

# Contents

<b>Introduction</b>	xxi
<b>Physico-chemical Data and Abbreviations</b>	xxiii
<b>INSECTICIDES</b>	<b>1</b>
<b>Carbamates</b>	<b>3</b>
Bendiocarb	7
Benfuracarb	10
Carbaryl	15
Carbofuran	25
Carbosulfan	34
Ethiofencarb	39
Formetanate	43
Methiocarb	49
Metolcarb	53
Pirimicarb	57
Propoxur	63
Trimethacarb	68
XMC	73
Xylylcarb	75
<b>Macrocyclic insecticides</b>	<b>79</b>
Abamectin	81
Emamectin benzoate	87
Milbemectin	95
Spinosad	99
<b>Neonicotinoids</b>	<b>105</b>
Acetamiprid	107
Imidacloprid	111
Nitenpyram	121
Thiamethoxam	124
<b>Nereistoxin precursors</b>	<b>127</b>
Cartap	129
Thiocyclam	134

<b>Organochlorine insecticides</b>	139
Chlordane	143
DDT	150
Dicofol	159
Dienochlor	161
Endosulfan	165
Gamma-HCH	171
Heptachlor	177
Methoxychlor	181
<b>Organophosphorus insecticides</b>	187
Acephate	201
Azamethiphos	205
Azinphos-ethyl	207
Azinphos-methyl	211
Cadusafos	218
Chlorethoxyfos	220
Chlorfenvinphos	224
Chlormephos	231
Chlorpyrifos	234
Chlorpyrifos-methyl	243
Coumaphos	247
Cyanophos	251
Demeton-S-methyl	255
Diazinon	258
Dichlorvos	264
Dicrotophos	268
Dimethoate	274
Dimethylvinphos	282
Disulfoton	287
EPN	291
Ethion	296
Ethoprophos	299
Etrimfos	303
Famphur	307
Fenamiphos	309
Fenitrothion	314
Fenthion	326
Flupyrzofos	332
Fonophos	335
Formothion	340
Heptenophos	343
Isazofos	346
Isofenphos	349

<b>Organophosphorus insecticides (cont.)</b>	
Isoxathion	355
Malathion	360
Mecarbam	368
Methamidophos	372
Methidathion	377
Mevinphos	383
Monocrotophos	388
Naled	394
Omethoate	397
Oxydemeton-methyl	402
Parathion	408
Parathion-methyl	417
Phenthoate	422
Phorate	428
Phosalone	433
Phosmet	437
Phosphamidon	441
Phoxim	447
Pirimiphos-methyl	451
Profenofos	455
Propaphos	458
Propetamphos	462
Prothiofos	466
Pyraclofos	472
Pyridaphenthion	476
Quinalphos	480
Sulfotep	484
Sulprofos	486
Temephos	490
Terbufos	494
Tetrachlorvinphos	499
Thiometon	505
Triazophos	508
Trichlorfon	512
Vamidothion	518
<b>Organotin insecticides</b>	523
Azocyclotin	525
Cyhexatin	528
Fenbutatin oxide	530
<b>Oxime and Oxyimidothioate carbamates</b>	535
Alanycarb	539

<b>Oxime and Oxyimidothioate carbamates</b> ( <i>cont.</i> )	
Aldicarb	543
Aldoxycarb	549
Butocarboxim and Butoxycarboxim	553
Methomyl	557
Oxamyl	561
Thiodicarb	566
Thiofanox	570
<b>Phenylpyrazoles</b>	573
Fipronil	575
<b>Pyrethroids</b>	579
Allethrins	587
Bifenthrin	594
Cycloprothrin	597
Cyfluthrin	601
Cyhalothrin and Lambda-cyhalothrin	605
Cypermethrin	610
Alpha-cypermethrin	623
Beta-cypermethrin	626
Theta-cypermethrin	629
Zeta-cypermethrin	632
Cyphenothrin	635
Deltamethrin	638
Empenthrin	645
Esfenvalerate	648
Etofenprox	650
Fenpropathrin	653
Fenvalerate	659
Flucythrinate	667
Tau-fluvalinate	670
Permethrin	678
Phenothrin	685
Prallethrin	690
Pyrethrum	694
Resmethrin	702
RU 15525 (Kadethrin)	708
Tefluthrin	712
Tetramethrin	717
Tralomethrin	723
<b>Miscellaneous insecticides</b>	727
Amitraz	729

<b>Miscellaneous insecticides (cont.)</b>	
Buprofezin	734
Chloropicrin	738
Cyromazine	741
DNOC	744
Fenazaquin	747
Fenothiocarb	752
Hydramethylnon	759
Nicotine	764
Pentachlorophenol	771
Rotenone	782
Sulfuramid	786
Triazamate	789
<b>INSECT GROWTH MODULATORS</b>	793
<b>Benzoylureas</b>	795
Chlorfluazuron	797
Diflubenzuron	799
Fluazuron	804
Flufenoxuron	806
Hexaflumuron	809
Lufenuron	812
Teflubenzuron	814
<b>Diacylhydrazines</b>	817
Tebufenozide	819
<b>Juvenile hormone mimics</b>	823
Azadirachtin	827
Fenoxycarb	830
Hydroprene	836
Methoprene	839
Pyriproxyfen	845
<b>INSECT PHEROMONES</b>	851
Dodeca-7,9-dien-1-yl acetate	857
Muscalure	860
Tetradec-11-en-1-yl acetate	862
<b>INSECTICIDE SYNERGISTS</b>	865
Piperonyl butoxide	869

<b>NEMATICIDES</b>	873
1,2-Dichloropropane	877
1,3-Dichloropropene	880
Ethylene dibromide	884
Ethylene dichloride	888
Methyl bromide	892
<b>RODENTICIDES</b>	895
Brodifacoum	903
Bormadiolone	905
Bromethalin	908
Calciferols	910
Chloralose	915
Diphacinone	917
Flocoumafen	920
Sodium fluoroacetate	924
Strychnine	928
Warfarin	932
<b>FUNGICIDES</b>	937
<b>Alkylenebis(dithiocarbamate)s</b>	939
Mancozeb	943
Maneb	946
Nabam	950
Propineb	953
Zineb	956
<b>Anilinopyrimidines</b>	961
Cyprodinil	963
Mepanipyrim	966
Pyrimethanil	970
<b>Antibiotics</b>	975
Blasticidin-S	977
Kasugamycin	980
Validamycin A	982
<b>Aromatic hydrocarbon derivatives</b>	985
Biphenyl	987
Hexachlorobenzene	991
2-Phenylphenol	998
Quintozene	1004

<b>Azoles and analogues</b>	1011
Azaconazole	1015
Bitertanol	1017
Bromuconazole	1023
Cyproconazole	1031
Difenoconazole	1036
Diniconazole	1038
Fenbuconazole	1042
Fluquinconazole	1048
Flusilazole	1050
Flutriafol	1055
Hexaconazole	1058
Imazilil	1061
Imibenconazole	1064
Ipconazole	1066
Myclobutanil	1069
Pefurazoate	1071
Penconazole	1074
Prochloraz	1077
Propiconazole	1080
Tebuconazole	1085
Tetraconazole	1088
Triadimefon	1090
Triadimenol	1095
Triflumizole	1098
Triforine	1101
<b>Benzimidazoles</b>	1105
Benomyl	1113
Carbendazim	1120
Fuberidazole	1126
Thiabendazole	1129
Thiophanate methyl	1134
<b>Carboxamides</b>	1139
Carboxin	1141
Flutolanil	1145
Mepronil	1150
<b>Dicarboximides</b>	1155
Chlozolate	1157
Iprodione	1159
Procymidone	1165
Vinclozolin	1169

<b>Dimethyldithiocarbamates</b>	1175
Ferbam	1177
Thiram	1180
Ziram	1186
<b>Dinitrophenols</b>	1189
Dinobuton	1191
Dinocap	1195
<b>Guanidines</b>	1199
Dodine	1201
Guazatine	1204
Iminoctadine	1206
<b>Methyl isothiocyanate and precursors</b>	1211
Dazomet	1213
Metam	1217
Methyl isothiocyanate	1221
<b>Morpholines</b>	1225
Dimethomorph	1227
Fenpropidin	1232
Tridemorph	1235
<b>Organophosphorus fungicides</b>	1239
Edifenphos	1241
Fosetyl-aluminium	1245
Iprobenfos	1249
Phosdiphen	1253
Pyrazophos	1256
Tolclofos-methyl	1259
<b>Phenoxyquinolines</b>	1263
Quinoxifen	1265
<b>Phenylamides</b>	1269
Benalaxyl	1271
Furalaxyl	1274
Metalaxyl	1277
<b>Phenyl carbamates</b>	1283
Diethofencarb	1285
<b>Phenylpyrroles</b>	1289
Fenpiclonil	1291
Fludioxonil	1295

<b>Pyrimidines</b>	1299
Bupirimate	1301
Dimethirimol	1305
Ethirimol	1308
<b>Pyrimidinyl carbinols</b>	1313
Fenarimol	1315
Nuairimol	1321
<b>Strobilurin analogues</b>	1327
Azoxystrobin	1329
Kresoxim-methyl	1336
<b>N-Trihalomethylthio derivatives</b>	1343
Captafol	1347
Captan	1351
Dichlofluanid	1359
Folpet	1363
Tolyfluanid	1368
<b>Miscellaneous fungicides</b>	1375
Chinomethionat	1377
Chlorothalonil	1380
Cymoxanil	1385
Dichlorophen	1389
Dicloran	1391
Diphenylamine	1395
Etridiazole	1400
Famoxadone	1405
Fentin	1414
Fluazinam	1420
Fluoroimide	1424
8-Hydroxyquinoline sulfate	1429
Hymexazol	1431
Isoprothiolane	1436
Pencycuron	1439
Pyroquilon	1443
Triazoxide	1448
<b>PLANT ACTIVATORS</b>	1453
CGA245704	1457
Probenazole	1459

<b>Index of Common Names</b>	1463
<b>Index of Chemical Names</b>	1466
<b>Index of CAS Registry Numbers and Common Names</b>	1472