pg 48
Foliage	TOPSIN/thiophanate methyl	Not listed in 4th edition

SUGAR BEET SEED

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Foliage	COMITE/propargite	Chapter 5 pg 44
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Soil	DYFONATE/fonofos	Chapter 1 pg 1
Foliage	DYLOX/trichlorfon	Chapter 1 pg 2
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	METASYSTOX-R/oxydemetonmethyl	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	/sulfur	Chapter 5 pg 48
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Soil	TEMIK/aldicarb	Chapter 2 pg 12
Soil	THIMET/phorate	Chapter 1 pg 1
Foliage	THIODAN/endosulfan	Chapter 3 pg 17

Herbicides:

Foliage	ANTOR/diethatyl ethyl	Not listed in 4th edition
Soil	AVADEX/triallate	Chapter 11 pg 84
Foliage	CARBYNE/barban	Chapter 11 pg 84
Soil	EPTAM or GENEP/EPTC	Chapter 11 pg 84
Soil	FURLOE/chlorpropham	Chapter 11 pg 84
Soil	KERB/pronamide	Chapter 11 pg 84
Soil	NORTRON/ethofumesate	Not listed in 4th edition
Soil	PYRAMIN/pyrazon	Chapter 5 pg 34
Foliage	POST/sethoxydim	Not listed in 4th edition
Soil	Ro Neet/cycloate	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides:

Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Foliage	BENLATE/benomyl	Chapter 12 pg 112
Foliage, Soil	MERTECT/thiabendazole	Chapter 12 pg 113

SUNFLOWER SEED

Application	TRADE NAME/common name	Recognition page #
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Insecticides:

Information not available at this printing

Herbicides:

Soil	AMIBEN/chloramben	Chapter 11 pg 84
Foliage	CARBYNE/barban	Chapter 11 pg 84
Soil	EPTAM/EPTC	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	TREFLAN/trifluralin	Chapter 11 pg 85

Fungicides:

Information not available at this printing

TOMATOES

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage	/diazinon	Chapter 1 pg 1
Foliage	DIBROM/naled	Chapter 1 pg 2
Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	KELTHANE/dicofol	Chapter 3 pg 17
Foliage	LANNATE/methomyl	Chapter 2 pg 12
Foliage	/malathion	Chapter 1 pg 1
Foliage	MARLATE/methoxychlor	Chapter 3 pg 17
Foliage	/parathion	Chapter 1 pg 1
Foliage	PHOSDRIN/mevinphos	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
<u>Herbicides:</u>		
Soil	AMIBEN/chloramben	Chapter 11 pg 84
Soil	DEVINOL/napropamide	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PREFAR/bensulide	Chapter 1 pg 2
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Seed treater	ARASAN/thiram	Chapter 11 pg 96
Foliage	BRAVO/chlorothalonil	Chapter 12 pg 95
Foliage	DYRENE/anilazine	Chapter 12 pg 111
Foliage	DITHANE/mancozeb	Chapter 12 pg 101
Foliage	/maneb	Chapter 12 pg 100
Soil	RIDOMIL/metalaxyl	Chapter 12 pg 113
Soil	TELONE II/dichloropropene	Chapter 14 pg 132
Soil	VORLEX/	Not listed in 4th edition
Foliage	/zineb	Chapter 12 pg 100
Foliage	/ziram	Chapter 11 pg 100

WALNUT

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	AMBUSH or POUNCE/permethrin	Chapter 5 pg 34
Foliage	ASANA/esfenvalerate	Chapter 5 pg 34
Foliage	DIPEL or THURICIDE/bacillus thuringiensis	Chapter 4 pg 32
Foliage	DIBROM/naled	Chapter 1 pg 2
Foliage	/diazinon	Chapter 1 pg 1
Foliage	GUTHION/azinphos methyl	Chapter 1 pg 1
Foliage	LORSBAN/chlorpyrifos	Chapter 1 pg 1
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PYDRIN/fenvalerate	Chapter 5 pg 34
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Foliage	SUPRACIDE/methidathion	Chapter 1 pg 2
Foliage	THIODAN/endosulfan	Chapter 3 pg 17
Foliage	ZOLONE/phosalone	Chapter 1 pg 2
<u>Herbicides:</u>		
Soil	CASORON or NOROSAC/dichlobenil	Chapter 11 pg 84
Soil	DEVINOL/napropamide	Not listed in 4th edition
Soil	EPTAM/EPTC	Chapter 11 pg 84
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	PRINCEP/simazine	Chapter 11 pg 84
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SOLICAM/norflurazon	Not listed in 4th edition
Soil	SURFLAN/oryzalin	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	bordeaux	Chapter 12 pg 103
Foliage	CYPREX/dodine	Chapter 12 pg 112
Foliage	KOCIDE/copper hydroxide	Chapter 12 pg 102
Foliage	/lime sulfur	Not listed in 4th edition

WHEAT

Application	TRADE NAME/common name	Recognition page #
<u>Insecticides:</u>		
Foliage	CYGON/dimethoate	Chapter 1 pg 2
Foliage/Soil	DI-SYSTON/disulfoton	Chapter 1 pg 1
Soil	FURADAN/carbofuran	Chapter 2 pg 12
Seed treater	/lindane	Chapter 3 pg 17
Foliage	/malathion	Chapter 1 pg 1
Foliage	/parathion	Chapter 1 pg 1
Foliage	PENNCAP-M/methyl parathion	Chapter 1 pg 1
Foliage	SEVIN/carbaryl	Chapter 2 pg 12
Soil	THIMET/phorate	Chapter 1 pg 1
<u>Herbicides:</u>		
Foliage	2,4-D	Chapter 7 pg 63
Foliage	AVENGE/difenzoquat	Not listed in 4th edition
Foliage	BANVEL D/dicamba	Chapter 7, 11 pgs 64, 84
Foliage	BROMINAL or BUCTRIL/bromoxynil	pg ? (phenoxy)
Foliage	CARBYNE/barban	Chapter 11 pg 84
Soil	FAR-GO/triallate	Chapter 11 pg 84
Foliage	FINESSE or ALLY/metsulfuron methyl	Not listed in 4th edition
Foliage/Soil	GLEAN/chlorsulfuron	Not listed in 4th edition
Foliage	GRAMOXONE SUPER/paraquat	Chapter 10 pg 76
Soil	HOELON/diclofop methyl	Not listed in 4th edition
Soil	IGRAN/terbutryn	Chapter 11 pg 86
Soil	KARMEX/diuron	Chapter 11 pg 87
Foliage/Soil	LOROX/linuron	Chapter 11 pg 87
Foliage	/MCPA	Chapter 7 pg 64
Foliage	ROUNDUP/glyphosate	Chapter 11 pg 85
Soil	SENCOR or LEXONE/metribuzin	Chapter 11 pg 86
Foliage/Soil	TORDON 22K/picloram	Chapter 11 pg 85
Soil	TREFLAN/trifluralin	Chapter 11 pg 85
<u>Fungicides:</u>		
Foliage	BAYLETON/triadimefon	Chapter 12 pg 113
Seed treater	/captan	Chapter 12 pg 102
Seed treater	DITHANE/mancozeb	Chapter 12 pg 101
Seed treater	/imazalil	Not listed in 4th edition
Seed treater	MERTECT/thiabendazole	Chapter 12 pg 113
Seed treater	NO BUNT/hexachlorobenzene	Chapter 12 pg 90
Seed treater	TERRACOAT/PCNB	Chapter 12 pg 93
Foliage	TILT/propiconazole	Not listed in 4th edition
Soil	VAPAM/metam sodium	Chapter 12 pg 98
Seed treater	VITAVAX/carboxin	Not listed in 4th edition

Chapter 4

GENERAL INFORMATION ABOUT THE MAJOR PESTICIDES USED IN THE NORTHWEST

All pesticides used on agricultural, forest, nursery and other crops are federally registered and have a label approved by the Environmental Protection Agency (EPA). The EPA approved label attached to or accompanying a pesticide container is a legal document approved by EPA as prescribed by the Federal Insecticide, Fungicide and Rodenticide Act as amended October 1988. These pesticides must also be registered by the state in which they will be used to control pests on food, fiber, ornamental and industrial sites.

A label is a great resource aiding you in your diagnosis of pesticide related illness. The label contains important information such as the product TRADE NAME, the signal word, application rates and methods, crops the product can be used on and pests controlled. Also listed are first aid and antidote information and the manufacturers name and address but usually not its phone number.

Additional resource information is available from several sources the most common of which is "Material Safety Data Sheets" (MSDS). MSDS are available from a pesticide dealer or can be obtained by contacting the product manufacturer.

In this chapter you will find many chemicals used by agricultural, forestry, ornamental and industrial applicators in the Pacific Northwest. When a pesticide is offered by more than one manufacturer it will often have more than one Trade Name. When this occurs we have listed the products most commonly used in the PNW.

"Recognition and Management of Pesticide Poisonings" fourth edition is a valuable resource book that outlines the toxicology, symptoms and signs of poisoning. It is designed to aid health professionals recognize symptoms and treat patients that have been exposed to pesticides.

An additional resource of product information is the **Farm Chemicals Handbook**, published annually by Meister Publishing Company, Willoughby, Ohio. Much of the information outlined in this chapter, "A Guide to Characteristics of the Major Pesticides used in the Northwest", can be found in this publication.

A pesticide is placed into one of three general categories according to its use or type of pest controlled; that is Insecticide, Herbicide, Fungicide. Products are listed alphabetically in each category.

Under each respective heading you will find TRADE NAME (product label name) followed by /the common name for the chemical (which may or may not be found on a label). The common name, often referred to in scientific periodicals, is an assigned name given to a particular chemical structure. The Trade Name, common name and the chemical structure name are all useful when cross referencing treatment for a patient exposed to a particular pesticide.

A (/) followed by the common name (small type) indicates that this is the accepted trade reference name for that product. This happens usually after the chemical patent has run out and/or through trade use the chemical name has become the TRADE NAME.

Toxicity:

Table 1 gives a relationship between rating systems for the toxicity of a pesticide. The use of "Signal Word" ratings will appear on a pesticide label in the same general area as the ingredients statement and TRADE NAME of the chemical.

Category	Toxicity	Signal Word	LD ₅₀ oral	LD ₅₀ dermal	Example
Class I	Highly Toxic	"Danger Poison"	0-50	0-200	Furidan Temik Paraquat
Class II	Moderately Toxic	"Warning"	51-500	201-2000	Lorsban Pydrin Roundup
Class III	Slightly Toxic	"Caution"	501-5000	2001-20000	Treflan Banvel D Sevin

Table 1

Category, Toxicity rating words or LD₅₀ levels are not found on a label. LD₅₀ mg/kg does not appear on a label. LD₅₀ is a numerical rating system indicating the number of milligrams (of that particular pesticide) per kilogram (of body weight of test animals) that produces the death of 50% of exposed test animals. This information is found on the MSDS and other scientific fact sheets or literature.

Signal Word:

"Signal Words" will appear on a label in the same general area as the brand name and the ingredient statement. The highly toxic signal word "Danger Poison" will be printed in red and usually have a skull and crossbones.

Applications:

This section can aid you in your diagnosis. It is helpful to know how the pesticide was applied. Many chemicals are applied only as a foliar spray. However some pesticides can be applied to either plant foliage or the soil depending on the pest that is being controlled or stage of growth of the crop that is being protected.

Foliage insecticide sprays are applied to the crop to control chewing or sucking insects.

Foliage herbicide sprays are applied to a crop, that is tolerant to the chemical, while the weeds growing along with the crop are susceptible to the chemical.

Foliage herbicide sprays sometimes can be applied preplant or preemergence to control target weeds.

Foliage fungicide sprays are usually applied to a crop, that is tolerant to the chemical, harboring plant diseases that are susceptible to the chemical.

Soil applied insecticides or herbicides can be either a liquid spray directed at the soil or a granular formulation that is applied to the soil. Soil applied chemicals usually are incorporated into the soil by mechanical equipment, irrigation or natural rain water.

Dusts formulations are blown onto a crop or target pest. They can be considered either foliage or soil applied and therefore are not indicated in the following product outlines.

Seed coating refers to a pesticide application sprayed on the seed coating to protect it from storage pests. Seed coatings also protect the young germinating seedling from soil insects or plant diseases. This application is usually made by a seed treating warehouse. Worker exposure comes from handling treated seed or possibly exposure to dust from treated seed.

Antidote/Treatment:

A great deal of information is available under this heading. We have listed the page number in "Recognition and Management of Pesticide Poisonings" fourth edition where this information can be found. The information found in the fourth edition will aid the professional in identifying the chemical group, its structure, toxicology, signs and symptoms and treatment of the pesticide illness.

Manufacturer:

Under this heading are the major manufacturers of the pesticide. Next is the TRADE NAME for the pesticide, followed by the business and emergency phone numbers that can be called when seeking toxicological or other assistance concerning the pesticide and its affects on your patient.

Insecticide: Ambush or Pounce/permethrin

Toxicity: Class I oral LD₅₀ 430-4000 mg/kg; dermal LD₅₀ >4000 mg/kg.

Signal Word: **Warning** (Ambush), **Danger** (Pounce).

Applications: Foliar spray on various vegetable, fruit, nut, berry, crops, greenhouse nursery, field nursery, indoor plants, termite.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 34.

Manufacturer:

	Trade Name	Business	Emergency
FMC Corporation	Pounce	215 299 6000	716 735 3765
ICI America Inc	Ambush	302 575 3000	800 456 3669

Insecticide: Asana/esfenvalerate

Toxicity: Class I oral LD₅₀ 75-458 mg/kg; dermal LD₅₀ >2000 mg/kg.

Signal Word: **Warning**

Applications: Foliar spray used on various crops vegetable, nuts, forest nursery, Xmas trees, ornamental.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 34.

Manufacturer:

	Trade Name	Business	Emergency
DuPont Chemical Company	Asana XL	800 441 7515	800 441 3637

Insecticide: Comite/propargite.

Toxicity: Class I oral LD₅₀ 2200 mg/kg. Avoid contact with human, animal or fish.

Signal Word: **Danger**.

Application: Foliage spray to control mites in fruit, field crops, berries, hops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 44.

Manufacturer:

	Trade Name	Business	Emergency
Uniroyal Chemical Company	Comite	203 573 2000	203 723 3670

Insecticide: Counter/terbufos

Toxicity: Class I oral LD₅₀ 3.5 9.0 mg/kg; dermal LD₅₀ 29 34 mg/kg.

Signal Word: **Danger Poison**.

Application: Soil applied systemic insecticide used to control soil insects in corn and sugarbeets.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

Manufacturer:

	Trade Name	Business	Emergency
American Cyanamid Company	Counter	201 831 2000	321 937 6100

Insecticide: Cygon/dimethoate.

Toxicity: Class II, oral LD₅₀ 215 mg/kg, dermal LD₅₀ > 1000 mg/kg.

Signal Word: **Warning**

Application: Foliage spray controls a wide range of insects in field crops, fruit, grape, grain, vegetable, buildings. Used as residual wall spray in farm buildings for controlling house flies.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
American Cyanamid Company	Cygon	201 831 2000	321 937 6100

Insecticide: Dasanit/fensulfothion

Toxicity: Class I oral LD₅₀ 2-10 mg/kg, dermal LD₅₀ 3-30 mg/kg.

Signal Word: **Danger Poison**

Application: Soil applied insecticide used to control certain insects in several crops usually through contact in the soil.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Mobay Chemical Corporation	Dasanit	816 242 2000	816 242 2582

Insecticide: /diazinon.

Toxicity: Class II, oral LD₅₀ 300-400 mg/kg; dermal LD₅₀ 3600 mg/kg.

Signal Word: **Caution** or **Warning** (depending on formulation).

Applications: Foliage spray controls plant and soil insects on fruit, vegetable, field, pasture, grass seed crops, ornamental. Used to control household and turf insects, seed treatment.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Ciba Geigy Corporation	Diazinon or Spectricide	919 292 7100	914 478 3131
Pennwalt Corporation	Knox Out, 2FM	409 779 0060	409 846 2993

Insecticide: Dibrom/naled.

Toxicity: Class I, oral LD₅₀ 430 mg/kg, dermal LD₅₀ 1100 mg/kg.

Signal Word: **Danger.**

Application: Foliar spray to control flies in barns, poultry houses, kennels and food processing plants. Not approved for use in grain bins. Liquids applied to green house heating pipes kill insects by vapor action. Used by municipal and mosquito districts.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Dibrom	209 224 2513	415 233 3737

Insecticide: Di-Syston/disulfoton.

Toxicity: Class I oral LD₅₀ 2-12 mg/kg; dermal LD₅₀ 6-25 mg/kg.

Signal Word: **Danger.**

Application: Foliar spray on grain, a soil spray, granular or side dressing applied in seed furrow or broadcast on many crops. Can be used as a seed treater.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Mobay Chemical Corp.	Di-Syston	816 242 2000	816 242 2582

Insecticide: Dursban/chlorpyrifos.

Toxicity: Class I oral LD₅₀ 96-270, dermal LD₅₀ 2,000.

Signal Word: **Warning, liquid; Caution for granular.**

Application: Foliar or soil applied insecticide, liquid or granular for use on field crops, vegetables, corn and several others.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Dow Chemical Company	Lorsban	517 636 1000	517 636 4400

Insecticide: Dyfonate/fonofos.

Toxicity: Class I oral LD₅₀ 8-17.5, dermal LD₅₀ 25. Granular formulation is less hazardous than liquid.

Signal Word: **Danger.**

Application: Soil applied insecticide, liquid or granular for use on field crops, vegetables, corn and several others.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
ICI America Inc.	Dyfonate	302 575 3000	800 456 3669

Insecticide: Dylox/trichlorfon.

Toxicity: Class II oral LD₅₀ 144 mg/kg; dermal LD₅₀ >2000 mg/kg.

Signal Word: **Warning.**

Application: Foliage spray or bait. Registered for use on a wide variety of field crops, vegetables, seed crops, and ornamentals. It is effective when used as a fly bait or spray in dairy buildings.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Mobay Chemical Corporation	Dylox	816 242 2000	816 242 2582

Insecticide: Furadan/carbofuran

Toxicity: Class I oral LD₅₀ 11 mg/kg; dermal LD₅₀ 10,200 mg/kg.

Signal Word: **Danger** (flowable formulation), **Warning** Granular.

Application: Soil applied insecticide to control a broad spectrum of insects on field crops, grapes, grain, some vegetables.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 12.

Manufacturer:

Trade Name	Business	Emergency
FMC Corporation	Furadan	215 299 6000
		716 735 3765

Insecticide: Guthion/azinphos methyl.

Toxicity: Class I oral LD₅₀ 5-20 mg/kg; dermal LD₅₀ 220 mg/kg.

Signal Word: **Danger** **Poison**.

Application: Foliage spray used to control pests on fruit, vegetable, nut, melon, field crops, ornamentals, forest and shade trees.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

Manufacturer:

Trade Name	Business	Emergency
Mobay Chemical Corporation	Guthion	816 242 2000
		816 242 2582

Insecticide: Imidan/phosmet

Toxicity: Class II oral LD₅₀ 147-316 mg/kg; dermal LD₅₀ > 1,500 mg/kg.

Signal Word: **Warning**

Application: Foliage applied insecticide that controls a broad spectrum of insects in fruit, nuts, berries, potato, pea, alfalfa, ornamentals and shade trees.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.

Manufacturer:

Trade Name	Business	Emergency
ICI America Inc.	Imidan	302 575 3000
		800 456 3669

Insecticide: Kelthane/dicofol.

Toxicity: Class II oral LD₅₀ 1300 mg/kg; dermal LD₅₀ 5000 mg/kg.

Signal Word: **Warning** or **Caution** varies with formulation.

Application: Foliar spray used on many fruit, vegetable, ornamental, and field crops for the control of various species of mites.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 17.

Manufacturer:

Trade Name	Business	Emergency
Rohm and Hass Company	Kelthane	215 592 3000
		215 592 3000

<u>Insecticide:</u>	Lannate or Nudrin/methomyl		
<u>Toxicity:</u>	Class I oral LD ₅₀ 17 mg/kg; dermal LD ₅₀ 5880mg/kg.		
<u>Signal Word:</u>	Danger Poison.		
<u>Application:</u>	Foliage spray for control of insects in vegetables, field crops, certain fruit and ornamentals (commercial plantings).		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 12.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Lannate	800 441 7515	800 441 3637
Shell Chemical Company	Nudrin	713 473 9461	713 473 9461

<u>Insecticide:</u>	Lorsban/chlorpyrifos.		
<u>Toxicity:</u>	Class II oral LD ₅₀ 276 mg/kg; dermal LD ₅₀ > 2000 mg/kg.		
<u>Signal Word:</u>	Warning.		
<u>Application:</u>	Foliage spray used to control insects on vegetable, fruit, nut and berry crops, seed treatment, turf and ornamental plant insects, mosquitoes, cockroaches, and other household insects, stored product pests, termites and lice and horn fly on cattle.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
Dow Chemical Company	Lorsban	517 636 1000	517 636 4400

<u>Insecticide:</u>	/malathion.		
<u>Toxicity:</u>	Class III oral LD ₅₀ 1000 mg/kg; dermal LD ₅₀ 4100 mg/kg.		
<u>Signal Word:</u>	Caution.		
<u>Application:</u>	Foliage spray to control a wide variety of insects on many, fruits, vegetables, grape, berry, field crops forage, grain, forest, mosquitos, ornamentals, and stored products.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
American Cyanamid Company	Malathion ULV	201 831 2000	321 937 6100

<u>Insecticide:</u>	Marlate/methoxychlor.		
<u>Toxicity:</u>	Class III oral LD ₅₀ 6000 mg/kg.		
<u>Signal Word:</u>	Caution.		
<u>Application:</u>	Foliage spray to control a wide spectrum of insects. A long residual control on many crops such as vegetable, fruit, field crops, shade tree, cattle, buildings, ornamentals, stored grain.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 17.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Marlate	800 441 7515	800 441 3637

Insecticide: Mesurol/methiocarb

Toxicity: Class II oral LD₅₀ 10 mg/kg; dermal LD₅₀ > 5,000 mg/kg.

Signal Word: **Warning**

Application: Foliage spray applied to fruit, berries and buildings to repel birds. Seed treated, or granulars used at time of seeding to repel birds. Used in various other crops, ornamentals and homes to repel birds.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 12.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Mobay Chemical Corporation	Mesurol	816 242 2000	816 242 2582

Insecticide: /metaldehyde.

Toxicity: Class II oral LD₅₀ 250-1000 mg/kg; dermal > 3100 mg/kg. Can be toxic pets or small children.

Signal Word: **Warning** or **Caution** depending on formulation.

Application: Soil applied used as a molluscicide bait applied to soil around vegetables, fruit, berry and field crops greenhouse and ornamentals. May be formulated with or without calcium arsenate.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 146.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
	Several Manufacturers using different trade names.		

Insecticide: Meta Systox-R/oxydemeton-methyl.

Toxicity: Class III oral LD₅₀ 65-75 mg/kg; dermal LD₅₀ 250 mg/kg. Toxic to bees and fish.

Signal Word: **Warning**

Application: Foliage spray that gives effective control by contact and systemic action on many vegetable, fruit and field crops, ornamental flowers, shrubs and trees.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Mobay Chemical Corporation	Meta Systox R	816 242 2000	816 242 2582

Insecticide: Mocap/ethoprop

Toxicity: Class I oral LD₅₀ 60 mg/kg; dermal LD₅₀ 20 mg/kg.

Signal Word: **Danger** (emulsifiable), **Warning** (granular).

Application: Soil applied spray or granule used to control certain pests on vegetable, potato, grass seed and turf.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Rhone-Poulenc Incorporated	Mocap	919 549 2000	800 334 7577

Insecticide: Monitor/methamidophos.

Toxicity: Class I oral LD₅₀ 15 mg/kg; dermal LD₅₀ 150 mg/kg.

Signal Word: **Danger Poison.**

Application: Foliage applied spray to control certain insects on fruit, potato, and other crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Monitor	209 224 2513	415 233 3737
Mobay Chemical Corporation	Monitor	816 242 2000	816 242 2582

Insecticide: Orthene/acephate.

Toxicity: Class III oral LD₅₀ 945 mg/kg; dermal LD₅₀ >10,250 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray used as a contact and systemic for control of insects on vegetables, field crops, forest, ornamental, plants and certain residential or industrial buildings.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Orthene	209 224 2513	415 233 3737

Insecticide: /parathion.

Toxicity: Class I oral LD₅₀ 13 mg/kg; dermal LD₅₀ 6.8 mg/kg. Toxic to warm-blooded animals.

Signal Word: **Danger.**

Application: Foliage spray that controls many insects in many crops. Sometimes used as a soil spray or granular application.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Monsanto Chemical Company	parathion	314 694 1000	314 694 1000

Insecticide: /methyl parathion.

Toxicity: Class I oral LD₅₀ 9 mg/kg; dermal LD₅₀ 300-400 mg/kg. Pennncap-M: oral LD₅₀ > 60 mg/kg; dermal LD₅₀ > 1200.

Signal Word: **Danger.** For Pennncap-M.

Application: Foliar spray controls many insects. Pennncap M is an encapsulated formulation used to control insects on vegetable, fruit, grape and berry crops, hay, pasture, rangeland, grain, peas, beans (dry, & snap), onions (dry).

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Pennwalt Corporation	Pennncap M	409 779 0060	409 846 2993

Insecticide: Phosdrin/mevinphos.

Toxicity: Class I oral LD₅₀ 3.7-12 mg/kg; dermal LD₅₀ 33.8 mg/kg.

Signal Word: **Danger Poison.**

Application: Foliage spray that kills by contact or fumigation action under plant canopy. Controls insect pests in a broad range of field, forage, vegetable and fruit crops. Dissipates quickly.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Shell Chemical Company	Phosdrin	713 473 9461	713 473 9461

Insecticide: Pydrin/fenvalerate

Toxicity: Class III oral LD₅₀ 3200 mg/kg; dermal LD₅₀ > 5000 mg/kg.

Signal Word: **Warning.**

Application: Foliar spray to control insects on many ornamental, forest, Nursery, Xmas trees, orchard crops, termites, carpenter ants.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 34.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Pydrin	800 441 7515	800 441 3637

Insecticide: Sevin/carbaryl

Toxicity: Class II oral LD₅₀ 500 mg/kg.

Signal Word: **Warning** or **Caution** depending on formulation.

Application: Foliage spray to control insects on more than 100 different vegetable, fruit, nut and field crops, rangeland, forage, forests, lawns, ornamentals, shade trees, poultry, pets and many others.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 12.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Union Carbide Company	Sevin	304 744 3487	212 551 4785

Insecticide: Telone/dichloropropene

Toxicity: Class I oral LD₅₀ 224 mg/kg; dermal 333 LD₅₀ mg/kg.

Signal Word: **Danger.**

Application: Soil applied fumigant that controls insects and weeds in soil that is being prepared for future use.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 132.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Dow Chemical Company	Telone II	517 636 1000	517 636 4400

Insecticide: Temik/aldicarb.

Toxicity: Class I oral LD₅₀ 1 mg/kg; dermal LD₅₀ 20 mg/kg.

Signal Word: **Danger.**

Application: Soil applied systemic insecticide nematicide that controls certain pests on potato, dry beans, sugarbeet, ornamentals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 12.

<u>Manufacturer</u>	Trade Name	Business	Emergency
Rhone-Poulenc Incorporated	Temik	919 549 2000	800 334 7577

Insecticide: Thimet/phorate

Toxicity: Class I oral LD₅₀ 2-4 mg/kg; dermal LD₅₀ 20-30 mg/kg. Toxic to warm blooded animals.

Signal Word: **Danger Poison.**

Application: Soil applied systemic insecticide used to control insects on a wide range of crops; alfalfa, beans, potato, corn, wheat.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 1.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
American Cyanamid Company	Thimet	201 831 2000	321 937 6100

Insecticide: Thiodan/endosulfan

Toxicity: Class I oral LD₅₀ 30 mg/kg, dermal LD₅₀ 359 mg/kg.

Signal Word: **Danger Poison.**

Application: Foliage spray used to control insects on many crops fruit, berry, vegetable, grains, forest, shade trees, ornamentals. Controls termites.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 17.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
FMC Corporation	Thiodan	215 299 6000	716 735 3765

Insecticide: Thuricide or Dipel/bacillus thuringiensis.

Toxicity: Class III nontoxic, safe for the environment.

Signal Word: NA.

Application: Foliage spray for agricultural and ornamental crops. Also used to control mosquito and fly.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 32.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Abbott Laboratories	Dipel	312 934 0201	312 937 6100
PBI Gordon	Batos	816 421 4070	913 342 8783
Sandoz Crop Protection	Thuricide	321 699 1616	321 699 1616

Insecticide: Toxakil or Strobane-T/toxaphene.

Toxicity: Class I oral LD₅₀ 69 mg/kg.

Signal Word: **Warning**

Application: Foliage spray usually. Also effective when used as a dust or mixed bait forms for the control of certain insects.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 17.

Manufacturer:

Trade Name	Business	Emergency
Several Manufacturers.		

Insecticide: Vapam/metam-sodium.

Toxicity: Class III oral LD₅₀ 1700 mg/kg; dermal LD₅₀ > 1800 mg/kg. Can blister skin if contaminated clothing or skin are not washed.

Signal Word: **Warning** or **Caution** depending on formulation.

Application: Soil applied fumigant that controls many insects, weeds and plant diseases on land being prepared for planting.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 98.

Manufacturer:

	Trade Name	Business	Emergency
BASF Corporation	Nemasol	201 316 3000	201 316 3000
ICI America Inc.	Vapam	302 575 3000	800 456 3669
	Several other trade names also being used.		

Insecticide: Vydate/oxamyl.

Toxicity: Class I oral LD₅₀ 5 mg/kg; dermal LD₅₀ 2960 mg/kg.

Signal Word: **Danger**

Application: Foliar spray usually to control certain insects on field crops, vegetables, fruit, ornamentals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 12.

Manufacturer:

	Trade Name	Business	Emergency
DuPont Chemical Company	Vydate	800 441 7515	800 441 3637

HERBICIDES

Herbicide: /2,4-D.

Toxicity: Class I oral LD₅₀ mg/kg 375 mg/kg; dermal LD₅₀ > 375 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray applied to grasses, small grain, sorghum, corn, non-crop areas, and certain other crops. Used as a post-emergent control of broadleaf weeds. Many broadleaf crops are extremely sensitive to 2,4D.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 63.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Dow Chemical Company	Formula 40 or others	517 636 1000	517 636 4400

Herbicide: Alanap/naptalam.

Toxicity: Class II oral LD₅₀ 1770 mg/kg.

Signal Word: **Warning.**

Application: Soil applied preemergence weed control usually combined with other chemicals in certain crops such as cucumbers.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Uniroyal Chemical Company	Alanap L	203 573 2000	203 723 3670

Herbicide: Amiben/chloramben.

Toxicity: Class III oral LD₅₀ 3500 mg/kg.

Signal Word: **Caution.**

Application: Soil applied spray or granule to control weeds preemergence in certain crops, dry beans, squash, vegetables, melons, asparagus.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Rhone-Poulenc Incorporated	Amiben	919 549 2000	800 334 7577

Herbicide: /atrazine.

Toxicity: Class I oral LD₅₀ 1780 mg/kg.

Signal Word: **Warning.**

Application: Soil applied spray, often tank mixed with other chemicals, for preemergence weed control in corn. Also weed control in ornamental planting, roadside, Christmas tree and nonselective weed control on non-croplands.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 86.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Ciba Geigy Corporation	Aatrex	919 292 7100	914 478 3131

Herbicide: Avenge/difenzoquat

Toxicity: Class I oral LD₅₀ 470 mg/kg; dermal LD₅₀ 3540 mg/kg. Slight eye or skin irritation.

Signal Word: Danger.

Application: Foliage spray to control wildoats in certain crops.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	<u>Trade Name</u>	<u>Business</u>	<u>Emergency</u>
American Cyanamid Company	Avenge	201 831 2000	321 937 6100

Herbicide: Balan/benefin.

Toxicity: Class III oral LD₅₀ 5,000 mg/kg.

Signal Word: varies with formulation.

Application: Soil applied preplant to control weeds in alfalfa, clover, lettuce, turf and certain other crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

<u>Manufacturer</u>	<u>Trade Name</u>	<u>Business</u>	<u>Emergency</u>
Elanco Products Company	Balan	317 276 2000	317 276 2000

Herbicide: Basagran/bentazon.

Toxicity: Class II oral LD₅₀ 2063 mg/kg.

Signal Word: Caution.

Application: Foliage spray often tank mixed with other chemicals to control certain weeds in alfalfa, asparagus, clover, peas, dry beans, mint, onion, ornamentals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	<u>Trade Name</u>	<u>Business</u>	<u>Emergency</u>
BASF Corporation	Basagran	201 316 3000	201 316 3000

Herbicide: Banvel/dicamba.

Toxicity: Class II oral LD₅₀ 1707 mg/kg; dermal LD₅₀ > 2000 mg/kg.

Signal Word: Caution.

Application: Foliage spray to control annual and perennial broadleaf weeds in field and silage corn, grain, asparagus, grass seed crops, turf, pasture, rangeland and noncropland areas such as fence rows, roadways and wasteland. Also for control of brush and vines in noncropland, pasture, and rangeland areas.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 64, 84.

<u>Manufacturer:</u>	<u>Trade Name</u>	<u>Business</u>	<u>Emergency</u>
Sandoz Crop Protection	Banvel D	321 699 1616	321 699 1616

Herbicide: Bladex/cyanazine.

Toxicity: Class II oral LD₅₀ 288 mg/kg; dermal LD₅₀ > 2,000 mg/kg.

Signal Word: **Warning.**

Application: Soil applied usually tank mixed for preemergence weed control in corn or fallow cropland.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 86.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Bladex	800 441 7515	800 441 3637

Herbicide: Brominal or Buctril/bromoxynil.

Toxicity: Class II oral LD₅₀ 260 mg/kg.

Signal Word: **Warning.**

Application: Foliage spray, often tank mixed with other chemicals, applied for weed control in grain, grass seed crops.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Rhone-Poulenc Inc.	Bromoxynil, Buctril	919 549 2000	800 334 7577

Herbicide: Carbyne/barban.

Toxicity: Class III oral LD₅₀ 1350 mg/kg; dermal LD₅₀ > 20,000 mg/kg.

Signal Word: **Caution.**

Application: Foliar applied spray for wild oat control in grain and certain other crops, mustard, sugarbeet, sunflower.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Sandoz Crop Protection	Carbyne	321 699 1616	321 699 1616

Herbicide: Casoron or Norosac/dichlobenil.

Toxicity: Class III oral LD₅₀ 3160 mg/kg; dermal LD₅₀ > 1350 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray or granular application cranberry bogs, ornamentals, nurseries, orchards, vineyards, forest plantations, public green areas, industrial sites, railway lines, under asphalt. Aquatic weeds in non-flowing water.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Uniroyal Chemical Company	Casoron	203 573 2000	203 723 3670
PBI Gordon	Norosac	816 421 4070	913 342 8783

Herbicide: Devrinol/napropamide.

Toxicity: Class III oral LD₅₀ 500 mg/kg.

Signal Word: Caution.

Application: Spray or granular application to soil around base of plants in tree fruit, grape, berry, ornamental plantings. Can be applied to established as well as new plantings.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
ICI America Inc.	Devrinol	302 575 3000	800 456 3669

Herbicide: Diquat/diquat.

Toxicity: Class II oral LD₅₀ 600 mg/kg; dermal LD₅₀ > 400 mg/kg.

Signal Word: Warning.

Application: Foliage spray that is nonselective, used as a contact plant desiccant. Sometimes aquatic weed control.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 76.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Diquat	209 224 2513	415 233 3737

Herbicide: Dowpon/dalapon

Toxicity: Class II oral LD₅₀ 970 mg/kg; dermal LD₅₀ 7570 mg/kg.

Signal Word: Warning.

Application: Spray application used as a preplant treatment to control established perennial grasses in cropland and noncropland areas and irrigation ditch banks.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Dow Chemical Company	Dowpon M	517 636 1000	517 636 4400

Herbicide: Dual/metolachlor.

Toxicity: Class II oral LD₅₀ 2780 mg/kg; dermal LD₅₀ 10,000 mg/kg.

Signal Word: Warning.

Application: Soil applied spray, usually applied with other chemicals, or granules for preemergence weed control in certain crops corn, potato, woody ornamentals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Ciba Geigy Corporation	Dual, Bicep	919 292 7100	914 478 3131

<u>Herbicide:</u>	Eptam or Genep/EPTC.		
<u>Toxicity:</u>	Class III oral LD ₅₀ 1325 mg/kg; dermal 1420 LD ₅₀ mg/kg.		
<u>Signal Word:</u>	Caution.		
<u>Application:</u>	Soil applied spray or granular application used to control weeds in potatoes, beans, forage legumes, and other crops.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Genep	209 224 2513	415 233 3737
ICI America Inc.	Eptam	302 575 3000	800 456 3669

<u>Herbicide:</u>	Eradicane/EPTC+.		
<u>Toxicity:</u>	Class III oral LD ₅₀ 1325 mg/kg; dermal 1420 LD ₅₀ mg/kg.		
<u>Signal Word:</u>	Caution.		
<u>Application:</u>	Soil applied preemergence weed control in corn usually applied in combination with other chemicals.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
ICI America Inc.	Eradicane	302 575 3000	800 456 3669

<u>Herbicide:</u>	Far-Go or Avadex BW/triallate.		
<u>Toxicity:</u>	Class II oral LD ₅₀ 1675 mg/kg; may be irritating to skin and eyes.		
<u>Signal Word:</u>	Warning (EC), Caution (G).		
<u>Application:</u>	Soil spray or granular application preplant to control wild oats in grain crops.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
Monsanto Chemical Co.	Far-Go, Avadex BW	314 694 1000	314 694 1000

<u>Herbicide:</u>	Furloe or Sprout Nip or IPC/chlorpropham.		
<u>Toxicity:</u>	Class III oral LD ₅₀ 3700 mg/kg.		
<u>Signal Word:</u>	Caution.		
<u>Application:</u>	Soil applied preplant to control weeds in certain crops alfalfa, snapbean, berries, vegetable, clover, nursery, onion, spinach.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Furloe, Sprout Nip	209 224 2513	415 233 3737

Herbicide: Fusilade/fluazifop.

Toxicity: Class I oral LD₅₀ 2451 mg/kg; dermal LD₅₀ 2420 mg/kg.

Signal Word: **Danger.**

Applications: Foliage applied grass control in certain crops.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

Manufacturer:

	Trade Name	Business	Emergency
ICI America Inc.	Fusilade	302 575 3000	800 456 3669

Herbicide: Glean/chlorsulfuron

Toxicity: Class III oral LD₅₀ 5545 mg/kg; dermal LD₅₀ 3400 mg/kg.

Signal Word: **Caution.**

Application: Soil applied preemergence weed control in certain grain crops.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

Manufacturer:

	Trade Name	Business	Emergency
DuPont Chemical Co.	Glean, Telar	800 441 7515	800 441 3637

Herbicide: Goal/oxyfluorfen.

Toxicity: Class II oral LD₅₀ 5,000 mg/kg; dermal LD₅₀ 10,000 mg/kg.

Signal Word: **Warning.**

Application: Foliar spray for pre and postemergence weed control in certain orchard, vineyard, mint, ornamental crops.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

Manufacturer:

	Trade Name	Business	Emergency
Rohm and Hass Company	Goal	215 592 3000	215 592 3000

Herbicide: Gramoxone/paraquat.

Toxicity: Class I oral LD₅₀ 150 mg/kg.

Signal Word: **Danger poison.**

Application: Foliage spray to control weeds in bearing and non-bearing orchards, shade trees and ornamentals, many seed crops pasture renovation, before planting or crop emergence, dormant alfalfa and clover, directed spray, and for killing potato vines. Also used on noncropland and at industrial sites.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 76.

Manufacturer:

	Trade Name	Business	Emergency
ICI America Inc	Gramoxone	302 575 3000	800 4516 3669

Herbicide: Hoelon/diclofop methyl.

Toxicity: Class I oral LD₅₀ 580 mg/kg; dermal > 5,000 LD₅₀ mg/kg.

Signal Word: **Danger**

Application: Foliage applied weed control of certain grasses in peas, wheat and other grain.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Hoechst-Roussel Agri-Vet.	Hoelon	201 231 2000	210 231 2244

Herbicide: Karmex/diuron.

Toxicity: Class II oral LD₅₀ 3400 mg/kg; dermal LD₅₀ > 5000 mg/kg.

Signal Word: **Warning**

Application: Soil applied spray used as a selective herbicide for control of germinating weeds in berries, alfalfa, grapes, and peppermint. At high application rates, it is a general weed killer or a soil sterilizer.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 87.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Karmex	800 441 7515	800 441 3637

Herbicide: Kerb/pronamide.

Toxicity: Class III oral LD₅₀ 5620 mg/kg.

Signal Word: **Caution**

Application: Foliar or soil directed spray to control grasses in certain orchard, vegetable, grass seed, Xmas tree, berries, nursery stock, ornamental.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Rohm and Hass Company	Kerb	215 592 3000	215 592 3000

Herbicide: Lasso/alachlor

Toxicity: Class I oral LD₅₀ 1800 mg/kg.

Signal Word: **Danger**

Application: Soil applied spray or granular for preemergence weed control in certain crops corn, dry beans, sunflower, milo.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Monsanto Chemical Company	Lasso	314 694 1000	314 694 1000

Herbicide: Lexone or Sencor/metribuzin.

Toxicity: Class III oral LD₅₀ 1100 mg/kg; dermal LD₅₀ 20,000 mg/kg.

Signal Word: Caution

Application: Foliage spray application used to control weeds in wheat, barley, peas, lentils, potatoes, alfalfa, asparagus, and tomatoes.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 86.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Lexone	800 441 7515	800 441 3637
Mobay Chemical Corporation	Sencor	816 242 2000	816 242 2582

Herbicide: Lorox/linuron.

Toxicity: Class III oral LD₅₀ 4,000 mg/kg.

Signal Word: Caution.

Application: Foliar or soil applied spray for pre and postemergence weed control in certain crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 87.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Drexel Chemical Company	Linex	901 774 4370	
DuPont Chemical Company	Lorox	800 441 7515	800 441 3637

Herbicide: /MCPA.

Toxicity: Class III oral LD₅₀ 1160 mg/kg.

Signal Word: Caution.

Application: Foliar applied spray for weed control in certain crops grain, rangeland, peas, fruit, nuts, and turf.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 64.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Rhone-Poulenc Incorporated	MCPA	919 549 2000	800 334 7577

Herbicide: MH 30/maleic hydrazide.

Toxicity: Class III oral LD₅₀ 6950 mg/kg.

Signal Word: Caution.

Application: Foliage spray used as a growth inhibitor or for selective weed control in certain crops. Mostly a potato sprout inhibitor.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Drexel Chemical Company	Retard	901 774 4370	
Uniroyal Chemical Company	MH 30	203 573 2000	203 723 3670

Herbicide: Post/sethoxydim.

Toxicity: Class III oral LD₅₀ 3,200 mg/kg; dermal LD₅₀ 5,000 mg/kg.

Signal Word: **Caution.**

Application: Foliar spray to selectively control grass weeds in certain crops sugarbeet, alfalfa, vegetable, peas, ornamental, fruit.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
BASF Corporation	Post	201 316 3000	201 316 3000

Herbicide: Prefar or Betasan/bensulide.

Toxicity: Class III oral LD₅₀ 271 mg/kg.

Signal Word: **Caution.**

Application: Spray or granular application for preemergence weed control in certain vegetable and ornamental crops, grass lawns.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 2.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
ICI America Inc.	Prefar	302 575 3000	800 456 3669
PBI Gordon	Betasan	816 421 4070	913 342 8783

Herbicide: Princep/simazine.

Toxicity: Class III oral LD₅₀ 5,000 mg/kg; dermal LD₅₀ 31000 mg/kg.

Signal Word: **Caution.**

Application: Spray or granular application to the soil. Used in established alfalfa, cherries, peaches, caneberries, cranberries, grapes, apples, pears, nuts, asparagus, ornamentals, nursery stock, algae control in ponds and in turf grass sod production. At higher rates, it is used for non-selective weed control in industrial areas.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 86.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Ciba Geigy Corporation	Princep	919 292 7100	914 478 3131
	Several other Manufacturers.		

Herbicide: Prowl/pendimethalin

Toxicity: Class II oral LD₅₀ 1250 mg/kg; dermal 75,000 LD₅₀ mg/kg.

Signal Word: **Warning.**

Application: Foliar or soil applied to control weeds in corn and potato.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
American Cyanamid Company	Prowl, Stomp	201 831 2000	321 937 6100

Herbicide: Pyramin/pyrazon.

Toxicity: Class III oral LD₅₀ 3,000 mg/kg.

Signal Word: **Caution.**

Application: Soil applied spray usually tank mixed with other chemicals for preemergence weed control in sugarbeets and tablebeets.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 34.

Manufacturer:

	Trade Name	Business	Emergency
BASF Corporation	Pyramin	201 316 3000	201 316 3000

Herbicide: Ramrod/propachlor.

Toxicity: Class II oral LD₅₀ 710 mg/kg may cause allergic skin reaction.

Signal Word: **Warning.**

Application: Soil applied spray or granule to control certain weeds in corn, milo, pumpkins.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

Manufacturer:

	Trade Name	Business	Emergency
Monsanto Chemical Company	Ramrod	314 694 1000	314 694 1000

Herbicide: Ro Neet/cycloate

Toxicity: Class III oral LD₅₀ 3160 mg/kg.

Signal Word: **Caution.**

Application: Soil applied preplant for weed control in sugarbeets, sugarbeet seed, spinach.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

Manufacturer:

	Trade Name	Business	Emergency
ICI America Inc.	Ro Neet	302 575 3000	800 456 3669

Herbicide: Ronstar/oxadiazon

Toxicity: Class II oral LD₅₀ 5,000 mg/kg; dermal LD₅₀ 72,000 mg/kg.

Signal Word: **Danger (EC), Warning (G,WP).**

Application: Soil application preemergence, often combined with other chemicals for broad spectrum weed control in certain ornamental crops, ornamental plantings and around public buildings.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

Manufacturer:

	Trade Name	Business	Emergency
Rhone-Poulenc Inc.	Ronstar	919 549 2000	800 334 7577

Herbicide: Roundup/glyphosate.

Toxicity: Class II oral LD₅₀ 4300 mg/kg; dermal LD₅₀ 7940 mg/kg.

Signal Word: **Warning.**

Application: Foliage spray to control weeds, tree and woody brush species by ground sprayer, hand-held, aerial application and others. Controls weeds in many crops, industrial, recreational and public areas.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

Manufacturer:

	Trade Name	Business	Emergency
Monsanto Chemical Company	Roundup	314 694 1000	
	Several Manufacturers package the product under different names.		

Herbicide: Sinbar/terbacil.

Toxicity: Class III oral LD₅₀ >5,000 mg/kg.

Signal Word: **Caution.**

Application: Soil applied spray for selective control of many weeds in certain crops such as alfalfa, apples, peaches, blueberries, strawberries, pecans and mint.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 86.

Manufacturer:

	Trade Name	Business	Emergency
DuPont Chemical Company	Sinbar	800 441 7515	800 441 3637

Herbicide: Spin-Aid/phenmedipham

Toxicity: Class III oral LD₅₀ 8,000 mg/kg; dermal LD₅₀ 4,000 mg/kg.

Signal Word: **Caution.**

Application: Foliar spray applied for weed control in sugarbeets, spinach, table beets.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

Manufacturer:

	Trade Name	Business	Emergency
Nor-Am Chemical Co.	Bentamil, Spin Aid	302 575 2000	800 424 9300

Herbicide: Solicam/norflurazon

Toxicity: Class III oral LD₅₀ 10,000 mg/kg.

Signal Word: **Caution.**

Application: Soil applied preplant preemergence weed control in orchard, cranberries.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

Manufacturer:

	Trade Name	Business	Emergency
Sandoz Crop Protection	Solicam	321 699 1616	321 699 1616

Herbicide: Sonalan/ethalfluralin

Toxicity: Class II oral LD₅₀ > 10,000 mg/kg.

Signal Word: Warning

Application: Soil applied preemergence weed control in certain crops dry beans, cucurbits.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Elanco Products Company	Sonalan	317 276 2000	317 276 2000

Herbicide: Surflan/oryzalin.

Toxicity: Class III oral LD₅₀ > 10,000 mg/kg.

Signal Word: Caution.

Application: Soil applied spray usually as a preemergence control of weeds in bearing and nonbearing fruit trees, nut trees, vineyards, and established ornamentals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Elanco Products Company	Surflan	317 276 2000	317 276 2000

Herbicide: Surpass/vernolate+.

Toxicity: Class III oral LD₅₀ 1,800 mg/kg.

Signal Word: Caution.

Application: Soil applied preplant to control grass weeds in corn. Usually applied tank mix with other chemicals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
ICI America Inc.	Surpass	302 575 3000	800 456 3669

Herbicide: Sutan+ or Genate+ /butylate.

Toxicity: Class III oral LD₅₀ 3,878 mg/kg; dermal LD₅₀ > 4,640 mg/kg.

Signal Word: Caution.

Application: Soil applied spray often tank mixed with other chemicals or granulars applied preemergence for weed control in corn.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 84.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Genate+	209 224 2513	415 233 3737
ICI America Inc.	Sutan+	302 575 3000	800 456 3669

Herbicide: Tenoran/chloroxuron

Toxicity: Class III oral LD₅₀ 3,700 mg/kg; dermal LD₅₀ > 10,000 mg/kg.

Signal Word: Caution.

Application: Soil or foliage spray but usually directed at the soil for pre or postemergence weed control in several crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 86.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Ciba Geigy Corporation	Tenoran	919 292 7100	914 478 3131

Herbicide: Tordon/picloram

Toxicity: Class II oral LD₅₀ 8200 mg/kg.

Signal Word: Warning.

Application: Foliar or soil application for weed and brush control in pasture and non-cropland, right-of-way, small grain.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Dow Chemical Company	Tordon 22K	517 636 1000	517 636 4400

Herbicide: Treflan/trifluralin.

Toxicity: Class II or III oral LD₅₀ 10,000 mg/kg.

Signal Word: Warning, depending on formulation.

Application: Soil applied liquid spray or granular that controls weeds in beans, sugarbeets, transplants of cabbage and other vegetables. Nonbearing vineyards, established alfalfa, potatoes. Postplant on greens, okra, cantaloupe, cucumbers, and watermelons; established ornamental, mint and hops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 85.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Elanco Products Co.	Treflan	317 276 2000	317 276 2000

Herbicide: Vapam/metam-sodium.

Toxicity: Class III oral LD₅₀ 1700 mg/kg; dermal LD₅₀ > 1800 mg/kg. Can blister skin if contaminated clothing or skin not washed.

Signal Word: Warning or Caution depending on formulation.

Application: Soil applied fumigant that controls many insects, weeds and plant diseases in soil being prepared for planting.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 98.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
ICI America Inc.	Vapam	302 575 3000	800 456 3669
	Several other trade names being used	Soil Prep Nemasol.	

Herbicide: Velpar/hexazione.

Toxicity: Class II oral LD₅₀ 1,690 mg/kg; dermal LD₅₀ 5,278 mg/kg.

Signal Word: **Warning**

Application: Foliar or soil applied spray to control grass, broadleaf weeds and brush in certain crops, noncropland and forest.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Velpar	800 441 7515	800 441 3637

FUNGICIDES

Fungicide: Bayleton/triademifon.

Toxicity: Class II or III oral LD₅₀ 1,020 mg/kg; dermal LD₅₀ 5,000 mg/kg.

Signal Word: Warning (WP), Caution (EC, G).

Application: Foliage spray to control plant diseases in orchard, grain, vineyard, vegetable, grass seed, turf, ornamentals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 113.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Mobay Chemical Corp.	Bayleton	816 242 2000	816 242 2582

Fungicide: Benlate/benomyl.

Toxicity: Class III oral LD₅₀ 10,000 mg/kg; dermal LD₅₀ > 10,000 mg/kg.

Signal Word: Caution.

Application: Foliage spray for the control of a wide range of diseases of fruits, nuts, vegetables, field crops, turf, and ornamentals.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 112.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Benlate	800 441 7515	800 441 3637

Fungicide: /bordeaux.

Toxicity: No LD₅₀ rating at this time.

Chemical Composition: Hydrated lime plus copper sulfate.

Application: Foliage spray used to control plant diseases such as mildew on a variety of crops. Used as a dormant spray on many orchard, nut and vineyard crops, ornamentals, sometimes used on vegetables.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 103.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Uniroyal Chemical Company	bordeaux	203 573 2000	203 723 3670

Fungicide: Botran/dicloran.

Toxicity: Class III oral LD₅₀ 5,000 mg/kg.

Signal Word: Caution.

Application: Foliage spray to control plant diseases on many crops. Used preharvest on orchard, often used post harvest to prevent storage rots in fruit, vegetable, field crops, ornamental.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 94.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Nor-Am Chemical Co.	Botran, Botel	302 575 2000	800 424 9300

Fungicide: Bravo/chlorothalonil

Toxicity: Class I, LD₅₀ 10,000 mg/kg; dermal LD₅₀ 10,000 mg/kg.

Signal Word: **Danger, Warning** Skin and eye irritant.

Application: Foliage spray used to control plant diseases in, vegetable, grass seed, turf, ornamental.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 113.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
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SDS Biotech Corp. Painesville, Ohio	Bravo Daconil 2787		
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Fungicide: Captan or Orthocide/captan.

Toxicity: Class III oral LD₅₀ 9,000 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray used to control plant diseases on orchards, grapes, small fruits, berries, vegetable, and ornamental crops. Used as a seed treater to protect seeds from soil diseases.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 102.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
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Valent USA Corp.	Orthocide	209 224 2513	415 233 3737
ICI America Inc.	Captan	302 575 3000	800 456 3669
Drexel Chemical Company	Captan	901 774 4370	

Fungicide: Cyprex/dodine.

Toxicity: Class I oral LD₅₀ 1,000 mg/kg; dermal LD₅₀ > 6,000 mg/kg.

Signal Word: **Danger.**

Application: Foliage spray used to control plant diseases in orchard, nuts, berries.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 112.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
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American Cyanamid Company	Cyprex	201 831 2000	321 937 6100
Drexel Chemical Company		901 774 4370	

Fungicide: Difolatan/captafol.

Toxicity: Class II oral LD₅₀ 5,000 mg/kg.

Signal Word: **Warning**

Application: Foliage spray used to control fungus diseases in grain, potato.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 102.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
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Mobay Chemical Corp.	Difolatan	816 242 2000	816 242 2582
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Fungicide: Dithane or Manzate/mancozeb.

Toxicity: Class III oral LD₅₀ 11,200 mg/kg; dermal LD₅₀ 15,000 mg/kg.

Signal Word: Caution.

Application: Foliage spray used to control plant diseases in orchard, vegetable, nut, and field crops. It can be used as a seed treatment for potatoes, corn, tomatoes, cereal grains.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 101.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Manzate	800 441 7515	800 441 3637
Rohm and Hass Company	Dithane	215 592 3000	

Fungicide: Duter/triphenyltin

Toxicity: Class II oral LD₅₀ 156 mg/kg; dermal LD₅₀ 1,600 mg/kg.

Signal Word: Warning.

Application: Foliage spray used to control plant diseases in potato, sugarbeet, certain vegetables.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 108.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Hoechst-Roussel Agri-Vet.	Duter	201 231 2000	210 231 2244

Fungicide: Dyrene/anilazine.

Toxicity: Class I oral LD₅₀ 5,000 mg/kg; dermal LD₅₀ > 5,000 mg/kg.

Signal Word: Danger.

Application: Foliage spray used to control fungus diseases in ornamental, turf, certain vegetables and other crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 111.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Mobay Chemical Corp.	Dyrene	816 242 2000	816 242 2582

Fungicide: /ferbam.

Toxicity: Class III oral LD₅₀ > 17,000 mg/kg.

Signal Word: Caution.

Application: Foliage spray used to control plant diseases in orchard, nuts and many other crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 99.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
	Several Manufacturers package products containing ferbam.		

Fungicide: Funginex/triforine

Toxicity: Class III (WP) Class II (EC) oral LD₅₀ > 16,000 mg/kg; dermal LD₅₀ > 10,000 mg/kg.

Signal Word: **Caution** (WP) **Danger**.

Application: Foliage spray used to control plant diseases in orchard, vegetable, berry, grain, ornamental. Can be used as a post harvest dip.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 113.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Funginex	209 224 2513	415 233 3737

Fungicide: Gallex/xlenol, + meta cresol

Toxicity: Class II.

Signal Word: **Warning** .

Application: Soil application usually a drench to control crown gall and other bacteria diseases on trees, vines, ornamentals.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
AgBioChem Inc.	Gallex	415 254 0789	415 254 0789

Fungicide: Galltrol/agrobacterium

Toxicity: Class II.

Signal Word: **Warning** .

Application: Used as a dip on seedling, cuttings, bare rootstock to control crown gall.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition, this product is an agricultural bacteria.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
AgBioChem Inc.	Galltrol A	415 254 0789	415 254 0789

Fungicide: /imazalil.

Toxicity: Class II.

Signal Word: **Warning** .

Application: Seed treatment on grain, post harvest decay on certain fruit.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
FMC Corporation	Fresh Guard	215 299 6000	716 735 3765
Wilbur Ellis Company	Nu Zone	415 772 4000	415 772 4000

Fungicide: Karathane/dinocap.

Toxicity: Class III oral LD₅₀ 980 mg/kg.

Signal Word: Caution .

Application: Foliage spray used to control fungus diseases on plants. Also used to control mites on fruit, vegetables, ornamental.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 68.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Rohm and Hass Company	Karathane	215 592 3000	215 592 3000

Fungicide: Kocide 101/copper hydroxide.

Toxicity: Class III oral LD₅₀ 1,000 mg/kg. Can cause severe eye irritation

Signal Word: Caution.

Application: Foldage spray used to control plant diseases on alfalfa, orchard, beans, berries, crucifer and cole crops, melons, cranberry, cucumber, vineyards, nuts, vegetable, ornamental small grain.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 102.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Griffin Corporation	Kocide 101	912 242 8635	

Fungicide: /lime sulfur.

Toxicity: Class I, Aqueous solution or calcium polysulfide.

Signal Word: Danger

Application: Foliage spray used to control diseases usually as a dormant or delay dormant spray in orchard, nuts, berry, some ornamental and many other crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 48.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Lime Sulfur	209 224 2513	415 233 3737
C.H. Lilly Company	Lime Sulfur	503 256 4600	

Fungicide: /maneb.

Toxicity: Class III oral LD₅₀ 7,990 mg/kg.

Signal Word: Caution.

Application: Foliage spray used to control blight on potatoes, tomatoes and many other diseases of fruits, vegetables, and field crops; also a turf fungicide.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 100.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
	Several Manufacturers produce a form of maneb.		

Fungicide: Manzate or Dithane/mancozeb.

Toxicity: Class III oral LD₅₀ 11,200 mg/kg; dermal LD₅₀ 15,000 mg/kg.

Signal Word: Caution.

Application: Foliage spray to used to control plant diseases in orchard,vegetable, nut, and field crops. It can be used as a seed treatment for potatoes, corn, tomatoes, cereal grains.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 101.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
DuPont Chemical Company	Manzate	800 441 7515	800 441 3637
Rohm and Hass Company	Dithane	215 592 3000	

Fungicide: Mertect/thiabendazole

Toxicity: Class III oral LD₅₀ 3,100 mg/kg.

Signal Word: Caution .

Application: Foliage spray used to control molds and rots.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 113.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
MSD Agvet, Merck & Co.	Mertect, Arbotect	210 855 3800	215 661 7300.

Fungicide: No Bunt/hexachlorobenzene

Toxicity: oral LD₅₀ 10,000 mg/kg.

Signal Word:

Application: Seed protectant to control bunts and smuts in wheat.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 90.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
	Several Manufacturers produce a form No bunt or HCB.		

Fungicide: Orthocide or Captan/captan.

Toxicity: Class III oral LD₅₀ 9,000 mg/kg.

Signal Word: Caution.

Application: Foliage spray used to control plant diseases on orchards, grapes, small fruits, berries, vegetable, and ornamental crops. Used as a seed treater to protect seeds from soil diseases.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 102.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Orthocide	209 224 2513	415 233 3737
ICI America Inc.	Captan	302 575 3000	800 456 3669
Drexel Chemical Company	Captan	901 774 4370	

<u>Fungicide:</u>	Phaltan/folpet		
<u>Toxicity:</u>	Class II oral LD ₅₀ 10,000 mg/kg.		
<u>Signal Word:</u>	Warning		
<u>Application:</u>	Foliage spray to control plant diseases on berry, orchard, vegetable crops, ornamentals, seed bed treatment.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 102.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
Valent USA Corp.	Fungitrox II	209 224 2513	415 233 3737
ICI America Inc.	Phaltan	302 575 3000	800 456 3669

<u>Fungicide:</u>	Phygon/dichlone		
<u>Toxicity:</u>	Class III oral LD ₅₀ 1,300 mg/kg; dermal LD ₅₀ 5,000 mg/kg.		
<u>Signal Word:</u>	Caution.		
<u>Application:</u>	Foliage spray used to control plant diseases on orchard, vegetable, field crops, ornamental, public outdoor plantings.		
<u>Antidote Treatment:</u>	Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
	Several Manufacturers produce Phygon.		

<u>Fungicide:</u>	Ridomal/metalaxyl		
<u>Toxicity:</u>	Class I oral LD ₅₀ 669 mg/kg; dermal LD ₅₀ 3,100 mg/kg.		
<u>Signal Word:</u>	Danger.		
<u>Application:</u>	Spray applied to seed to protect it from soil diseases that are injurious to plants.		
<u>Antidote Treatment:</u>	Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 113.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
Ciba Geigy Corporation.	Ridomil, Subdue	919 292 7100	914 478 3131

<u>Fungicide:</u>	Ronilan/vinclozolin.		
<u>Toxicity:</u>	Class III oral LD ₅₀ 10,000 mg/kg; dermal LD ₅₀ 2,000 mg/kg.		
<u>Signal Word:</u>	Caution.		
<u>Application:</u>	Foliage spray used to control plant diseases on vineyards, orchards, hops, vegetable, ornamental, turf.		
<u>Antidote Treatment:</u>	Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.		
<u>Manufacturer:</u>	Trade Name	Business	Emergency
BASF Corporation	Ronilan	201 316 3000	201 316 3000
Sierra Chemical Company	Vorlan	314 275 7561	

Fungicide: Rovral/iprodione

Toxicity: Class III oral LD₅₀ 10,000 mg/kg; dermal LD₅₀ > 5,000 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray used to control plant diseases on vineyard, orchard, berry, vegetable, ornamental, flowers, turf, seed treater.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 112.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Rhone-Poulenc Incorporated	Rovral Chipco 26019	919 549 2000	800 334 7577

Fungicide: Rubigan/fenarimol.

Toxicity: Class II or Class III, varies with formulation.
Oral LD₅₀ 4,500 mg/kg; dermal LD₅₀ 2,500 mg/kg.

Signal Word: **Warning, Caution.**

Application: Foliage spray used to control plant diseases in orchard, other crops and ornamentals.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Elanco Products Company	Rubigan	317 276 2000	317 276 2000

Fungicide: Spergon/chloranil

Toxicity: Oral LD₅₀ 4,000 mg/kg.

Signal Word:

Application: Seed treatment to protect seed and seedlings from soil diseases.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Uniroyal Chemical Company	Spergon	203 573 2000	203 723 3670

Fungicide: /sulfur.

Toxicity: Class III.

Signal Word: **Caution.**

Application: Foliage spray used to control plant diseases in most crops.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 48.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
ICI America Inc.	Magnetic 6	302 575 3000	800 456 3669
Sandoz Crop Protection	Thiolux	321 699 1616	321 699 1616
Stoller Chemical Company	This, That	713 461 2910	713 466 1975
Drexel Chemical Company	Suffa	901 774 4370	

Fungicide: Telone/dichloropropene.

Toxicity: Class III oral LD₅₀ mg/kg; dermal LD₅₀ mg/kg.

Signal Word: Danger.

Application: Soil applied spray used when preparing ground for planting. Control soil diseases in many crops.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 132.

Manufacturer:

	Trade Name	Business	Emergency
Dow Chemical Company	Telone II	517 636 1000	517 636 4400

Fungicide: Terracoat/etridiazole.

Toxicity: Class I oral LD₅₀ 1,077 mg/kg; dermal LD₅₀ 1,700 mg/kg.

Signal Word: Danger.

Application: Seed treater, in-furrow treater or soil applied to control plant diseases in grain, vegetable, ornamental, turf.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

Manufacturer:

	Trade Name	Business	Emergency
Sierra Chemical Company	Truban	314 275 7561	
Uniroyal Chemical Company	Terra Coat	203 573 2000	203 723 3670
United Agri-products Inc.	Phorate TSX	303 356 4400	303 356 4400

Fungicide: /thiram.

Toxicity: Class III oral LD₅₀ 780 mg/kg.

Signal Word: Caution.

Application: Foliage spray used to control certain plant diseases in orchard, berries, vegetables. As seed protectant reduces loss from soil diseases.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 96.

Manufacturer:

	Trade Name	Business	Emergency
DuPont Chemical Company	thiram	800 441 7515	800 441 3637
Pennwalt Corporation	thiram	409 779 0060	409 846 2993
	Several Manufacturers using different trade names.		

Fungicide: Tilt/propiconazol

Toxicity: Oral LD₅₀ 4,000 mg/kg.

Signal Word:

Application: Foliage spray used to control plant diseases in grain, grass seed.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

Manufacturer:

	Trade Name	Business	Emergency
Ciba Geigy Corporation	Tilt	919 292 7100	914 478 3131

Fungicide: Topsin/thiophanate-methyl.

Toxicity: Class III oral LD₅₀ 7,500 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray to give systemic control plant diseases in orchard, vegetable, turf.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Pennwalt Corporation	Top-sin M	409 779 0060	409 846 2993

Fungicide: Vitavax/carboxin

Toxicity: Class III oral LD₅₀ 3,820 mg/kg; dermal LD₅₀ 8,000 mg/kg.

Signal Word: **Caution.**

Application: Seed treater used to control soil diseases in grain, corn, and other crops.

Antidote Treatment: Information is not found in "Recognition and Management of Pesticide Poisonings" fourth edition.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Uniroyal Chemical Company	Vitavax	203 573 2000	203 723 3670

Fungicide: /zineb.

Toxicity: Class III oral LD₅₀ > 5,200 mg/kg; dermal LD₅₀ 2,500 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray used to control fungus plant disease on fruit and vegetables.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 100.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Several Manufacturers produce a form of zineb.			

Fungicide: /ziram.

Toxicity: Class III oral LD₅₀ 1,400 mg/kg; dermal LD₅₀ > 6,000 mg/kg.

Signal Word: **Caution.**

Application: Foliage spray used to control plant diseases in fruit and vegetables.

Antidote Treatment: Information is found in "Recognition and Management of Pesticide Poisonings" fourth edition, page 99.

<u>Manufacturer:</u>	Trade Name	Business	Emergency
Several Manufacturers produce ziram.			

INDEX

A

Abott Laboratories	3
acephate	78
Ag Chem & Hop Lab, WA Dept of Ag	5,15
AgBioChem Inc.	3
agrobacterium	101
alachlor	89
Alanap	83
aldicarb	80
Alfalfa Hay	27
Alfalfa Seed	28
Alternatives To Pesticides	6,23
Ambush	72
American Cyanamid Company	3
Amiben	83
anilazine	100
Apple	29
Apricots	30
Asana	72
Asparagus	30
atrazine	83
Avadex BW	87
Avenge	84
azinphos methyl	75

B

bacillus thuringiensis	80
Balan	84
Banvel	84
barban	85
Barley	31
Basagran	84
BASF Corporation	3
Bayleton	98
Beans, Dry	32
Beans, Snap	33
Beet Seed, Table	34
Beets, Table	34
benefin	84
Benlate	98
benomyl	98
bensulide	91
bentazon	84
Betasan	91
Blackberry	35
Bladex	85
Blueberry	36
bordeaux	98
Botran	98
Boysenberry	36
Bravo	99
Broccoli	37
Brominal	85
bromoxynil	85
Brussel Sprout	37
Buctril	85
Bureau of Dairy, Idaho Dept of Ag	5,18
butylate	94

C

C.H. Lilly Company	3
Cabbage Seed	39
Cabbage	37
Capitol Medical Laboratory	4,9

captafol	99
captan	99
carbaryl	79
carbofuran	75
carboxin	107
Carbyne	85
Carrot	38
Carrot Seed	38
Casoron	85
Cauliflower	37
Chemical Fallow	39
Chemtrec	1,8
Cherry	40
Childrens Hospital & Medical Center	8
chloramben	83
chloranil	105
chlorothalonil	99
chloroxuron	95
chlorpropham	87
chlorpyrifos	74,76
chlorsulfuron	88
Christmas Tree	41
Ciba Geigy Corporation	3
Clover Hay	42
Clover Seed	42
Comite	72
Consulting Associates, Boise	6,22
Coop Extension Service, U of Idaho	4,12
Coop Extension Service, Oregon State U	4,12
Coop Extension Service, WSU	4,12
copper hydroxide	102
Corn, Field and Silage	43
Corn, Sweet	44
Counter	72
Cranberry	45
Cucumber	45
Currant	46
cyanazine	85
cycloate	92
Cygon	73
Cyprex	99

D

2,4-D	83
Dairy & Food Div, WA Dept of Ag	5,18
dalapon	86
Dasanit	73
Deaconess Medical Center	1,8
Department of Laboratory Medicine, U of W	9,10
Devrinol	86
Di-Syston	74
diazinon	73
Dibrom	73
dicamba	84
dichlobenil	85
dichlone	104
dichloropropene	79,106
diclofop methyl	89
dicloran	98
dicofof	75
difenzoquat	84
Difolatan	99
dimethoate	73
dinocap	102

linuron	90
Loganberry	51
Lorox	90
Lorsban	76
Loveland Industries Inc.	3

M

Magic Valley Regional Medical Center	4,9
malathion	76
maleic hydrazide	90
mancozeb	100, 103
maneb	102
Manzate	100, 103
Marlate	76
Mary Bridge Childrens Health Center	1,8
MCPA	90
Medical Central Laboratory	4,9
Melons	51
Mercy Medical Center	4,9
Merk & Company	3
Mertect	103
Mesuroi	77
Meta Systox-R	77
metalaxyl	104
metaldehyde	77
metam-sodium	81
methamidophos	78
methiocarb	77
methomyl	76
methoxychlor	76
methyl parathion	78
metolachlor	86
metribuzin	90
Metropolitan Hospitals Laboratory	4,9
mevinphos	79
MH 30	90
Michael Watson, Toxicologist	10
Mint	52
Mobay Chemical Corporation	3
Mocap	77
Monitor	78
Monsanto Chemical Company	3
MSD Agvet, Merck & Co.	3
Mustard	53

N

Nat Coalition Against Misuse of Pesticides	6,22
Nat Institute of Occupational Safety & Health	5,13
N W Coalition for Alternatives to Pesticides	6,23
NACAMP	6,22
naled	73
napropamide	86
naptalam	83
NCAP	6,23
Nemasol	81, 95
NIOSH	5,13
No Bunt	103
Nor-Am Chemical Company	3
norflurazon	93
Norosac	85
Nu Zone	101
Nudrin	75

O

Oat	54
Occupational Safety & Health Adm	
OSHA Boise	5,16
OSHA Seattle	5,16

Occupational Medicine Clinic	4,9
OERS	5,14
Office of Health Monitoring, OR	5,13
Onion	54
Oregon County Extension Offices	2
Oregon Medical Laboratory	4,9
Oregon Department of Ag	4,5,10,15
Oregon Department of Forestry	5,20
Oregon Department of Environmental Quality	4,11
Oregon Occupational Safety and Health	5,16
Oregon Emergency Response System	5,14
Oregon Health Sciences University	1,8
Oregon Department of Health and Welfare	5,13
Oregon Legal Services Corporation	6,21
Oregon State University	4,12
Oregon Health Division	6,13
Oregon Dept. of Environmental Quality	4,11
Oregonians for Food and Shelter	6,22
Ornamental and Turf	55
Orthene	78
Orthocide	99, 103
oryzalin	94
OSHA	16
oxadiazon	92
oxamyl	81
oxydemeton-methyl	77
oxyfluorfen	88

P

paraquat	88
parathion	78
PARC	5,14
Pathologist Regional Laboratory	4,9
PBI Gordon	3
Pea	58
Pea Seed	59
Peach	56
Pear	57
pendimethalin	91
Pennwalt Corporation	3
Pepper	59
permethrin	72
Pest Management Practices	6,22
Pesticide Analytical Response Center	5,14
Pesticide Incident Reporting	5,14
Pesticide Health and Safety Education	6,24
Pesticides and Chemical Laboratory	5,15
Phaltan	104
phenmedipham	93
Phorate TSX	106
phorate	80
Phosdrin	79
phosmet	75
Phygon	104
Physicians Laboratory	4,9
picloram	95
PIRT	5,14
Plum	60
POISON CONTROL CENTER	1,8
Idaho	1,8
Oregon	1,8
Washington	1,8
Post	91
Potato	61
Pounce	72
Prefar	91
Princep	91
Private and Hospital Laboratories	4,9
pronamide	89
propachlor	92

propargite	72
propiconazol	106
Prowl	91
Prune	60
Pumpkin	62
Pydrin	79
Pyramin	92
pyrazon	92

Q-R

Radish	53
Ramrod	92
Raspberry	62
Regional Pesticides and Chemical Laboratory	5,15
Rhone-Poulenc Incorporated	3
Rhubarb	63
Ridomal	104
Ro Neet	92
Rohm and Hass Company	3
Ronilan	104
Ronstar	92
Roundup	93
Rovral	105
Rubigan	105

S

Sacred Heart Medical Center	1,4,8,9
SALUD, Phoenix	6,23
Sandoz Crop Protection	3
SDS Biotech K.K.	3
Sencor	90
sethoxydim	91
Sevin	79
Shell Chemical Company	3
Sierra Chemical Company	3
simazine	91
Sinbar	93
Soil Prep	95
Solicam	93
Sonalan	94
Spergon	105
Spin-Aid	93
Spinach Seed	64
Spinach	63
Sprout Nip	87
Squash	64
St. Alphonsus Hospital	1,8
St. Elizabeth Medical Center	4,9
State Pesticide Laboratory	5,15
State Coordinating Group	5,14
Stoller Chemical Company	3
Strawberry	65
Strobane-T	80
Sugar Beet Seed	66
sulfur	105
Sunflower Seed	66
Surflan	94
Surpass	94
Sutan	94
Swiss Chad	53

T

Telephone Numbers	1
Telone	79, 106
Temik	80
Tenoran	95
terbacil	93
terbufos	72

Terracoat	106
thiabendazole	103
Thimet	80
Thiodan	80
thiophanate-methyl	107
thiram	106
Thuricide	80
Tilt	106
Tomato	67
Topsin	107
Tordon	95
Toxakil	81
toxaphene	81
Treasure Valley Laboratory	4,9
Treflan	95
triademifon	98
triallate	87
trichlorfon	74
trifluralin	95
triforine	101
triphenyltin	100
Truban	106
Turnip	53

U

U of W Dept. of Environmental Health	4,12
U.S. Forest Service, Portland	5,20
U.S. Forest Service, Missoula	5,20
Union Carbide Company	3
Uniroyal Chemical Company	3
United Agri-products Inc.	3
University Extension Services	4,12
University Hospital	4,9
University of Idaho	4,12

V

Valent USA Corporation	3
Vapam	81
Velpar	96
Velsicol Chemical Company	3
vernolate	94
vinclozolin	104
Vitavax	107
Vydate	81

W

Walnut	68
Washington Toxic Coalition	6,23
Washington State University	4,12
Washington Friends of Farms and Forests	6,22
Washington State Pesticide Advisory Board	5,14
Washington Dept of Health	5,13
Washington Toxic Coalition	6,23
Washington Dept of Agriculture	10
Yakima, WA	4,10
Olympia, WA	4,10
Washington Dept of Social & Health Services Lab	5,13
Washington Dept of Natural Resources	5,20
Washington Dept of Ecology	
Olympia	4,11
Redmond	4,11
Spokane	4,11
Yakima	4,11
Washington Dept of Labor & Industries	5,16
Washington County Extension Offices	2
Waste/Spills/Accidents	4,11
Wheat	69
Wilbur Ellis Company	3

Work Group on Pesticide Health & Safety	6,24
Worker Health and Safety	5,16
X	
xyleneol, + meta cresol	101
Y	
Yakima Valley Memorial Hospital	1,8
Z	
zineb	107
ziram	107