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**THE TOXICITY OF HERBICIDES TO MAMMALS,
AQUATIC LIFE, SOIL MICROORGANISMS,
BENEFICIAL INSECTS AND CULTIVATED PLANTS,
1950 - 65 ;**

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PREFACE

The Toxicity of Herbicides to Mammals, Aquatic Life, Soil Microorganisms, Beneficial Insects and Cultivated Plants is the second in a series of special bibliographies compiled by Patricia A. Condon for the Pesticides Information Center, National Agricultural Library.

For the purpose of this bibliography, "toxicity" is broadly interpreted to mean an unusual effect of an herbicide on a plant or animal. However, especially in the section on mammalian toxicity, articles are included even when the herbicide studied has had no discernible effect on an animal.

Whenever possible, chemicals are designated by their common name as approved by the Weed Society of America's Terminology Committee.

Toxicity data for many herbicides are available in unpublished reports. These reports have been cited only when there is a published abstract of the material which they contain.

Annotations have been added to a citation only when necessary to clarify the title.

All references except those marked with an asterisk (*) were examined by the compiler.

The American Standard for Periodical Title Abbreviations, issued in 1964 by the American Standards Association, is the authority used for abbreviations. The abbreviation "Ref." indicates that the item contains at least ten references to other literature.

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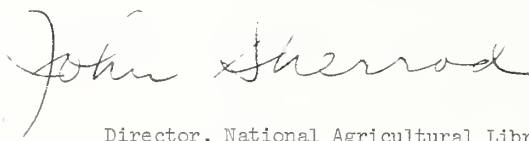
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3A Compiled by
Patricia A. Condon
Pesticides Information Center
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Amine methylarsonate use
Amine methanearsonate.

**Registered trade mark.

3-Amino-2,5-dichlorobenzoic acid use
Amiben.

6-Amino 2,5-dichlorobenzoic acid, 1283

Aminotriazole, 3-Amino-1,2,4-triazole use
Amitrole.

4-Amino-3,5,6-trichloropicolinic acid
use Picloram.

Amitrol use Amitrole.

Amitrole, 13, 22, 34, 53, 54, 55, 60, 85, 89, 109,
149, 194, 199, 234, 303, 304, 335, 367,
369, 379, 387, 394, 395, 400, 401, 420,
432, 433, 435, 460, 479, 480, 483, 484,
485, 498, 510, 535, 554, 555, 615, 626,
632, 696, 720, 721, 723, 760, 779, 810,
821, 838, 863, 867, 876, 880, 886, 887,
903, 918, 938, 970, 1009, 1061, 1105,
1124, 1190, 1194, 1199, 1213, 1314A,
1215, 1239, 1271, 1293, 1310, 1346,
1353, 1356, 1470, 1474, 1478, 1492,
1654, 1664, 1677

Amitrole, Ammonium thiocyanate mixture, . . 1225

Amitrole-T use Amitrole, Ammonium
thiocyanate mixture.

Amizol use Amitrole.

Ammate use Ammonium Sulfamate.

Ammonium compounds, quaternary, 554, 665, 976

Ammonium compounds, substituted, 307

Ammonium dinitro-sec-butyl phenate use
Dinitrobutylphenol.

Ammonium methanearsonate, 1666

Ammonium methyl arsenate use
Ammonium methanearsonate.

Ammonium Sulfamate, 45, 111, 182, 230, 350, 493, 517,
523, 527

Ammonium thiocyanate, 1225

Aqualin** use Acrolein.

Aquathol** use Endothall.

Armazide** pool algacide use Dodecylamine
hydrochloride, Ammonium compounds,
substituted mixture.

Aromatic oils use Aromatic petroleum
distillate.

**Register trade mark.

Aromatic petroleum derivative solvents, . . .	9, 36, 893, 1186
Aromatic petroleum distillate,	609, 1530, 1531
Arsenic,	150
Arsenic acid,	398, 445
Arsenic compounds,	19, 29, 49, 51, 182, 224, 242, 243, 253, 283, 509, 523, 532, 1316, 1634, 1635
Arsenic oxides,	548
Arsenites,	133, 506, 586
AT use Amitrole.	
Atrasine use Atrazine.	
Atratone,	1234, 1235, 1497, 1690
Atrazine,	27, 97, 199, 278, 683, 684, 687, 730, 750, 753, 765, 776, 781, 788, 790, 794, 812, 815, 819, 828, 829, 847, 848, 849, 865, 869, 870, 889, 920, 932, 958, 978, 984, 1031, 1033, 1072, 1081, 1103, 1121, 1138, 1144, 1163, 1181, 1266, 1267, 1330, 1340, 1344, 1346, 1370, 1394, 1452, 1497, 1526, 1588, 1589, 1593, 1596, 1625, 1627, 1638, 1641, 1643, 1645, 1648, 1669, 1672, 1677, 1683, 1684, 1685, 1690
Azak** use 2,6-Di-tert-butyl-p-tolyl methylcarbamate.	
Bandane** use Polychlorobicyclopentadiene isomers.	
Banvel-D** use Dicamba.	
Banvel T** use Tricamba.	
Barban,	64, 76, 314, 730, 970, 1013, 1038, 1041
Baron** use Erbon.	
Benefin,	362
Bensulide,	77, 82, 341, 889, 1596, 1603, 1632, 1667
Benzene,	1192
Benzimidazoles,	321
Benzoic acid compounds,	266
Betasan** use Bensulide.	
Benapacryl	319
**Registered trade mark.	

BiPC use 1-Methyl-2-propynyl m-chlorocarbanilate.	
Bis (ethylxanthogen)tetrasulfide use Diethyl tetrathiobis(thionoformate).	
Bis (ethylxanthogen)trisulfide use Diethyl trithiobis(thionoformate).	
2,4-Bis[(3-methoxypropyl)amino]-6- (methylthio)-s-triazine,	1436
1,3-Bis(2,2,2-trichloro-1-hydroxyethyl)- urea,	416, 417
Borates,	586
Borates, chlorates mixture,	844
Borax,	182
Bromacil,	265, 351, 1326, 1341
5-Bromo-3-tert-butyl-6-methyluracil, . . .	1341
Bromoxynil,	329, 782, 871, 1152, 1383
Butiphos use Tributyl phosphorotrithioate.	
Butofen use Dinitrobutylphenol.	
Butyl 2,4-dichlorophenoxyacetate use 2,4-D derivatives	
2-sec-Butyl-4,6-dinitrophenol use Dinitrobutylphenol.	
S-tert-Butyl Dipropylthiocarbamate, . . .	911
Butyl 2,4,5-trichlorophenoxyacetate use 2,4,5-T derivatives.	
Butyraldehyde,	74
Cacodylic acid,	906
CADE (concentrated activated diesel emulsion) use Diesel oil.	
Calcium arsenate,	59, 376, 748, 1609, 1634, 1635, 1636, 1665, 1666
Calcium chlorate,	335, 548
Calcium cyanamide,	177, 182, 450, 1202
Calcium propanearsonate,	1608, 1659, 1665, 1666
Calcium propyl arsonate use Calcium propanearsonate.	
Carbamates,	133, 149, 264, 315, 914, 1535

Carboxylic acid compounds,	1091, 1454
Carbyne** use Barban.	
Casoron** use Dichlobenil.	
CDAA use 2-Chloro-N,N-diallylacetamide.	
CDEA use 2-Chloro-N,N-diethylacetamide.	
CDEC use 2-Chloroallyl diethyldithio- carbamate.	
Chlorates,	162, 292, 586, 842, 844
Chlorazine,	1239, 1275, 1291, 1592
Chlordane,	1609, 1614, 1615, 1634, 1635, 1636, 1675
Chloroacetic acid,	211
2-Chloro-N,N-diallylacetamide,	755, 779, 844, 927, 941, 970, 980, 981, 1026, 1085, 1105, 1303, 1456, 1540, 1551, 1638, 1639, 1673, 1683, 1684
2-Chloroallyl diethyldithiocarbamate, . .	796, 844, 854, 874, 927, 941, 1026, 1242, 1270, 1303, 1309, 1456, 1638, 1639, 1640, 1673, 1683, 1684
2-Chloro-N,N-diethylacetamide,	779, 874, 941, 1270, 1456, 1551
2-Chloro-4,6-bis-(ethylamino)-s-triazine use Simazine.	
5-Chloro-3-tert-butyl-6-methyluracil use Terbacil.	
2-Chloro-4-ethylamino-6-methoxypropylamino- s-triazine,	1672
Chloro IPC use Isopropyl N-(3-chlorophenyl)- carbamate.	
2-Chloro-4-isopropylamino-6-methylamino-s- triazine,	1497, 1588, 1683, 1684
4-Chloro-2-methylphenoxyacetic acid use 2-Methyl-4-chlorophenoxyacetic acid.	
N-(3-Chloro-4-methylphenyl)-pentane carbonamide-2 use Solan.	
Chlorophenols,	117
o-Chlorophenol-sulfonyl fluoride,	783
Chlorophenoxy compounds,	133, 150, 308, 1020, 1247
4-Chlorophenoxyacetic acid,	1279, 1364, 1371, 1386, 1438
Chlorophenoxyacetic acids	209, 308, 461, 462
**Registered trade mark.	

4-(4-Chlorophenoxy)butyric acid,	1265, 1347
N-4-(p-Chlorophenoxy)phenyl-N,N-dimethylurea use Chloroxuron.	
N-(3-Chlorophenyl)carbamate,	1624
3-(p-Chlorophenyl)-1,1-dimethylurea use Monuron.	
3-(p-Chlorophenyl)-1,1-dimethylurea trichloroacetate use MonuronTCA.	
Chloroxuron,	1339, 1368, 1676
Chlorpropham use Isopropyl N-(3-chlorophenyl)carbamate.	
CIBA 1983 use Chloroxuron.	
CIPC use Isopropyl N-(3-chlorophenyl)-carbamate.	
Clobber** use Cypromid.	
CMPP use Mecoprop.	
CMU use Monuron.	
Copper compounds,	29, 260, 280
Copper EDTA use Copper ethylenediaminetetraacetate.	
Copper ethylenediaminetetraacetate, . . .	687
Copper naphthenate,	294
Copper sulfate,	129, 130, 220, 280, 290, 310, 548, 555, 579, 581, 585, 590, 594, 606, 628, 629, 634, 636, 638, 658, 674, 684, 687, 691, 933
CP-17029 use 2,4-Bis[(3-methoxypropyl)-amino]-6-(methylthio)-s-triazine.	
CPA use Calcium propanearsonate.	
4-CPB use 4-(4-Chlorophenoxy)butyric acid.	
Crag herbicide, Crag 1** use Sesone.	
Cresol,	622
Crotilin use 2,4-D, alpha-chlorocrotyl ester.	
Crotonaldehyde,	74
Crotylin use 2,4-D, alpha-chlorocrotyl ester.	
**Registered trade mark.	

Cuprous oxide,	262
Cyanamid, Cyanamide use Calcium cyanamide.	
Cycluron,	1077
Cycluron, 1-Methyl-2-propynyl m-chlorocarbanilate mixture,	841, 1275, 1646
Cypromide,	470
2,4-D,	1, 7, 11, 15, 20, 29, 32, 38, 39, 40, 41, 45, 46, 47, 48, 63, 71, 79, 108, 111, 112, 118, 127, 131, 135, 138, 142, 144, 149, 167, 169, 171, 172, 181, 182, 183, 188, 194, 195, 197, 199, 201, 207, 208, 212, 127, 219, 222, 223, 225, 226, 227, 228, 229, 230, 232, 241, 246, 247, 249, 250, 253, 254, 263, 266, 272, 277, 288, 289, 292, 297, 299, 300, 312, 320, 325, 326, 334, 336, 337, 338, 339, 340, 348, 372, 373, 374, 375, 378, 383, 384, 404, 405, 411, 412, 437, 455, 456, 462, 464, 468, 469, 477, 478, 488, 504, 510, 516, 518, 521, 523, 525, 526, 534, 540, 542, 545, 546, 548, 550, 553, 555, 558, 559, 569, 571, 583, 584, 586, 587, 602, 604, 609, 611, 614, 617, 626, 632, 637, 646, 651, 652, 653, 654, 655, 660, 661, 663, 664, 684, 686, 687, 690, 699, 701, 702, 703, 705, 706, 707, 708, 713, 715, 717, 718, 720, 721, 722, 723, 724, 725, 726, 728, 729, 730, 731, 732, 734, 735, 738, 740, 741, 745, 755, 756, 757, 762, 763, 767, 769, 773, 780, 781, 785, 786, 787, 790, 792, 793, 795, 796, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 811, 813, 814, 816, 817, 818, 820, 821, 824, 828, 829, 832, 834, 835, 836, 838, 839, 855, 856, 859, 860, 862, 864, 867, 868, 869, 870, 872, 874, 876, 877, 880, 881, 882, 883, 884, 885, 888, 891, 892, 898, 899, 900, 901, 903, 907, 908, 809, 910, 912, 913, 915, 918, 921, 925, 928, 933, 939, 942, 944, 945, 947, 948, 951, 953, 954, 955, 959, 960, 961, 965, 967, 968, 971, 973, 974, 975, 979, 984, 985, 987, 988, 990, 994, 995, 996, 997, 998, 999, 1000, 1001, 1003, 1004, 1005, 1010, 1011, 1013, 1004, 1015, 1016, 1017, 1018, 1022, 1023, 1024, 1027, 1028, 1029, 1032, 1033, 1034, 1035, 1037, 1039, 1044, 1045, 1046, 1047, 1048, 1049, 1051, 1052, 1053, 1054, 1055, 1056, 1058, 1059, 1060, 1062, 1063, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1075, 1079, 1080, 1081, 1082, 1083, 1087, 1088, 1089, 1090, 1092, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1104, 1105, 1108, 1112, 1114, 1116, 1117, 1118, 1123, 1125, 1128, 1129, 1130, 1131, 1132, 1137, 1139, 1142, 1143, 1144, 1147, 1153,

2,4-D (Cont.)

	1154, 1155, 1157, 1158, 1161, 1162, 1164, 1165, 1166, 1169, 1174, 1175, 1179, 1183, 1184, 1197, 1198, 1205, 1206, 1207, 1214B, 1219, 1222, 1228, 1230, 1232, 1244, 1248, 1249, 1250, 1253, 1254, 1255, 1257, 1260, 1262, 1264, 1268, 1277, 1278, 1279, 1280, 1281, 1287, 1288, 1296, 1302, 1305, 1311, 1312, 1313, 1314, 1315, 1318, 1319, 1322, 1323, 1324, 1325, 1327, 1331, 1333, 1334, 1339, 1346, 1347, 1348, 1353, 1357, 1359, 1361, 1362, 1363, 1364, 1366, 1367, 1370, 1371, 1372, 1373, 1376, 1377, 1378, 1381, 1382, 1384, 1386, 1387, 1390, 1391, 1392, 1397B, 1398, 1400, 1401, 1403, 1407, 1408, 1410, 1411, 1412, 1415, 1416, 1417, 1418, 1420, 1423, 1424, 1425, 1427, 1429, 1431, 1432, 1433, 1434, 1435, 1437, 1438, 1439, 1440, 1441, 1442, 1444, 1445, 1446, 1448, 1449, 1450, 1453, 1455, 1460, 1461, 1466, 1467, 1468, 1469, 1471, 1472, 1473, 1475, 1478, 1480, 1482, 1484, 1487, 1488A, 1488B, 1488C, 1489, 1500, 1501, 1502, 1503, 1504, 1506, 1508, 1509, 1510, 1515, 1516, 1517, 1518, 1519, 1520, 1525, 1527, 1528, 1529, 1533, 1540, 1542, 1547, 1550, 1557, 1558, 1559, 1560, 1561, 1567, 1568, 1573, 1574, 1578, 1579, 1582, 1586, 1592, 1597, 1598, 1607, 1618, 1619, 1623, 1624, 1625, 1626, 1631, 1632, 1653, 1654, 1656, 1657, 1658, 1663, 1671, 1674, 1679, 1687, 1688, 1689, 1692, 1694A, 1694B, 1695.
2,4-D, S-Ethyl di-N,N-propylthiolcarbamate mixture,	1680
2,4-D, 2,4,5-T mixture,	1655
2,4-D derivatives,	20, 146, 149, 154, 263, 326, 465, 467, 475, 476, 495, 515, 569, 588, 643, 647, 656, 749, 775, 826, 846, 855, 863, 867, 880, 897, 898, 962, 970, 989, 1008, 1084, 1085, 1110, 1121, 1133, 1141, 1148, 1151, 1173, 1185, 1252, 1282, 1349, 1430, 1514, 1555, 1617
2,4-D esters and salts use 2,4-D derivatives.	
3,4-D, 3,4-DA use 3,4-Dichlorophenoxy-acetic acid.	
DAC-893, Dacthal** use Dimethyl tetrachloroterephthalate.	
Dalapon,	101, 149, 194, 213, 214, 216, 226, 227, 245, 266, 268, 415, 510, 138, 539, 546, 548, 552, 554, 555, 566, 586, 615, 620, 626, 632, 639, 665, 696, 720, 721, 730, 755, 781, 810, 819, 821, 823, 824, 825, 831, 838, 844, 854, 858, 867, 876, 880, 890, 903, 919, 927, 970, 977, 1019,

**Registered trade mark.

1061, 1104, 1105, 1114, 1124, 1134, 1145,
 1187, 1190, 1196, 1201, 1214A, 1258,
 1262, 1270, 1271, 1293, 1304, 1310, 1329,
 1346, 1353, 1354, 1396, 1397A, 1405,
 1414, 1419, 1421, 1426, 1451, 1479, 1485,
 1486, 1495, 1505, 1540, 1544, 1571, 1628,
 1660, 1677, 1686, 1690

DATC use Diallate.

2,4-DB, 4-(2,4-DB) use
 4-(2,4-Dichlorophenoxy)butyric acid.

DCB use o-Dichlorobenzene.

DCMA use Dicryl.

DCPA use Dimethyl tetrachloroterephthalate.

DCU use Dichloral urea.

2,4-DEB use 2,4-Dichlorophenoxyethyl
 benzoate

DEF** use Tributyl phosphorotrithioate.

Delrad use Amine D acetate.

2,4-DEP use Tris(2,4-dichlorophenoxyethyl)-
 phosphite.

2,4-DES use Sesone.

Desmetryne, 1497

Dessicant L-10 use Arsenic acid.

Diallate, 760, 963, 970, 1002, 1013, 1073, 1385

Diallylacetamides, 264

2,6-Di-tert-butyl-p-tolyl methylcarbamate,. 1596, 1603, 1632

Dicamba, 52, 103, 361, 500, 556, 819, 970, 1168,
 1346, 1632, 1678

Dichlobenil, 44, 377, 572, 575, 614, 615, 679, 894,
 976, 1077, 1346, 1575, 1584, 1622, 1633,
 1648, 1672, 1680, 1682

Dichlone, 548, 554, 555, 590, 638

Dichloral urea, 416, 417, 784, 816, 817, 1462, 1502, 1674

2,5-Dichloro-3-aminobenzoic acid use
 Amiben.

o-Dichlorobenzene, 977

2,5-Dichlorobenzoic acid, 1283

**Registered trade mark.

2,6-Dichlorobenzonitrile use Dichlobenil.	
2,5-Dichloro-3-nitrobenzoic acid,	927, 1216, 1238, 1272
2,4-Dichlorophenol,	122, 123, 308
2,4-Dichlorophenol p-nitrophenyl ether, . .	67
2,4-Dichlorophenoxyacetamide,	1681, 1682
2,4-Dichlorophenoxyacetic acid use 2,4-D.	
2,4-Dichlorophenoxyacetic acid salts and esters use 2,4-D derivatives.	
3,4-Dichlorophenoxyacetic acid,	1371, 1386, 1407, 1438
4-(2,4-Dichlorophenoxy)butyric acid, . . .	195, 231, 249, 583, 602, 720, 721, 760, 1020, 880, 939, 969, 982, 1006, 1007, 1010, 1021, 1048, 1104, 1265, 1280, 1347, 1372, 1374, 1375, 1384, 1390, 1393, 1395, 1396, 1397A, 1397B, 1400, 1402, 1414, 1415, 1419, 1421, 1425, 1449, 1451, 1455, 1558, 1559, 1597
2,4-Dichlorophenoxyethyl benzoate,	1323
2,4-Dichlorophenoxyethyl sulfate use Sesone.	
2,4-Dichlorophenyl "cellosolve" sulfate use Sesone.	
N-(3,4-Dichlorophenyl) methacrylamide use Dicryl.	
O-(2,4-Dichlorophenyl) O-methyl isopropyl-phosphoramidothioate,	100, 101, 344, 819, 970, 1360, 1596, 1601, 1603, 1608, 1609, 1614, 1632, 1634, 1665, 1666, 1668, 1672, 1675
3-(3,4-Dichlorophenyl)-l-methylurea, . . .	935
3,4-Dichloropropionanilide use Propanil.	
2,2-Dichloropropionic acid and its sodium salt, use Dalapon.	
2,6-Dichlorothiobenzamide,	1622
Dichlorprop,	616, 617, 725, 1010, 1013, 1048, 1484, 1518
Dicopur use 2,4-D.	
Dicotex use 2-Methyl-4-chlorophenoxyacetic acid.	
Dicryl,	819, 1025

Diesel oil,	813, 863
Diesel shale oil use Diesel oil.	
2-(Diethylamino)-4-(isopropylamino)-6-methoxy-s-triazine,	1497
Diethyl tetrathiobis(thionoformate), . . .	397
Diethyl trithiobis(thionoformate),	397
Difernox use 2,4-D.	
Dikonirt use 2,4-D.	
Dimethylcocoamine disodium endothall use Endothall derivatives.	
Dimethyldodecylamine acetate,	446
Dimethyl tetrachloroterephthalate,	233, 342, 510, 714, 725, 819, 875, 934, 1106, 1203, 1346, 1360, 1436, 1577, 1584, 1596, 1601, 1603, 1605, 1606, 1608, 1614, 1630, 1632, 1634, 1638, 1639, 1640, 1663, 1665, 1666, 1672, 1675, 1682
3,5-Dimethyltetrahydro-2H,1,3,5-thiodiazine-2-thione,	101, 1629
Dinitro compounds,	8, 49, 110, 182, 209, 230, 256, 257, 523, 632, 838, 1381, 1499, 1505, 1536, 1554
Dinitroalkylphenylacetate,	1455
4,6-Dinitro-o-sec-amylphenol,	734, 736, 737
Dinitrobutylphenol,	59, 63, 126, 153, 175, 192, 222, 229, 265, 279, 319, 323, 366, 388, 436, 494, 586, 627, 703, 704, 717, 720, 721, 722, 726, 730, 734, 736, 737, 763, 779, 783, 799, 824, 858, 863, 880, 896, 927, 928, 929, 930, 933, 952, 970, 1030, 1059, 1077, 1104, 1105, 1114, 1140, 1163, 1174, 1201, 1203, 1208, 1229, 1238, 1239, 1258, 1261, 1277, 1281, 1285, 1293, 1328, 1339, 1378, 1382, 1420, 1438, 1439, 1442, 1455, 1464, 1476, 1477, 1494, 1499, 1521, 1522, 1538, 1540, 1541, 1545, 1551, 1561, 1562, 1589, 1624, 1672
Dinitrocresol,	3, 4, 6, 7, 33, 43, 45, 59, 63, 68, 71, 93, 111, 113, 114, 115, 116, 119, 120, 121, 124, 125, 132, 134, 139, 145, 148, 151, 152, 153, 156, 157, 159, 163, 166, 174, 175, 178, 180, 184, 192, 198, 204, 205, 215, 235, 284, 285, 323, 324, 386, 402, 406, 407, 408, 414, 438, 440, 442, 474, 509, 514, 519, 521, 525, 545, 548, 568, 586, 599, 703, 704, 713, 714, 719, 726, 730, 734, 735, 746, 772, 773, 774, 779, 799, 855, 928, 930, 933, 1003, 1030,

1042, 1058, 1077, 1107, 1115, 1174,
1234, 1235, 1437, 1692

Dinitroisopropylphenol,	35, 388, 389
Dinitrophenol,	7, 29, 68, 73, 126, 128, 136, 149, 150, 157, 166, 180, 209, 255, 323, 385, 439, 452, 453, 501, 568, 799, 953
Dinitropropylphenol,	323
Dinoben** use 2,5-Dichloro-3- nitrobenzoic acid.	
Dinoseb use Dinitrobutylphenol.	
Diphenamid,	363, 421, 615, 1163, 1203, 1272, 1360, 1436, 1584, 1608, 1672, 1675, 1681, 1682
Diphenatrile,	1608, 1659, 1665, 1666, 1667, 1672, 1675
Dipropalin,	1596, 1659, 1665, 1666, 1672
Diquat,	88, 149, 240, 331, 538, 554, 572, 575, 615, 640, 665, 667, 668, 1353
Disodium endothal use Endothall.	
Disodium-3,6-endoxohexahydrophthalic acid use Endothall.	
Disodium methanearsonate,	906, 1534, 1614, 1636, 1665, 1666, 1675
Diuron,	265, 354, 415, 554, 582, 680, 725, 761, 819, 889, 935, 1077, 1086, 1104, 1105, 1172, 1229, 1233, 1239, 1267, 1270, 1293, 1303, 1310, 1317, 1330, 1341, 1344, 1346, 1352, 1354, 1355, 1356, 1451, 1459, 1490, 1491, 1498, 1505, 1512, 1521, 1534, 1540, 1541, 1543, 1545, 1546, 1551, 1588, 1589, 1591, 1622, 1627, 1628, 1648, 1676, 1681, 1682, 1690
DMA use Disodium methanearsonate.	
DMPA use O-(2,4-Dichlorophenyl) O-methyl isopropyl-phosphoramidothioate.	
DMTT use 3,5-Dimethyltetrahydro-2H, 1,3,5-thiadiazine-2-thione.	
DNBP use Dinitrobutylphenol.	
DNC, DNOC, DNOSBP, and its salts, use Dinitrobutylphenol.	
DNPP use Dinitroisopropylphenol.	
DNSBP and its salts use Dinitrobutylphenol.	
**Registered trade mark.	

Dodecylamine hydrochloride, substituted
Ammonium compounds mixture.

Dowpon** use Dalapon.

2,4-DP, 2-(2,4-DP) use Dichlorprop.

DPA use 3,4-Dichlorophenoxyacetic acid.

DSMA use Disodium methanearsonate.

Dybar** use Fenuron.

Dymid** use Diphenamid.

E.H. No. 1 use Sesone.

E.H. No. 2 use Dichloral urea.

Emid use 2,4-Dichlorophenoxyacetamide.

Endothal** use Endothall.

Endothall, 45, 46, 47, 48, 50, 62, 75, 164, 167,
206, 287, 381, 499, 554, 584, 595, 614,
615, 638, 665, 667, 684, 685, 686, 687,
697, 734, 737, 816, 817, 976, 1116, 1251,
1252, 1303, 1463, 1465, 1496, 1575, 1624

Endothall, Isopropyl N-phenyl-carbamate
mixture, 841

Endothall derivatives, 681, 689

3,6-Endoxohexahydrophthalic acid use
Endothall.

Eptam** use S-Ethyl di-N,N-
propylthiolcarbamate.

EPTC use S-Ethyl di-N,N-
propylthiolcarbamate.

Erbitox use 2,4-D.

Erbon, 137, 343, 346, 1190, 1415, 1592

Erpan use 2,4-D.

Ervaxone use 2,4-D.

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S-Ethyl di-N,N-propylthiolcarbamate, . . . 78, 79, 761, 854, 941, 963, 966, 1085,
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1270, 1273, 1284, 1292, 1293, 1303, 1346,
1436, 1540, 1588, 1622, 1638, 1639, 1640,
1641, 1647, 1663, 1672, 1673, 1680, 1682,
1683, 1684

**Registered trade mark.

Ethylene glycol bis(trichloroacetate), . . .	391
Ethyl phenylcarbamate,	1089
Ethyl urethane use Ethyl carbamate.	
Experimental herbicide 732 use Terbacil.	
Experimental herbicide 733 use 5-Bromo-3-tert-butyl-6-methyluracil.	
F-98 use Acrolein.	
Falone** use Tris(2,4-dichlorophenoxyethyl) phosphite.	
Fenac,	87, 598, 614, 615, 640, 755, 819, 831, 941, 976, 1086, 1181, 1261, 1370, 1549, 1575, 1635, 1636, 1690
Fenuron,	309, 355, 505, 554, 582, 680, 730, 935, 1086, 1181, 1261, 1459, 1662, 1676
FenuronTCA,	305
Feoplat use Methylphenylcarbamate.	
Ferbam,	590
Fermate** use Ferbam.	
Folex** use Tributyl phosphorotrithioite.	
Formaldehyde,	74
Furaldehyde use Furfural.	
Furfural,	538
FW-925 use 2,4-Dichlorophenyl p-nitrophenyl ether.	
G-27901 use Trietazine.	
G-30026 use 2-Chloro-4-isopropylamino-6- methylamino-s-triazine.	
G-30031 use Ipazine.	
G-32292 use 2-Isopropylamino-4-methoxy-6- methylamino-s-triazine.	
G-34360 use Desmetryne.	
G-34361 use 2-Allylamino-4-chloro-6- isopropylamino-s-triazine.	
G-34696 use 2-Chloro-4-ethylamino-6- methoxypropylamino-s-triazine.	

**Registered trade mark.

G-36393 use 2-(Isopropylamino)-4-
[(3-methoxypropyl)-amino]-6-(methylthio)-
s-triazine.

Glytac use Ethylene glycol
bis(trichloroacetate)

H-1318 use Siduron.

H-7531 use Norea.

H-9573 use 2,6-Di-tert-butyl-p-tolyl
methylcarbamate.

Halogenoalkylcarboxylic acid esters use
Carboxylic acid compounds.

Hedolit use Dinitrocresol.

Herbicidal oils use Petroleum oils.

Herbicide No. 2 use Isopropyl N-
phenylcarbamate.

Hexachlorophene use 2,2'-Methylene
bis-(3,4,6-trichlorophenol).

Hoe-2747 use Monolinuron.

Hormit use 2,4-D derivatives.

Hungazin-DT use Simazine.

Hungazin-PK use Atrazine.

Hyamine, Hyamine 1622, Hyamine 2389, use
Ammonium compounds, quaternary.

Hydrocarbons, 992, 1218, 1223

Hydrocarbons (aromatic), 1192

IAA, IES use Indoleacetic acid.

Indoleacetic acid, 974, 1122, 1557, 1560, 1613

Ioxynil, 218, 329, 782, 871, 1152, 1383

Ipatone use 2-(Diethylamino)-4-
(isopropylamino)-6-methoxy-s-triazine.

Ipazine, 1497, 1638, 1643, 1660

IPC use Isopropyl N-phenylcarbamate.

Isocil, 265, 1326, 1341, 1346

2-Isopropylamino-4-methoxy-6-methylamino-
s-triazine, 1497

2-(Isopropylamino-4-[3-methoxypropyl)-amino]-6-(methylthio)-2-triazine,	1596
Isopropyl N-(3-chlorophenyl)carbamate, . .	93, 112, 222, 295, 312, 413, 415, 418, 491, 545, 548, 552, 583, 614, 615, 725, 755, 772, 779, 784, 791, 838, 844, 863, 864, 867, 1111, 1140, 1172, 1177, 1187, 1196, 1234, 1235, 1238, 1239, 1242, 1251, 1261, 1269, 1277, 1281, 1291, 1303, 1323, 1339, 1379, 1401, 1413, 1432, 1437, 1438, 1439, 1442, 1443, 1451, 1456, 1462, 1481, 1490, 1493, 1498, 1502, 1505, 1521, 1522, 1535, 1538, 1540, 1541, 1543, 1545, 1548, 1551, 1556, 1584, 1588, 1590, 1591, 1622, 1624, 1627, 1628, 1644, 1677
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4K-2M use 2-Methyl-4-chlorophenoxyacetic acid.	
Karmex DL use Diuron.	
Karmex W** use Monuron.	
Kerosene,	286
Kuron** use Silvex.	
Kurosai G**, Kurosai Sl** use Silvex.	
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Lead compounds,	280
Linuron,	21, 265, 356, 1077, 1163, 1436, 1681, 1682
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Maleic hydrazide diethanolamine,	825

**Registered trade mark.

MCP, MCPA use 2-Methyl-4-chlorophenoxyacetic acid.

MCPA esters and salts use 2-Methyl-4-chlorophenoxyacetic acid derivatives.

MCPB use 4-(2-Methyl-4-chlorophenoxy)-butyric acid.

MCPP, 2-(MCPP) use Mecoprop.

Mecoprop, 112, 199, 312, 993, 1005, 1010, 1013, 1033, 1159, 1258, 1296, 1302, 1632

Mercaptobenzothiazole, 415

Mercury compounds, 187

Methoxone** use 2-Methyl-4-chlorophenoxyacetic acid.

2-Methoxy-3,6-dichlorobenzoic acid use Dicamba.

2-Methoxy-3,5,6-trichlorobenzoic acid use Tricamba.

Methyl bromide, 49, 182

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*Registered trade mark.

2-Methyl-4-chlorophenoxyacetic acid derivatives,	1008, 1151, 1430
2-Methyl-4-chlorophenoxyacetic acid esters and salts use 2-Methyl-4-chlorophenoxyacetic acid derivatives.	
4-(2-Methyl-4-chlorophenoxy)butyric acid .	196, 782, 862, 905, 931, 969, 982, 1006, 1007, 1010, 1020, 1021, 1058, 1106, 1107, 1128, 1141, 1188, 1261, 1265, 1347, 1353, 1372, 1374, 1375, 1380, 1384, 1389, 1390, 1392, 1395, 1397B, 1384, 1389, 1390, 1392, 1395, 1397B, 1400, 1402, 1404, 1415, 1421, 1425, 1427, 1449, 1455, 1558, 1559, 1695
2-(2-Methyl-4-chlorophenoxy)propionic acid use Mecoprop.	
1-(2-Methylcyclohexyl)-3-phenylurea use Siduron.	
2,2'-Methylene bis-(3,4,6-trichlorophenol),	547
Methyl-1-naphthaleneacetic acid,	45, 47, 48
Methylphenylcarbamate,	459
1-Methyl-2-propynyl m-chlorocarbinalate, .	841, 1077, 1275, 1581, 1646
MG-T use 3-Oxypyridizone-6, triethanolamino salt.	
MH use Maleic hydrazide.	
Mineral oils,	1223
Molinate,	80, 1360, 1622
Monochloroacetate use Chloroacetic acid.	
Monolinuron,	1229
Monuron,	112, 265, 312, 357, 390, 415, 539, 540, 546, 548, 552, 554, 555, 559, 582, 586, 626, 680, 684, 687, 725, 730, 768, 779, 781, 783, 791, 810, 844, 853, 863, 876, 927, 935, 983, 1050, 1086, 1111, 1116, 1135, 1153, 1172, 1174, 1177, 1181, 1187, 1190, 1195, 1196, 1202, 1214A, 1217, 1229, 1245, 1252, 1259, 1269, 1293, 1310, 1317, 1344, 1352, 1353, 1382, 1401, 1421, 1459, 1473, 1483, 1490, 1491, 1498, 1521, 1522, 1543, 1546, 1566, 1576, 1587, 1600, 1624, 1628, 1650, 1662, 1689
MonuronTCA,	306, 858
Murbetol use Endothall, Isopropyl N-phenylcarbamate mixture.	

Mylone** use 3,5-dimethyltetrahydro-2H,
1,3,5-thiodiazine-2-thione.

NAA use Naphthalenacetic acid.

Naphthaleneacetic acid, 45, 974, 1560

N-1-Naphthylphthalamic acid, 23, 451, 923, 1172, 1203, 1312, 1214A
1259, 1263, 1270, 1271, 1281, 1286, 1293,
1436, 1532, 1540, 1551, 1554, 1683, 1684

Natrin** use Sodium 2,4,5-
trichlorophenoxyethyl sulfate.

Neburon, 582, 680, 684, 687, 796, 1086, 1104,
1105, 1111, 1156, 1238, 1293, 1317, 1396,
1415, 1451, 1588, 1592, 1676, 1681

NES use Naphthaleneacetic acid.

Nigrosine, 666

Nitrates, 201, 217, 222, 223, 292, 297, 298, 299,
302,

Nitro compounds, 414

6-Nitro-2,5-dichlorobenzoic acid, 1283

Nitrophenols, 156

No-Crab use Calcium propanearsenate.

Norea, 1436

Novon use Erbon.

NP use N-1-Naphthylphthalamic acid.

NP-128 use o-Chlorophenol-sulfonyl fluoride.

NPA use N-1-Naphthylphthalamic acid.

Octyl 2,4-dichlorophenoxyacetate use
2,4-D derivatives.

Omazen, 554

OMU plus BiPC use Cycluron, 1-Methyl-2-
propynyl m-chlorocarbanilate mixture.

Ordram** use Molinate.

Ortho Aquatic Weed Killer use Aromatic
petroleum distillate.

3-Oxypyridizone-6, triethanolamino salt, . . . 1674

Paraquat, 88, 149, 240, 330, 572, 575, 584, 696,
697, 1272, 1346, 1534, 1628

**Registered trade mark.

PBA use Polychlorobenzoic acid.

PCA use Pyrazon.

PCP, PCP sodium salt use Pentachlorophenol.

PEBC use Pebulate.

Pebulate, 83, 368, 1272, 1565, 1682

Penar** use Dimethyldodecylamine acetate.

Pentachloronitrobenzene, 279

Pentachlorophenol, 3, 45, 59, 65, 75, 92, 102, 110, 115,
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237, 270, 271, 281, 282, 286, 294, 322,
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1462, 1550, 1554, 1624

Pentachlorophenolates use Pentachlorophenol.

Petroleum oils, 63, 182, 244, 615, 755, 892, 1224, 1306,
1523, 1524, 1661

Phenols, 133, 149, 622, 936, 1115

Phenoxy acids, substituted, 779

Phenoxy compounds, 49, 181, 256, 257, 779, 1469

1-Phenyl-4-amino-5-chloropyridazone-6 use
Pyrazon.

Phenylcarbamic acid isopropyl ester use
Isopropyl N-phenylcarbamate.

Phenyldimethylurea use Fenuron.

3-Phenyl-1,1-dimethylurea trichloroacetate
use FenuronTCA.

Phenylmercuric acetate, 49, 93, 186, 187, 259, 371, 424, 458,
1064, 1277

Phenylmercuric hydroxide, 1064

Phenylmercuric nitrate, 170

Phenylmercuric triethanol ammonium
lactate, 1064

Phenylmercury compounds, 1598

Phenyl urea compounds, substituted, 838

**Registered trade mark.

Phygon** XI. use Dichlone.

Picloram, 30, 218, 251, 570, 889, 964, 970, 1077,
1346, 1388, 1428, 1678, 1691

Picloram derivatives, 251

Picolinic acid, 1632

Pielik use 2,4-D.

PMA use Phenylmercuric acetate.

Polybor chlorate use Borates,
Chlorates mixture.

Polychlorobenzoic acid, 353, 684, 687, 821, 1513, 1549

Polychlorobenzoic acid dimethylamine salts,
use Polychlorobenzoic acid.

Polychlorobicyclopentadiene isomers, . . . 266, 1596, 1601, 1603, 1608, 1614, 1632,
1659, 1665, 1666, 1667

Potassium chlorate, 291

Potassium cyanate, 892, 1177, 1277, 1598

Potassium nitrate, 288

Prefar** use Bensulide.

Prometone, 27, 683, 1497, 1596, 1690

Prometryne, 27, 1163, 1346, 1497, 1534, 1543, 1596,
1638, 1643, 1646, 1680, 1681, 1690

Propanil, 66, 70, 264, 819

Propazine, 27, 199, 683, 932, 1266, 1275, 1452,
1497, 1596, 1638, 1640, 1641, 1643,
1646, 1647, 1672, 1677, 1683, 1684,
1685

Propham use Isopropyl N-phenylcarbamate.

Propionaldehyde, 74

S-Propyl-n-butylethylthiocarbamate use
Pebulate.

N-Propyl-dipropylthiolcarbamate use
Vernolate.

Pyramin** use Pyrazon.

Pyrazon, 423, 503, 851, 1077, 1565, 1581

Quaternary ammonium compounds use
Ammonium compounds, quaternary.

**Registered trade mark.

R-1607 use Vernolate.

R-1856 use S-tert-Butyl-dipropylthio-
carbamate.

R-1910 use Ethyl-N,N-diisobutylthiol-
carbamate.

R-4461 use Bensulide.

R-4572 use Molinate.

RADA use Amine D acetate.

Radapon** use Dalapon.

Rosin amine D acetate use Amine D acetate.

Rotenone, 699

S-847 use Barban.

SD-7961 use 2,6-Dichlorothiobenzamide.

SES use Sesone.

Sesone, 101, 110, 111, 328, 725, 783, 796, 816,
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1292, 1323, 1328, 1333, 1337, 1338, 1347,
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Silvex, 58, 207, 266, 267, 278, 301, 347, 554,
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649, 650, 655, 665, 667, 687, 755, 970,
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1393, 1441, 1449, 1467, 1468, 1478, 1484,
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Simazine, 27, 112, 199, 279, 312, 327, 410, 463,
466, 539, 545, 546, 548, 554, 559, 598,
639, 653, 662, 683, 684, 686, 687, 688,
704, 730, 750, 761, 774, 776, 777, 789,
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984, 1031, 1033, 1043, 1061, 1072, 1078,
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1642, 1643, 1644, 1648, 1660, 1663, 1669,
1672, 1673, 1676, 1677, 1681, 1682, 1683,
1684, 1686, 1690

**Registered trade mark.

Simetone,	1292, 1497, 1683, 1684
Sinox** use Dinitrocresol.	
Sodium acetate,	538
Sodium arsenate,	59, 327, 444, 471, 548, 1308
Sodium arsenite,	8, 59, 113, 176, 191, 203, 230, 242, 258, 276, 296, 317, 327, 471, 506, 514, 522, 527, 555, 557, 571, 572, 575, 576, 578, 590, 600, 624, 633, 657, 676, 684, 686, 687, 699, 1290
Sodium borate,	1252
Sodium chlorate,	43, 51, 133, 160, 182, 212, 235, 236, 239, 256, 392, 523, 539, 540, 548, 725, 792, 793, 810, 824, 876, 933, 1180, 1285, 1351
Sodium dichloroacetate,	507, 538
Sodium dichlorobutyrate,	696
Sodium 2,4-dichlorophenoxyacetate use, 2,4-D derivatives.	
Sodium 2,4-dichlorophenoxyethyl sulfate use Sesone.	
Sodium 2,2-dichloropropionate use Dalapon.	
Sodium dinitrocresylate use Dinitrocresol.	
Sodium fluoride,	548
Sodium metaborate,	392
Sodium methyldichlorophenoxyacetate use 2,4-D derivatives.	
Sodium monochloroacetate use Sodium chloroacetate.	
Sodium PCP, Sodium pentachlorophenate use Pentachlorophenol.	
Sodium TCA use Sodium trichloroacetate.	
Sodium trichloroacetate,	140, 182, 345, 554, 646, 895, 1113, 1178, 1405, 1502
Sodium 2,4,5-trichlorophenoxyethyl sulfate,	101, 1196, 1241, 1243, 1271, 1291
Solan,	448, 1272, 1681
Stam F-34** use Propanil.	

**Registered trade mark.

Stentan use Isopropyl N-phenylcarbamate,
Triazine mixture.

Stoddard solvent, 850, 1174, 1251, 1259

Stull invert oil use Petroleum oils.

Sulfonyl fluoride, 783

Sulfuric acid, 133

Swep, 1203, 1272, 1622

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181, 182, 194, 199, 212, 222, 225, 226,
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1382, 1386, 1397B, 1398, 1400, 1416,
1418, 1420, 1427, 1440, 1449, 1467, 1468,
1484, 1488A, 1489, 1501, 1508, 1518,
1527, 1528, 1529, 1547, 1568, 1578, 1586,
1613, 1618, 1625, 1631, 1632, 1654, 1655,
1663, 1687

2,4,5-T derivatives, 1179, 1182, 1617

2,4,5-TB use 4-(2,4,5-Trichlorophenoxy)-
butyric acid.

TBA, 2,3,6-TBA use 2,3,6-Trichlorobenzoic
acid.

TCA use Trichloroacetic acid.

TCB use Trichlorobenzene.

Tenoran** use Chloroxuron.

Terbacil, 1341

2,4,5-TES use Sodium 2,4,5-
Trichlorophenoxyethyl sulfate.

1,2,4,5-Tetrachlorobenzene, 957

Tetrachlorophenol, 117

Tillam** use Pebulate.

Tok** E-25 use 2,4-Dichlorophenyl
p-nitrophenyl ether.

**Registered trade mark.

Tordon**, Tordon** 101 use Picloram.

2,4,5-TP** use Silvex.

2,2,3-TFA use 2,2,3-Trichloroproponic acid.

Treflan** use Trifluralin.

Triallate,	1002, 1385
Triazine,	1581
Triazines,	133, 149, 264, 266, 632, 683, 688, 1076, 1236, 1274
Tributyl phosphorotrithioate,	75, 333, 431
Tributyl phosphorotrithioite,	31, 332, 819
Tricamba,	103, 218, 361, 819
Trichloroacetic acid,	229, 230, 523, 545, 546, 548, 553, 626, 639, 641, 653, 680, 720, 721, 722, 763, 779, 781, 784, 792, 793, 810, 814, 816, 817, 824, 838, 844, 880, 928, 929, 939, 950, 1018, 1033, 1114, 1116, 1174, 1201, 1234, 1235, 1251, 1258, 1261, 1262, 1277, 1382, 1420, 1421, 1426, 1432, 1442, 1472, 1473, 1480, 1495, 1544, 1569, 1624, 1662, 1677, 1689, 1690
Trichloroacetic acid derivatives,	1109
Trichlorobenzene,	1105
2,3,5-Trichlorobenzoic acid,	583, 1283, 1293
2,3,6-Trichlorobenzoic acid,	311, 360, 583, 760, 761, 819, 970, 993, 1005, 1010, 1013, 1077, 1085, 1159, 1227, 1234, 1235, 1246, 1256, 1283, 1293, 1296, 1302, 1513, 1549, 1592
Trichlorobenzoic acid dimethylamine salt,	352
2,3,6-Trichlorobenzylxyloxypropanol,	161, 393
Trichlorophenol,	117, 122, 123, 158
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2,4,6-Trichlorophenoxyacetic acid,	1191
4-(2,4,5-Trichlorophenoxy)butyric acid,	1265, 1347, 1654
2,4,5-Trichlorophenoxyethyl sulfate,	1240
2,3,6-Trichlorophenylacetic acid use Fenac.	

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2,2,3-Trichloropropionic acid,	1505
Tricresyl phosphate,	337
Trietazine,	932, 941, 1266, 1660, 1695
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2-(Trifluoromethyl)-benzimidazoles, . . .	10, 399
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Tris(2,4-dichlorophenoxyethyl) phosphite, .	24, 796, 1270, 1292, 1368, 1370
Tritac** use 2,3,6-Trichlorobenzyloxy- propanol.	
Tupersan** use Siduron.	
U 46 use 2,4-D.	
Urab** use FenuronTCA.	
Urea compounds,	133, 149, 632, 903
Urethane use Ethyl carbamate.	
Urox** use MonuronTCA.	
UT-10, UT10 Leuna use 2,4-D.	
Vegadex** use 2-Chloroallyl diethyldithiocarbamate.	
Vernam** use Vernolate.	
Vernolate,	84, 1163, 1203, 1360, 1622
W 6658 use Simazine.	
Weedex use 2-Methyl-4-chlorophenoxyacetic acid.	
Weedone use 2,4-D.	
Zinc sulfate,	629
Zytron** use O-(2,4-Dichlorophenyl) O-methyl isopropyl-phosphoramidothioate.	

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B. PLANTS AND ANIMALS

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