



Pesticide Notes

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Michigan State University
Pesticide Education Program



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**Michigan Restricted Use Pesticide Listing 1999-2000 (Arranged by Brand Name),
Robin Rosenbaum, Registration Program Manager, Michigan Department of Agriculture**

| BRAND NAME | EPA NUMBER | REGISTRANT |
|--|-----------------|---------------------------------|
| 98-2 | 8622-12 | AMERIBROM INC |
| 98-2 CONTAINS 2% CHLOROPICRIN | 8622-12-40926 | HYIELD-BROMINE INC |
| AATREX 4L HERBICIDE | 100-497 | CIBA-GEIGY CORPORATION |
| AATREX 4L HERBICIDE | 100-497 | NOVARTIS CROP PROTECTION INC |
| AATREX ACCU-PAK ¹ | 100-756 | CIBA-GEIGY CORPORATION |
| AATREX NINE-O HERBICIDE | 100-585 | CIBA-GEIGY CORPORATION |
| AATREX NINE-O HERBICIDE | 100-585 | NOVARTIS CROP PROTECTION INC |
| AATREX, CLASS NINE-O | 100-585-1381 | CENEX/LAND O'LAKES AGRONOMY CO. |
| AGRI-MEK 0.15 EC | 618-98 | MERCK & COMPANY INC |
| AGRI-MEK 0.15EC MITICIDE/INSECTICIDE | 100-898 | NOVARTIS CROP PROTECTION INC |
| AMBUSH 25W INSECTICIDE | 10182-35 | ZENECA AG PRODUCTS |
| AMBUSH 25W INSECTICIDE IN WATER-SOLUBLE PACK | 10182-110 | ZENECA AG PRODUCTS |
| AMBUSH INSECTICIDE | 10182-18 | ZENECA AG PRODUCTS |
| AMMO 2.5 EC INSECTICIDE | 279-3027 | FMC CORP/AGRI CHEMICAL GROUP |
| AMMO WSB INSECTICIDE | 279-3084 | FMC CORP/AGRI CHEMICAL GROUP |
| APHISTAR 50WSP ² | 707-sec18 | ROHM & HAAS COMPANY |
| ASANA XL INSECTICIDE | 352-515 | E.I. DU PONT DE NEMOURS AND CO. |
| ASTRO 25WP INSECTICIDE ¹ | 279-3051 | FMC CORP/AGRI CHEMICAL GROUP |
| ASTRO 3.2EC INSECTICIDE ¹ | 279-3014 | FMC CORP/AGRI CHEMICAL GROUP |
| ATRAZINE 4F ² | 42750-45 | ALBAUGH INC. |
| ATRAZINE 4L ¹ | 9779-255 | RIVERSIDE/TERRA CORPORATION |
| ATRAZINE 4L ¹ | 5905-470-38167 | SETRE CHEMICAL COMPANY |
| ATRAZINE 4L | 9779-255 | TERRA INTERNATIONAL INC |
| ATRAZINE 4L | 68119-4 | WILFARM |
| ATRAZINE 4L (TENKOZ) ² | 68119-4-55467 | TENKOZ INC |
| ATRAZINE 4L (TENKOZ) ¹ | 35915-4-55467 | TENKOZ INC |
| ATRAZINE 4L HERBICIDE | 19713-11 | DREXEL CHEMICAL COMPANY |
| ATRAZINE 4L HERBICIDE | 5905-470 | HELENA CHEMICAL COMPANY |
| ATRAZINE 4L HERBICIDE | 35915-4-60063 | SOSTRAM CORPORATION |
| ATRAZINE 4L HERBICIDE ¹ | 1386-647 | UNIVERSAL COOPERATIVES, INC. |
| ATRAZINE 4L HERBICIDE, CLEAN CROP | 34704-69 | PLATTE CHEMICAL CO. |
| ATRAZINE 4L HERBICIDE, ROYSTER CLARK ² | 19713-11-4904 | ROYSTER-CLARK INC |
| ATRAZINE 4L, CLASS ² | 100-497-1381 | CENEX/LAND O'LAKES AGRONOMY CO. |
| ATRAZINE 4L, CORNBELT | 11773-1 | VAN DIEST SUPPLY COMPANY |
| ATRAZINE 90 ¹ | 2749-485 | ACETO AGRIC. CHEMICALS CORPOR |
| ATRAZINE 90 ¹ | 2749-485-1386 | UNIVERSAL COOPERATIVES, INC. |
| ATRAZINE 90 DF | 2749-485-68119 | WILFARM |
| ATRAZINE 90 DF HERBICIDE | 35915-3-60063 | SOSTRAM CORPORATION |
| ATRAZINE 90 WDG | 34704-622 | PLATTE CHEMICAL CO. |
| ATRAZINE 90DF | 19713-76 | DREXEL CHEMICAL COMPANY |
| ATRAZINE 90DF ¹ | 9779-253 | RIVERSIDE/TERRA CORPORATION |
| ATRAZINE 90DF | 9779-253 | TERRA INTERNATIONAL INC |
| ATRAZINE 90DF ² | 68119-5 | WILFARM |
| ATRAZINE 90DF | 100-585-68119 | WILFARM |
| ATRAZINE 90DF (TENKOZ) ² | 68119-5-55467 | TENKOZ INC |
| ATRAZINE 90DF, CORNBELT | 11773-13 | VAN DIEST SUPPLY COMPANY |
| AVITROL CONCENTRATE FOR THE CONTROL OF GULLS | 11649-10 | AVITROL CORPORATION |
| AVITROL CORN CHOPS | 11649-6 | AVITROL CORPORATION |
| AVITROL DOUBLE STRENGTH CORN CHOPS | 11649-5 | AVITROL CORPORATION |
| AVITROL FC CORN CHOPS - 99 | 11649-12 | AVITROL CORPORATION |
| AVITROL MIXED GRAINS | 11649-4 | AVITROL CORPORATION |
| AVITROL WHOLE CORN | 11649-7 | AVITROL CORPORATION |
| AXIOM A ² | 3125-523 | BAYER CORPORATION |
| AZINPHOS-M 50 WSB | 10163-78 | GOWAN COMPANY |
| AZINPHOSMETHYL 2EC ¹ | 51036-76 | MICRO FLO COMPANY |
| AZINPHOSMETHYL 50W ¹ | 51036-164 | MICRO FLO COMPANY |
| AZTEC 2.1% GRANULAR | 3125-412 | BAYER CORPORATION |
| BANVEL-K + ATRAZINE ² | 51036-307 | MICRO FLO COMPANY |
| BASIS GOLD HERBICIDE | 352-585 | E.I. DU PONT DE NEMOURS AND CO. |
| BATTLE GC TURF AND ORNAMENTAL INSECTICIDE ¹ | 10182-400-10404 | LESCO INC |
| BAYLUSCIDE 3.2% GRANULAR | 6704-91 | FISH & WILDLIFE SERVICE |
| BAYLUSCIDE 70% WETTABLE POWDER | 6704-87 | FISH & WILDLIFE SERVICE |
| BAYTHROID 2 EMULSIFIABLE PYRETHROID INSECTICIDE | 3125-351 | BAYER CORPORATION |
| BICEP II | 100-710 | CIBA-GEIGY CORPORATION |
| BICEP II HERBICIDE | 100-710 | NOVARTIS CROP PROTECTION INC |
| BICEP II MAGNUM ¹ | 100-817 | CIBA-GEIGY CORPORATION |
| BICEP II MAGNUM | 100-817 | NOVARTIS CROP PROTECTION INC |
| BICEP II MAGNUM FC ² | 100-817 | NOVARTIS CROP PROTECTION INC |
| BICEP LITE HERBICIDE ¹ | 100-731 | CIBA-GEIGY CORPORATION |
| BICEP LITE II | 100-766 | CIBA-GEIGY CORPORATION |
| BICEP LITE II | 100-766 | NOVARTIS CROP PROTECTION INC |
| BICEP LITE II MAGNUM ¹ | 100-827 | CIBA-GEIGY CORPORATION |



BRAND NAME

BICEP LITE II MAGNUM
 BICEP MAGNUM TR HERB./WEED CONTROL IN FIELD CORN²
 BLADEX 4L HERBICIDE
 BLADEX 90DF HERBICIDE
 BRIGADE WSB INSECTICIDE/MITICIDE
 BROMAZINE²
 BRO-MEAN C-2PRE
 BRO-MEAN C-33 SOIL FUMIGANT
 BRO-MEAN C-O¹
 BROM-O-GAS SOIL FUMIGANT
 BROMOX + ATRAZINE
 BRONCO HERBICIDE BY MONSANTO
 BUCTRIL + ATRAZINE
 BULLET HERBICIDE
 CAPTURE 2EC²
 CCA CONCENTRATE 50% WOOD PRESERVATIVE
 CCA TYPE C WOOD PRESERVATIVE 50%
 CCA TYPE-C WOOD PRESERVATIVE 60%
 CCA-C CONCENTRATE 60%
 CHLOR-O-PIC
 CHLOR-O-PIC, DOUGLAS¹
 COAL TAR CREOSOTE (PRESSURE APPLICATIONS)
 COMPOUND DRC-1339 98% CONC.-PIGEONS
 COMPOUND DRC-1339 98% CONC. - LIVESTOCK DEP.
 COMPOUND DRC-1339 CONC STAGING AREAS
 COMPOUND DRC-1339 CONCENTRATE - FEEDLOTS
 COMPOUND DRC-1339 CONCENTRATE-GULLS
 CONTOUR HERBICIDE
 CO-RAL COUMAPHOS EMULSIFIABLE LIVESTOCK INSECTICIDE
 COUNTER 15G LOCK 'N LOAD
 COUNTER 15G SYSTEMIC INSECTICIDE-NEMATICIDE
 COUNTER CR
 COUNTER CR LOCK 'N LOAD
 CROPSTAR GB HERBICIDE¹
 CY-PRO 4L¹
 CY-PRO 90DF HERBICIDE¹
 CY-PRO AT 4L HERBICIDE¹
 CY-PRO AT DF HERBICIDE¹
 DANITOL 2.4 EC SPRAY
 DECLARE EMULSIFIABLE INSECTICIDE CONCENTRATE²
 DEGREE HERBICIDE²
 DEGREE XTRA HERBICIDE²
 DELTAGARD GC 5SC INSECTICIDE
 DELTAGARD GC GRANULAR INSECTICIDE
 DETIA FUMEX HYDROGEN PHOSPHIDE FUMIGANT
 DIAZINON (D.Z.N.) AG500
 DIAZINON (D.Z.N.) AG600 WBC
 DIAZINON (D-Z-N) 50W INSECTICIDE
 DIAZINON (D-Z-N) 50W INSECTICIDE
 DIAZINON (D-Z-N) AG500 INSECTICIDE
 DIAZINON (D-Z-N) AG600 WBC
 DIAZINON 14G
 DIAZINON 14G
 DIAZINON 3.33% + 31-5-7 FERTILIZER¹
 DIAZINON 4AG¹
 DIAZINON 4AG
 DIAZINON 4EC (AG)¹
 DIAZINON 500-AG, CLEAN CROP
 DIAZINON 50W
 DIAZINON 50W, CLEAN CROP
 DIAZINON 50W, PRENTOX
 DIAZINON AG500
 DIAZINON AG500
 DIAZINON AG500¹
 DIAZINON AG5000, PRENTOX
 DIAZINON AG600 WBC INSECTICIDE¹
 DIAZINON G-14, CLEAN CROP
 DIAZINON INSECTICIDE
 DICAMBA + ATRAZINE¹
 DIMILIN 25W
 DIMILIN 25W¹
 DIMILIN 2L
 DIMILIN 4L
 DIMILIN 4L¹
 DI-SYSTON 15% GRANULAR SYSTEMIC INSECTICIDE
 DI-SYSTON 8 EMULSIFIABLE SYSTEMIC INSECTICIDE
 DITRAC TRACKING POWDER
 DOUBLEPLAY SELECTIVE HERBICIDE
 DPX-MX670 HERBICIDE

EPA NUMBER

100-827
 100-928
 352-470
 352-495
 279-3108
 51036-255-68119
 5785-22-37733
 5785-24-37733
 5785-11-37733
 5785-4
 51036-255
 524-341
 264-477
 524-418
 279-3069
 62190-2
 10465-26
 10465-28
 62190-14
 5785-17
 5785-17-1015
 61468-1
 56228-28
 56228-29
 56228-30
 56228-10
 56228-17
 241-353
 11556-23
 241-238
 241-238
 241-314
 241-314
 524-296
 1812-366
 1812-365
 1812-367
 1812-368
 59639-35
 1812-432
 524-496
 524-511
 432-835-45639
 432-837-45639
 40285-16
 100-461
 100-784
 100-460
 100-460
 100-461
 100-784
 51036-70
 2935-408
 10404-14
 9779-210
 9779-210
 1386-599
 34704-231
 51036-108
 100-460-34704
 655-456
 5905-248
 51036-71
 5905-248-38167
 655-459
 100-784-10404
 34704-230
 19713-91
 7969-136-51036
 400-465
 37100-8-400
 400-461
 400-474
 37100-54-400
 3125-172
 3125-307
 12455-56
 10182-388
 7969-146-352

REGISTRANT

NOVARTIS CROP PROTECTION INC
 NOVARTIS CROP PROTECTION INC
 E.I. DU PONT DE NEMOURS AND CO.
 E.I. DU PONT DE NEMOURS AND CO.
 FMC CORP/AGRI CHEMICAL GROUP
 WILFARM
 REDDICK FUMIGANTS
 REDDICK FUMIGANTS
 REDDICK FUMIGANTS
 GREAT LAKES CHEMICAL CORP.
 MICRO FLO COMPANY
 MONSANTO AGRICUL. PRODUCTS CO
 RHONE POULENC AG COMPANY
 MONSANTO AGRICUL. PRODUCTS CO
 FMC CORP/AGRI CHEMICAL GROUP
 HICKSON CORPORATION
 CSI
 CSI
 HICKSON CORPORATION
 GREAT LAKES CHEMICAL CORP.
 DOUGLAS CHEMICAL COMPANY
 KOPPERS INDUSTRIES INC
 USDA, WILDLIFE SERVICES
 USDA, WILDLIFE SERVICES
 USDA, WILDLIFE SERVICES
 USDA, WILDLIFE SERVICES
 USDA, WILDLIFE SERVICES
 AMERICAN CYANAMID COMPANY
 BAYER CORPORATION, AGRIC. DIV.
 AMERICAN CYANAMID COMPANY
 AMERICAN CYANAMID COMPANY
 AMERICAN CYANAMID COMPANY
 AMERICAN CYANAMID COMPANY
 MONSANTO AGRICUL. PRODUCTS CO
 GRIFFIN LLC
 GRIFFIN LLC
 GRIFFIN LLC
 GRIFFIN LLC
 VALENT U.S.A. CORPORATION
 GRIFFIN LLC
 MONSANTO AGRICUL. PRODUCTS CO
 MONSANTO AGRICUL. PRODUCTS CO
 AGREVO USA COMPANY
 AGREVO USA COMPANY
 DEGESCH AMERICA, INC.
 NOVARTIS CROP PROTECTION INC
 CIBA-GEIGY CORPORATION
 CIBA-GEIGY CORPORATION
 NOVARTIS CROP PROTECTION INC
 CIBA-GEIGY CORPORATION
 NOVARTIS CROP PROTECTION INC
 MICRO FLO COMPANY
 WILBUR-ELLIS COMPANY
 LESCO INC
 RIVERSIDE/TERRA CORPORATION
 TERRA INTERNATIONAL INC
 UNIVERSAL COOPERATIVES, INC.
 PLATTE CHEMICAL CO.
 MICRO FLO COMPANY
 PLATTE CHEMICAL CO.
 PRENTISS INCORPORATED
 HELENA CHEMICAL COMPANY
 MICRO FLO COMPANY
 SETRE CHEMICAL COMPANY
 PRENTISS INCORPORATED
 LESCO INC
 PLATTE CHEMICAL CO.
 DREXEL CHEMICAL COMPANY
 MICRO FLO COMPANY
 UNIROYAL CHEMICAL COMPANY, INC.
 UNIROYAL CHEMICAL COMPANY, INC.
 UNIROYAL CHEMICAL COMPANY, INC.
 UNIROYAL CHEMICAL COMPANY, INC.
 UNIROYAL CHEMICAL COMPANY, INC.
 BAYER CORPORATION
 BAYER CORPORATION
 BELL LABORATORIES, INC.
 ZENECA AG PRODUCTS
 E.I. DU PONT DE NEMOURS AND CO.



| BRAND NAME | EPA NUMBER | REGISTRANT |
|--|----------------|----------------------------------|
| DYFONATE 4-EC INSECTICIDE ¹ | 10182-212 | ZENECA AG PRODUCTS |
| ETHYL-METHYL PARATHION 6-3 EC ² | 67760-39 | CHEMINOVA, INC. |
| EXTRAZINE II 4L HERBICIDE | 352-500 | E.I. DU PONT DE NEMOURS AND CO. |
| EXTRAZINE II DF HERBICIDE | 352-577 | E.I. DU PONT DE NEMOURS AND CO. |
| FIELDMASTER CORN HERBICIDE | 524-497 | MONSANTO AGRICUL. PRODUCTS CO |
| FORCE 1.5G INSECTICIDE | 10182-130 | ZENECA AG PRODUCTS |
| FORCE 3G INSECTICIDE | 10182-373 | ZENECA AG PRODUCTS |
| FORCE'S MOUS-CON NO. 2 | 814-9 | CARAJON CHEMICAL COMPANY, INC. |
| FORTRESS 2.5G GRANULAR INSECTICIDE ¹ | 352-579 | E.I. DU PONT DE NEMOURS AND CO. |
| FORTRESS 5G GRANULAR INSECTICIDE | 352-552 | E.I. DU PONT DE NEMOURS AND CO. |
| FULEX DITHIO INSECTICIDAL SMOKE | 1327-38 | FULLER SYSTEM, INC. |
| FULEX NICOTINE FUMIGATOR | 1327-41 | FULLER SYSTEM, INC. |
| FULTIME HERBICIDE | 10182-419 | ZENECA AG PRODUCTS |
| FUMI-CEL | 40285-8 | DEGESCH AMERICA, INC. |
| FUMI-STRIP | 40285-8 | DEGESCH AMERICA, INC. |
| FUMITOXIN PELLETS | 5857-2 | PESTCON SYSTEMS INC |
| FUMITOXIN TABLETS | 5857-1 | PESTCON SYSTEMS INC |
| FUMITOXIN/ALUMINUM PHOSPHIDE BAGS ¹ | 5857-6 | PESTCON SYSTEMS INC |
| FURADAN 15 GRANULES INSECTICIDE-NEMATICIDE | 279-3023 | FMC CORP/AGRI CHEMICAL GROUP |
| FURADAN 4F INSECTICIDE-NEMATICIDE | 279-2876 | FMC CORP/AGRI CHEMICAL GROUP |
| GASTOXIN FUMIGATION PELLETS | 43743-2 | BERNARDO CHEMICALS LIMITED |
| GASTOXIN FUMIGATION SACHET CHAIN | 43743-3 | BERNARDO CHEMICALS LIMITED |
| GASTOXIN FUMIGATION SACHETS | 43743-3 | BERNARDO CHEMICALS LIMITED |
| GASTOXIN FUMIGATION TABLETS | 43743-1 | BERNARDO CHEMICALS LIMITED |
| GENESIS | 524-479 | MONSANTO AGRICUL. PRODUCTS CO |
| GRAMOXONE EXTRA HERBICIDE | 10182-280 | ZENECA AG PRODUCTS |
| GUARDSMAN HERBICIDE ² | 7969-146 | BASF CORPORATION |
| GUARDSMAN HERBICIDE ¹ | 55947-150 | SANDOZ AGRO INC |
| GUTHION 2L ² | 3125-102 | BAYER CORPORATION |
| GUTHION 2S EMULSIFIABLE INSECTICIDE ¹ | 3125-123 | BAYER CORPORATION |
| GUTHION 3 FLOWABLE INSECTICIDE ¹ | 3125-338 | BAYER CORPORATION |
| GUTHION 50% WETTABLE POWDER ¹ | 3125-193 | BAYER CORPORATION |
| GUTHION SOLUPAK 50% WP | 3125-301 | BAYER CORPORATION |
| HARNESS 20G | 524-487 | MONSANTO AGRICUL. PRODUCTS CO |
| HARNESS HERBICIDE | 524-473 | MONSANTO AGRICUL. PRODUCTS CO |
| HARNESS PLUS EC HERBICIDE | 524-473 | MONSANTO AGRICUL. PRODUCTS CO |
| HARNESS PLUS HERBICIDE | 524-476 | MONSANTO AGRICUL. PRODUCTS CO |
| HARNESS XTRA | 524-480 | MONSANTO AGRICUL. PRODUCTS CO |
| HARNESS XTRA 5.6L | 524-485 | MONSANTO AGRICUL. PRODUCTS CO |
| HOELON 3EC | 45639-173 | AGREVO USA COMPANY |
| HOLLOW HEART CONC. WOOD PRESERVING COMPOUND ⁴ | 3008-8 | OSMOSE WOOD PRESERV CO OF AM INC |
| INJECT A CIDE B (CONTAINS TECHNICAL BIDRIN) | 7946-11 | J J MAUGET COMPANY |
| JUDGE ¹ | 524-314-9779 | RIVERSIDE/TERRA CORPORATION |
| JUDGE MT ¹ | 524-344-9779 | RIVERSIDE/TERRA CORPORATION |
| K-33-A(50%) WOOD PRESERVATIVE | 3008-42 | OSMOSE WOOD PRESERV CO OF AM INC |
| K-33-C (50%) WOOD PRESERVATIVE | 3008-36 | OSMOSE WOOD PRESERV CO OF AM INC |
| K-33-C (72%) WOOD PRESERVATIVE | 3008-17 | OSMOSE WOOD PRESERV CO OF AM INC |
| KERB 50-W A SELECTIVE HERB-IN WATER SOLUBLE POUCHES | 707-159 | ROHM & HAAS COMPANY |
| KERB WSP TURF & ORNAMENTAL HERBICIDE | 707-159 | ROHM & HAAS COMPANY |
| KNOXOUT NL ² | 4581-392-1001 | CLEARY CHEMICAL CORP |
| LADDOK S-12 HERBICIDE | 7969-100 | BASF CORPORATION |
| LAMPICIDE SEA LAMPREY LARVICIDE | 6704-45 | FISH & WILDLIFE SERVICE |
| LANNATE INSECTICIDE ¹ | 352-342 | E.I. DU PONT DE NEMOURS AND CO. |
| LANNATE LV INSECTICIDE | 352-384 | E.I. DU PONT DE NEMOURS AND CO. |
| LANNATE SP INSECTICIDE | 352-342 | E.I. DU PONT DE NEMOURS AND CO. |
| LARIAT | 524-329 | MONSANTO AGRICUL. PRODUCTS CO |
| LASSO HERBICIDE BY MONSANTO ¹ | 524-314 | MONSANTO AGRICUL. PRODUCTS CO |
| LASSO II GRANULAR HERBICIDE BY MONSANTO | 524-296 | MONSANTO AGRICUL. PRODUCTS CO |
| LEADOFF HERBICIDE | 352-600 | E.I. DU PONT DE NEMOURS AND CO. |
| LIBERTY ATZ HERBICIDE ² | 45639-219 | AGREVO USA COMPANY |
| LINDANE 20 EC ¹ | 8660-52-51036 | MICRO FLO COMPANY |
| LINDANE 20% ¹ | 19713-308 | DREXEL CHEMICAL COMPANY |
| LINDANE 20% EMULSIFIABLE CONCENTRATE, PRENTOX ¹ | 655-579 | PRENTISS INCORPORATED |
| MAGNACIDE B MICROBIOCIDE | 10707-10 | BAKER PETROLITE CORPORATION |
| MAGTOXIN PREPAC SPOT FUMIGANT | 40285-12 | DEGESCH AMERICA, INC. |
| MARKSMAN HERBICIDE ² | 7969-136 | BASF CORPORATION |
| MARKSMAN HERBICIDE ¹ | 55947-39 | SANDOZ AGRO INC |
| MBC CONCENTRATE SOIL FUMIGANT ² | 8853-2 | HENDRIX AND DAIL, INC. |
| MBC-33 SOIL FUMIGANT ² | 8853-3 | HENDRIX AND DAIL, INC. |
| MESUROL 75% WETTABLE POWDER ¹ | 3125-288-10163 | GOWAN COMPANY |
| MESUROL 75-W | 10163-231 | GOWAN COMPANY |
| MESUROL PRO INSECTICIDE MITICIDE ² | 10163-228 | GOWAN COMPANY |
| METABROM 100 | 8622-16 | AMERIBROM INC |
| METASYSTOX-R SPRAY CONCENTRATE | 10163-220 | GOWAN COMPANY |
| METASYSTOX-R2 ORNAMENTAL INSECTICIDE ¹ | 10163-220 | GOWAN COMPANY |
| METH-O-GAS 100 COMMODITY FUMIGANT | 5785-11 | GREAT LAKES CHEMICAL CORP. |
| METH-O-GAS Q | 5785-41 | GREAT LAKES CHEMICAL CORP. |
| METHYL BROMIDE 89.5% ² | 11220-17-8853 | HENDRIX AND DAIL, INC. |



| | | |
|---|-----------------|------------------------------------|
| METHYL BROMIDE 98% | 8536-19-8853 | HENDRIX AND DAIL, INC. |
| MICRO-TECH | 524-344 | MONSANTO AGRICUL. PRODUCTS CO |
| MISTY WEEDTROL VF ¹ | 8123-37-10807 | AMREP, INC. (GA) |
| MITC-FUME ¹ | 54289-2-3008 | OSMOSE WOOD PRESERV CO OF AM INC |
| MOCAP EC | 264-458 | RHONE POULENC AG COMPANY |
| MOLE-NOTS SPECIAL, NOTTS | 358-165 | NOTT MANUFACTURING COMPANY INC |
| MON 58420 HERBICIDE | 524-493 | MONSANTO AGRICUL. PRODUCTS CO |
| MON 58430 HERBICIDE | 524-496 | MONSANTO AGRICUL. PRODUCTS CO |
| MON 8411 HERBICIDE | 524-488 | MONSANTO AGRICUL. PRODUCTS CO |
| MONITOR 4 LIQUID INSECTICIDE | 3125-280 | BAYER CORPORATION |
| MONITOR 4 SPRAY | 59639-56 | VALENT U.S.A. CORPORATION |
| MOXY + ATRAZINE ¹ | 51036-255-9779 | RIVERSIDE/TERRA CORPORATION |
| MOXY + ATRAZINE | 51036-255-9779 | TERRA INTERNATIONAL INC |
| MUSTANG 1.5 EW INSECTICIDE | 279-3126 | FMC CORP/AGRI CHEMICAL GROUP |
| NEMACUR 10% TURF AND ORNAMENTAL ¹ | 3125-237 | BAYER CORPORATION |
| NEMACUR 10% TURF NEMATICIDE | 3125-237 | BAYER CORPORATION |
| NEMACUR 15% GRAN. SYSTEMIC INSECTICIDE-NEMATICIDE | 3125-236 | BAYER CORPORATION |
| NEMACUR 3 EMULS.SYSTEMIC INSECTICIDE-NEMATICIDE | 3125-283 | BAYER CORPORATION |
| NEMACUR 3 TURF | 3125-283 | BAYER CORPORATION |
| NICOTINE SMOKE GENERATOR | 8241-9 | PLANT PRODUCTS CORPORATION |
| NOXFISH FISH TOXICANT | 432-172 | AGREVO ENVIRONMENTAL HEALTH |
| NUSYN-NOXFISH FISH TOXICANT | 432-550 | AGREVO ENVIRONMENTAL HEALTH |
| OPTION II HERBICIDE ¹ | 45639-185 | AGREVO USA COMPANY |
| OSMOPLASTIC WOOD PRESERVING COMPOUND ¹ | 3008-56 | OSMOSE WOOD PRESERV CO OF AM INC |
| OSMOPLASTIC WOOD PRESERVING COMPOUND | 3008-68 | OSMOSE WOOD PRESERV CO OF AM INC |
| OSMOSE MITC-FUME | 69850-1-3008 | OSMOSE WOOD PRESERV CO OF AM INC |
| PARATHION 8 AQUA | 2935-483 | WILBUR-ELLIS COMPANY |
| PARATHION 8 EC ² | 67760-38 | CHEMINOVA, INC. |
| PARTNER CUSTOM BLEND HERBICIDE | 524-403 | MONSANTO AGRICUL. PRODUCTS CO |
| PARTNER WDG | 524-403 | MONSANTO AGRICUL. PRODUCTS CO |
| PENNCAP-M MICROENCAPSULATED INSECTICIDE ² | 4581-393 | ELF ATOCHEM NORTH AMER., AG. CHEM. |
| PHORATE 20G ² | 34704-259-2749 | ACETO AGRICULT. CHEMICALS CORP |
| PHORATE 20G ¹ | 9779-293 | RIVERSIDE/TERRA CORPORATION |
| PHORATE 20G | 9779-293 | TERRA INTERNATIONAL INC |
| PHORATE 20G, CLEAN CROP | 34704-259 | PLATTE CHEMICAL CO. |
| PHOSFUME PELLETS, DOUGLAS | 59209-2-1015 | DOUGLAS CHEMICAL COMPANY |
| PHOSFUME TABLETS, DOUGLAS | 59209-1-1015 | DOUGLAS CHEMICAL COMPANY |
| PHOSTOXIN PELLETS | 40285-3 | DEGESCH AMERICA, INC. |
| PHOSTOXIN PREPAC ROPE | 40285-13 | DEGESCH AMERICA, INC. |
| PHOSTOXIN TABLET PREPAC | 40285-14 | DEGESCH AMERICA, INC. |
| PHOSTOXIN TABLETS-R | 40285-1 | DEGESCH AMERICA, INC. |
| PIC-BROM 33 PREPLANT SOIL FUMIGANT | 8536-05-8853 | HENDRIX AND DAIL, INC. |
| PLANTFUME 103 SMOKE GENERATOR | 8241-10 | PLANT PRODUCTS CORPORATION |
| POL-NU 15-15 ¹ | 1022-408-50534 | ISK BIOSCIENCES CORPORATION |
| POL-NU PAK ¹ | 1022-240-50534 | ISK BIOSCIENCES CORPORATION |
| POUNCE 1.5 G INSECTICIDE | 279-3059 | FMC CORP/AGRI CHEMICAL GROUP |
| POUNCE 25 WP INSECTICIDE | 279-3051 | FMC CORP/AGRI CHEMICAL GROUP |
| POUNCE 3.2 EC INSECTICIDE | 279-3014 | FMC CORP/AGRI CHEMICAL GROUP |
| POUNCE WSB INSECTICIDE | 279-3083 | FMC CORP/AGRI CHEMICAL GROUP |
| PRENTOX PRENFISH COMMON CARP MANAGEMENT BAIT ² | 655-803 | PRENTISS INCORPORATED |
| PROCLAIM ¹ | 100-904 | NOVARTIS CROP PROTECTION INC |
| PRO-TEX ¹ | 1812-351 | GRIFFIN LLC |
| PROZAP ZINC PHOSPHIDE OAT BAIT ² | 61282-14 | HACCO, INC. |
| PROZAP ZINC PHOSPHIDE PELLETS ² | 2393-521 | HACO, INC. |
| RAMROD AND ATRAZINE FLOWABLE ¹ | 524-328 | MONSANTO AGRICUL. PRODUCTS CO |
| READY MASTER ATZ HERBICIDE ² | 524-509 | MONSANTO AGRICUL. PRODUCTS CO |
| REGENT 4SC INSECTICIDE | 264-582 | RHONE POULENC AG COMPANY |
| REGENT 80 WG INSECTICIDE | 264-570 | RHONE POULENC AG COMPANY |
| REWARD AQUATIC AND NONCROP HERBICIDE ¹⁸⁴ | 10182-404 | ZENECA AG PRODUCTS |
| REWARD LANDSCAPE AND AQUATIC HERBICIDE ²⁸⁴ | 10182-404 | ZENECA AG PRODUCTS |
| RIDALL-ZINC II ² | 2393-521-7173 | LIPHATECH INC |
| ROO-PRU SUPER TRI PAK | 64945-3 | CONNESSE CO. |
| ROZOL BLUE TRACKING POWDER FOR MICE AND RATS | 7173-172 | LIPHATECH INC |
| ROZOL TRACKING POWDER FOR MICE AND RATS | 7173-113 | LIPHATECH INC |
| SANAFOAM VAPOROOTER II | 9993-3 | AIRRIGATION ENGINEERING CO., INC. |
| SCIMITAR GC INSECTICIDE | 10182-400 | ZENECA AG PRODUCTS |
| SCOURGE 18% + 54% MF F2 | 432-667 | AGREVO ENVIRONMENTAL HEALTH |
| SCOURGE 4% + 12% MF F2 | 432-716 | AGREVO ENVIRONMENTAL HEALTH |
| SCOUT X-TRA INSECTICIDE | 34147-3-45639 | AGREVO USA COMPANY |
| SEA LAMPREY LARAVICIDE LAMPRECID | 6704-45 | FISH & WILDLIFE SERVICE |
| SEWEROUT | 64898-4 | FLORIDA PETROCHEMICALS, INC. |
| SEWEROUT-D (SUBPACK) | 64898-4 | FLORIDA PETROCHEMICALS, INC. |
| SEWEROUT-M(SUBPACK) | 64898-4 | FLORIDA PETROCHEMICALS, INC. |
| SHOTGUN FLOWABLE HERBICIDE | 34704-728 | PLATTE CHEMICAL CO. |
| SNIPER 50 PVA AZINPHOS METHYL INSECTICIDE | 10163-180-34704 | PLATTE CHEMICAL CO. |
| SNIPER 50W AZINPHOS METHYL INSECTICIDE ¹ | 66222-11-34704 | PLATTE CHEMICAL CO. |
| STERLING PLUS ² | 51036-307-9779 | TERRA INTERNATIONAL INC |
| STRYKER INSECTICIDE ¹ | 34147-3-45639 | AGREVO USA COMPANY |
| SUPER TIN 80WP | 1812-350 | GRIFFIN LLC |
| SUPER-TIN 4L TRIPHENYL TIN HYDROXIDE FLOW. FUNGICIDE ¹ | 1812-244 | GRIFFIN LLC |



| | | |
|--|---------------|-----------------------------------|
| SUPRACIDE 25W ² | 10163-244 | GOWAN COMPANY |
| SUPRACIDE 25WP ¹ | 100-754 | CIBA-GEIGY CORPORATION |
| SUPRACIDE 25WP | 100-754 | CIBA-GEIGY CORPORATION |
| SURPASS 100 HERBICIDE | 10182-363 | ZENECA AG PRODUCTS |
| SURPASS 20-G GRANULAR HERBICIDE | 10182-407 | ZENECA AG PRODUCTS |
| SURPASS EC HERBICIDE | 10182-325 | ZENECA AG PRODUCTS |
| SYNPREN-FISH TOXICANT LIQUID-EMULSIFIABLE | 655-421 | PRENTISS INCORPORATED |
| TALSTAR GC FLOWABLE INSECTICIDE/MITICIDE | 279-3156 | FMC CORP/AGRI CHEMICAL GROUP |
| TALSTAR GC GRANULAR INSECTICIDE | 279-3167 | FMC CORP/AGRI CHEMICAL GROUP |
| TALSTAR NURSERY FLOWABLE INSECTICIDE/MITICIDE | 279-3155 | FMC CORP/AGRI CHEMICAL GROUP |
| TALSTAR-N NURSERY FLOWABLE (PRESCRIPTION TREATMENT BRAND)INSECT/MITICIDE | 279-3155-499 | WHITMIRE MICRO-GEN RESRCH LAB INC |
| TAME 2.4 EC SPRAY | 59639-77 | VALENT U.S.A. CORPORATION |
| TELONE C-17 SOIL FUNGICIDE & NEMAT. | 62719-12 | DOW AGROSCIENCES LLC |
| TELONE C-17 SOIL FUNGICIDE & NEMAT. ¹ | 62719-12 | DOWELANCO CO. |
| TELONE C-35 ² | 62719-302 | DOW AGROSCIENCES LLC |
| TELONE II SOIL FUMIGANT | 62719-32 | DOW AGROSCIENCES LLC |
| TELONE II SOIL FUMIGANT ¹ | 62719-32 | DOWELANCO CO. |
| TEMIK ALDICARB PESTICIDE 15% GRANULAR | 264-330 | RHONE POULENC AG COMPANY |
| TEMIK BRAND 15G LOCK 'N LOAD ALDICARB PESTICIDE | 264-330 | RHONE POULENC AG COMPANY |
| TEMPO 20 WP GOLF COURSE INSECTICIDE | 3125-462 | BAYER CORPORATION |
| TERR-O-GAS 67 PREPLANT SOIL FUMIGANT | 5785-24 | GREAT LAKES CHEMICAL CORP. |
| TERR-O-GAS 98 | 5785-22 | GREAT LAKES CHEMICAL CORP. |
| TFM BAR | 6704-86 | FISH & WILDLIFE SERVICE |
| THIMET 15-G LOCK 'N LOAD | 241-145 | AMERICAN CYANAMID COMPANY |
| THIMET 15-G SOIL AND SYSTEMIC INSECTICIDE | 241-145 | AMERICAN CYANAMID COMPANY |
| THIMET 20-G LOCK 'N LOAD CLOSED HANDLING SYSTEM | 241-257 | AMERICAN CYANAMID COMPANY |
| THIMET 20-G SOIL AND SYSTEMIC INSECTICIDE | 241-257 | AMERICAN CYANAMID COMPANY |
| TIMBERFUME | 3008-39 | OSMOSE WOOD PRESERV CO OF AM INC |
| TIMBERFUME II | 3008-46 | OSMOSE WOOD PRESERV CO OF AM INC |
| TIMBERLIFE WOOD PRESERVING COMPOUND | 3008-68 | OSMOSE WOOD PRESERV CO OF AM INC |
| TIMBERLIFE WOOD PRESERVING COMPOUND ¹ | 3008-56 | OSMOSE WOOD PRESERV CO OF AM INC |
| TOPCID E O/S | 10182-417-400 | UNIROYAL CHEMICAL COMPANY, INC. |
| TOPNOTCH NO-TILL HERBICIDE | 10182-391 | ZENECA AG PRODUCTS |
| TORDON 101 WEED AND BRUSH KILLER | 62719-5 | DOW AGROSCIENCES LLC |
| TORDON 101 WEED AND BRUSH KILLER ¹ | 62719-5 | DOWELANCO CO. |
| TORDON K HERBICIDE | 62719-17 | DOW AGROSCIENCES LLC |
| TORDON K HERBICIDE ¹ | 62719-17 | DOWELANCO CO. |
| TRI-CON 67/33 | 11220-07-8853 | HENDRIX AND DAIL, INC. |
| TRI-FORM 30 | 11220-21-8853 | HENDRIX AND DAIL, INC. |
| TRI-FORM 35 ² | 11220-22-8853 | HENDRIX AND DAIL, INC. |
| TRIUMPH 4E ¹ | 100-643 | CIBA-GEIGY CORPORATION |
| TURCAM | 45639-59 | AGREVO USA COMPANY |
| TURCAM 2 1/2G INSECTICIDE ¹ | 45639-100 | NOR-AM CHEMICAL COMPANY |
| TURCAM 2-1/2 G | 45639-100 | AGREVO USA COMPANY |
| VENDEX 50WP MITICIDE, DU PONT | 352-480 | E.I. DU PONT DE NEMOURS AND CO. |
| VENDEX WP | 1812-413 | GRIFFIN LLC |
| VIKANE FUMIGANT | 62719-4 | DOW AGROSCIENCES LLC |
| VIKANE FUMIGANT ¹ | 62719-4 | DOWELANCO CO. |
| VULCAN GLAZD PENTA | 5382-16 | VULCAN CHEMICALS |
| VYDATE C-LV INSECTICIDE ² | 352-532 | E.I. DU PONT DE NEMOURS AND CO. |
| VYDATE L INSECTICIDE/NEMATICIDE WATER SOLUBLE LIQUID | 352-372 | E.I. DU PONT DE NEMOURS AND CO. |
| WARRIOR INSECTICIDE | 10182-96 | ZENECA AG PRODUCTS |
| WARRIOR T INSECTICIDE WIZEON TECHNOLOGY | 10182-434 | ZENECA AG PRODUCTS |
| WEEVIL-CIDE GAS BAGS | 59209-3-70506 | UNITED PHOSPHORUS INC |
| WEEVIL-CIDE PELLETS | 59209-2-70506 | UNITED PHOSPHORUS INC |
| WEEVIL-CIDE TABLETS | 59209-1-70506 | UNITED PHOSPHORUS INC |
| WOLMANAC CONCENTRATE 50% | 62190-2 | HICKSON CORPORATION |
| WOLMANAC CONCENTRATE 60% | 62190-14 | HICKSON CORPORATION |
| ZINC PHOSPHIDE CONC FOR RODENT AND LAGOMORPH CNTL | 56228-6 | USDA, WILDLIFE SERVICES |
| ZINC PHOSPHIDE CORN BAIT | 61282-20 | HACCO, INC. |
| ZINC PHOSPHIDE OAT BAIT | 61282-14 | HACCO, INC. |
| ZINC PHOSPHIDE ON OATS | 56228-14 | USDA, WILDLIFE SERVICES |
| ZINC PHOSPHIDE ON WHEAT FOR MOUSE CONTROL | 56228-3 | USDA, WILDLIFE SERVICES |
| ZINC PHOSPHIDE PELLETS, HOPKINS | 2393-521 | HACO, INC. |
| ZP RODENT BAIT AG | 12455-17 | BELL LABORATORIES, INC. |
| ZP TRACKING POWDER | 12455-16 | BELL LABORATORIES, INC. |

TOTAL: 374 registered as of 1/28/2000

¹Discontinued = The manufacturer has begun the 2-year discontinuance process. Existing stocks may be sold as long as the product is registered.



²New = New products registered in Michigan after 11/01/1998 (Date of last listing).

³Section 18 use only!

⁴Michigan RUP = Products restricted in Michigan only, pursuant to Regulation 633. Because these products are not federally restricted they do not bear the words "Restricted Use Pesticide" on the label. However, sales must be recorded and the product may be sold only to certified applicators.



Registration and restriction of pesticides in the United States is a constantly changing process. If you have questions regarding the inclusion or omission of certain pesticide products on this list, please contact Thomas Benner, MDA Pesticide Registration Coordinator at 517-241-3268 or e-mail at bennert9@state.mi.us.

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|---|---|---|
|  | <h2>Chemical Update</h2> <p>The following information provides registration status of particular pesticides and should not be considered as pesticide recommendations by MSU Extension.</p> |  |
|---|---|---|

Chemical Update

*Products are listed by trade name with active ingredient name and manufacturer following. Please note that multiple manufactures may make the same product. A change in the registration, formulation, or label of a product from one manufacturer **may not apply** to the same product made by another manufacturer. If you have any doubts about the status of a pesticide, please read a current label and/or check with the manufacturer directly.*

Residue Tolerances:

Insecticides

- Asana (esfenvalerate; Du Pont)—as a result of the IR-4 Project, residue tolerances have been proposed on bok-choy at 1 ppm, sweet potatoes and 0.05 ppm, and Brussels sprouts at 0.2 ppm. Comments were due by 12/31/00.
- Brigade (bifenthrin; FMC)—proposed residue tolerances as a result of the IR-4 Project on grapes at 0.2 ppm, peppers at 0.5 ppm, and head lettuce at 2 ppm.
- Danitol (fenpropathrin; Valent)—as a result of the IR-4 Project, residue tolerances have been proposed on cucurbit vegetables at 0.5 ppm. Comments were due by 1/3/00.
- Knack (pyriproxyfen; Valent)—residue tolerances established on fruiting vegetables (except cucurbits) at 0.2 ppm.



Herbicides

- Grammoxone (paraquat; Zeneca)—proposed to establish residue tolerances on artichokes and dry peas as a result of the IR-4 Project.
- Liberty (glufosinate-ammonium; AgrEvo)—residue tolerances established on apples and grapes at 0.05 ppm, sweet corn at 4 ppm, field corn at 4 ppm, and soybeans at 2 ppm.

Label Additions/Changes

Insecticides

- Conserve (spinosad; Dow AgroSciences)—use on roses added to the label as a result of the IR-4 Project.
- Conserve (spinosad; Dow AgroSciences)—use on greenhouse grown ornamentals added to the label.
- Delta Gard (deltamethrin; AgrEvo)—use on over 30 additional ornamental species added to the label as a result of the IR-4 Project.
- Sanmite (pyridaben; BASF)—use on over 25 additional ornamental species added to the label as a result of the IR-4 Project.

Herbicides

- Poast (sethoxydim; BASF)—use on leafy root and tuberous vegetables added to the label.

Fungicides

- Ferbam (USB Chemical)—use on carnations and tulips added to the label as a result of the IR-4 Project.
- Heritage (azoxystrobin; Zeneca)—use on over 50 new ornamental species added to the label as a result of the IR-4 Project.

Label Deletions/Cancellations

Insecticides

- Dycarb 76WP (bendiocarb; AgrEvo)—This product will be replaced with a new brand name Closure 76WP. It will no longer be registered on interior landscapes but the rest of the label remains the same.
- Lorsban/Dursban (chlorpyrifos; Dow AgroSciences)—use on popcorn is expected to be deleted from the label.
- Supracide (methidathion; Gowan/Novartis)—Use on potatoes and sorghum deleted due to registration cost.
- Plantfume 103 (sulfotepp; Plant Products Corp)—the company has voluntarily cancelled the use of this produce on greenhouse ornamentals and vegetables effective 9/30/02. Stock in distributor inventory can be sold until 9/30/04.



New Registrations/Products under Development

Insecticides

- Baythroid (cyfluthrin; Bayer)—registered for use on potatoes to control leafhoppers, loopers, Colorado potato beetle, cutworms, European corn borer, flea beetles, tuberworms, psyllids, and tarnished plant bugs.
- Flagship (thiamethoxam; Novartis)—conditionally registered for control of insect pests in ornamentals. Registration is expected in the near future for use on greenhouse and interiorscape ornamentals to control sucking insects such as aphids and whiteflies.
- Knack (pyriproxyfen; Valent)—registered for use on tomatoes and peppers to control whiteflies.
- Ovation (clofentezine; AgrEvo)—a new miticide (marketed by Scotts for use in greenhouses) expected to be registered for use on ornamentals.
- Pylon (chlorfenapyr; American Cyanamid)—registration is expected in the near future for use on greenhouse ornamentals to control mites and thrips (marketed by Olympic Hort Products).

Herbicides

- AC-900001 (picolinafen; Cyanamid)—a new class of chemicals being developed for post-emergence control of broadleaf weeds in cereals. The first introduction is scheduled for Canada in 2001.
- AEF-115008 (iodosulfuron-methyl sodium; AgrEvo)—a new post-emergence herbicide for use with mefenpyr-diethyl to control grasses in cereals.
- Aqua-Neat (glyphosate; Riverdale)—this is the trade name they will use for their aquatic formulation.
- Aramo (tepraloxymid; BASF)—being developed to replace sethoxydim for post-emergence control of grasses in broadleaf crops. Introduction is expected in 2000.
- Attribute/Olympus (BAY-MKH-6561; Bayer)—being developed as a post-emergence treatment for cereals to control grasses and some broadleaf weeds. It is a 70% WDP formulation.
- Backdraft (imazaquin/glyphosate; American Cyanamid)—a new formulation for use on Roundup Ready soybeans.
- Extreme (imazethapyr/glyphosate; American Cyanamid)—a new formulation for use on Roundup Ready soybeans.
- Everest (BAY-MKH-6562; Bayer)—being developed in the U.S. and Canada for post-emergence control of grasses and some broadleaf weeds in cereals. It may be available in 2000.
- Mesotrione (Zeneca)—a new herbicide being developed for pre- and post-emergence use on corn to control broadleaf weeds and some grasses. Introduction is expected in 2002.

- Readymaster ATX (glyphosate/atrazine; Monsanto)—a new formulation for use on Roundup Ready corn.
- Roundup Pro Dry (glyphosate; Monsanto)—a recently released dry formulation of Roundup.

Fungicides

- Agri Phos Ag Fungicide (phosphorus acid: Agrotol Int'l)—a new product being developed for use on cole crops, cucurbit crops, ginseng, grapes, hops, leafy vegetables, onions, pome fruits, strawberries and tomatoes to control various diseases. The company has proposed to receive an exemption from residue tolerance requirements. Comments due by 2/14/00.
- Gavel 75DF (zoxamide; Rohm & Haas)—proposed to register this new active ingredient to control downy mildew on grapes and early and late blight on potatoes.
- Maxim MZ (fludioxonil/mancozeb; Novartis)—a new combination fungicide used as a seed piece treatment on seed potatoes to control fusarium dry rot, rhizoctonia and helminthosporium.
- Quell (mefenoxam; Nirooyal)—a new formulation for use on turf, conifers, and ornamentals to control pythium blight, phytophthora root rot and downy mildew.
- Zoxium 80W/WSP (zoxamide; Rohm & Haas)—proposed to register this new active ingredient for use on grapes to control downy mildew and on potatoes to control early and late blight.

Miscellaneous

- **American Cyanamid** has entered into a global licensing agreement with **Michigan State University** to develop imidazolinone herbicide-tolerant sugarbeets. The first varieties will be available in 2002 and will be under Cyanamid's Clearfield label.
- **Isomate BTW** (pheromone; Bio Control Ltd.)—a new pheromone registered by EPA for the mating disruption of the beet army worm on alfalfa, asparagus, beans, beets, cabbage, celery, cole crops, cucumbers, ground nuts, lettuce, onions, peas, peppers, soybeans, strawberries, sweet potatoes, tomatoes and tobacco.
- **Monsanto** has announced a planned merger with the drug company Pharmacia, into a \$27 billion company. Monsanto has halted attempts to purchase Delta and Pine Land Co. It must pay DLP \$81 million termination fee.
- **Monsanto** applied to register corn rootworm-protected corn hybrids containing a genetically engineered *B.t.* Comments were due by 1/21/00.
- **Riverdale** has introduced two new glyphosate products, Razor for the specialty and industrial market and Aqua-Neat for the aquatic market.



- **Roundup Ready** seed was planted on 37.4 million acres in 199, slightly more than half of the 74.1 million acres planted. Introduction of Roundup Ready strawberry plants is expected in 2003.
- **Sumitomo Chemical** has announced it will purchase Abbott Labs agrochemical business (expected by February, 2000).
- **Syngenta** will be the name of the new corporation formed by the merger of Novartis and Astra Zeneca. This will form the largest agri-business company in

the world, worth about \$15 billion and will be based in Switzerland.

- **Uniroyal** will be known as CK Witco—Crop Protection Division.
- **United County Brands** is a new company resulting from the consolidation of Farmland Industries and Cenex Harvest States.

(Source: *Ag. Chem News*: 1/15/99 & 1/15/00)



News Extras



Attacks Against Bio-tech on the Increase

As most of you probably already know, there was a fire New Year's Eve in Michigan State University's



Agriculture Hall, which caused \$400,000 worth of damage to the 90-year-old building. The group that has claimed responsibility for the fire, the Earth Liberation Front (ELF), stated that their target was the Agricultural Biotechnology Support

Project Program located on the third floor of Agriculture Hall. The group has also claimed responsibility for several fires aimed at bio-tech and genetically engineered foods in past years.

According to an article in *USA Today*, in the last seven months, bio-vandals have struck four times at the University of California at Davis and twice at the University of California at Berkeley, Michigan State University, the University of Maine, the University of Washington and Washington State University also have been hit. Other targets have included research facilities, offices and test plots owned by seed companies, Novartis, Pioneer Hi-Bred, DeKalb and others. Several groups and individuals have claimed responsibility for the attacks in anonymous messages posted on a Web site run by a San Diego activist sympathetic to their cause.

The last arson at MSU was in 1992 when a group known as the Animal Liberation Front (ALF) torched Anthony Hall and set laboratory animals free. It has been reported that ALF sometimes collaborates with ELF on arsons. ELF was founded in Brighton, England in 1992 and has claimed responsibility for numerous criminal acts including a 1998 fire at a ski resort in Vail Colorado that caused \$12 million in damages. ELF struck in Michigan in 1998 releasing 5,000 mink from a mink farm in the Upper Peninsula (*State News*, 1/24/99).

EPA Considering New Testing Requirements for GMO's

The EPA is considering new testing requirements for genetically modified crops. According to EPA scientists, specific testing guidelines and data requirements are needed for plant-pesticides to ensure the safety of the environment. The testing requirements will probably follow current tests on mallards, quail, rainbow trout, earthworms, etc. that are required for most conventional pesticides. The EPA is also seeking information about the environmental fate of genetically engineered plants and their unique components.

Emotions concerning genetic engineering are running high. Critics of genetic engineering were highly visible at the December meetings of the World Trade Organization. On the other hand, industry scientists stress that EPA must consider the environmental risks of the conventional pesticides replaced by genetic engineering. Additional testing would greatly increase the cost of bringing new genetically engineered products to the market. The data that EPA is considering seems important for two reasons: 1) to identify potential risks and 2) to allay public fears. (*Georgia Pest Management Newsletter*, December 1999)



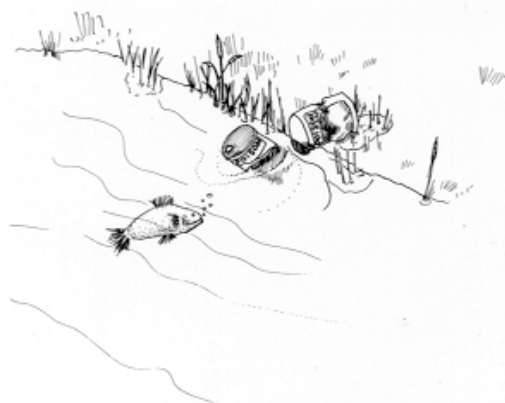
EPA Plans to Revise Policy for Estimating Surface Water Contamination

The EPA plans to revise its policy for estimating pesticide contamination in surface water. As an initial screen of surface water contamination, the Agency has been using estimates of how much pesticide could be expected to run into a pond located in the area treated with pesticides. Critics pointed out that the old model was not realistic and created a worst case scenario. The



EPA used monitoring data to revise the risk assessment for pesticides that did not pass the initial screen.

The new model replaces the farm pond with a “drinking water reservoir” scenario and considers the amount of cropping area around the reservoir. Future refinements may also include the percent of the crops that are treated with pesticide. The EPA Scientific Advisory Panel also encouraged EPA to continue development of more comprehensive “watershed” modeling for pesticide contamination of surface water. The paper is available through the OPP Docket and on the Internet (FR, 11-10-99). <http://www.epa.gov/pesticides/trac/science/>. (*Georgia Pest Management Newsletter*, December 1999).





Resources



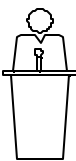
EPA Releases Fact Sheet on Spray Drift of Pesticides

EPA recently released a fact sheet regarding the spray drift of pesticides. This fact sheet serves as an information piece for consumers and people in the pesticide industry, including pesticide applicators. It offers the Office of Pesticide Programs’ definition of spray drift and interpretation of the current label prohibition “Do not allow drift.” Further, it informs readers about the impacts of drift, current activities within the Office of Pesticide Programs to improve its science assessments of drift, and plans for issuing a future notice for public comment on product labeling requirements for applica-

tors. The fact sheet may be accessed by visiting EPA’s website at <http://www.epa.gov/pesticides/citizens/spraydrift.htm>. For further information, contact EPA’s Communication Services Branch at 703-305-5017.

Pest Management in U.S. Agriculture


The USDA has released *Pest Management in U.S. Agriculture*, a report on the adoption of various pest management practices by field crops and some fruit/vegetable crops. If you want to read more, visit this USDA web site at www.econ.ag.gov/epubs/pdf/ah717.



Pesticide Applicator Recertification Seminars

This partial listing of recertification seminars was provided by MDA. Certified applicators and registered technicians may earn recertification credits by attending these programs. For additional information, call the MDA Lansing office at (517) 373-1087.

NOTE: Renewal of pesticide applicator certification credentials can be done by taking the appropriate exam(s) or by obtaining the necessary number of recertification credits by attending approved seminars.



| Date | Seminar | Location | Credit | Category | Phone # |
|------|--|------------------|--------|-------------|---------------|
| 2/14 | Arthropods in Farm, Home & Garden | Clinton Twp., MI | 3 | Any | (810)469-6440 |
| 2/15 | Whitmire Mirco-Gen Field Extension | Birmingham, AL | 2 | Com Core,7A | (800)799-0067 |
| 2/16 | Whitmire Mirco-Gen Field Extension | Atlanta, GA | 2 | Com Core,7A | (800)799-0067 |
| 2/17 | Whitmire Mirco-Gen Field Extension | Charlotte, NC | 2 | Com Core,7A | (800)799-0067 |
| 2/18 | Pest Control for Interior Plantscapers | Chicago, IL | 4 | Com Core,7E | (614)487-1117 |
| 2/22 | Whitmire Mirco-Gen Field Extension | St. Louis, MO | 2 | Com Core,7A | (800)799-0067 |
| 2/23 | RUP Core Training Meeting | Paw Paw, MI | 2 | Any | (616)657-7745 |
| 2/23 | Whitmire Mirco-Gen Field Extension | Dallas, TX | 2 | Com Core,7A | (800)799-0067 |
| 2/24 | Whitmire Mirco-Gen Field Extension | Houston, TX | 2 | Com Core,7A | (800)799-0067 |



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|---------|---------------------------------------|---------------------|----|-------------------|---------------|
| 3/1 | Pesticide Recertification Review Trng | Fremont, MI | 3 | Any | (231)924-0500 |
| 3/7 | Whitmire Mirco-Gen Field Ext. Prog. | Boston, MA | 2 | Com Core,7A | (800)799-0067 |
| 3/8 | MPCA Technician Training | Grand Rapids, MI | 4 | Com Core,7A,7D,7B | (810)498-8480 |
| 3/8 | Whitmire Mirco-Gen Field Ext. Prog | New York, NY | 2 | Com Core,7A | (800)799-0067 |
| 3/6-10 | Good Manuf. Pract. for Food Industry | Danville, IL | 12 | Com Core,7A,ST | (217)442-1800 |
| 3/13 | Arthropods in Farm, Home & Garden | Clinton Twp., MI | 3 | Any | (810)469-6440 |
| 3/13 | Pesticide Applicator Review Session | Monroe, MI | 3 | Any | (313)243-7113 |
| 3/14 | Core Manual Review | Allendale, MI | 2 | Any | (616)673-0370 |
| 3/15 | MPCA Technician Training | Lansing, MI | 4 | Com Core,7A,7C | (810)498-8480 |
| 3/21 | RUP Core Training Meeting | Paw Paw, MI | 2 | Any | (616)657-7745 |
| 3/21 | Whitmore Mirco-Gen Field Ext. Prog. | Washington, DC | 2 | Com Core,7A | (800)799-0067 |
| 3/22 | Whitmire Mirco-Gen Field Ext. Prog. | Newark, NY | 2 | Com Core,7A | (800)799-0067 |
| 3/24 | Pesticide Applicator Training Session | Marshall, MI | 2 | Any | (517)781-0785 |
| 4/3 | Pesticide Applicator Review Session | Monroe, MI | 3 | Any | (313)243-7113 |
| 4/4 | Whitmire Mirco-Gen Field Ext. Prog. | Cincinnati, OH | 2 | Com Core,7A | (800)799-0067 |
| 4/5 | Whitmire Mirco-Gen Field Ext. Prog. | Chicago, IL | 2 | Com Core,7A | (800)799-0067 |
| 4/6 | Whitmire Mirco-Gen Field Ext. Prog. | Kansas City, KS | 2 | Com Core,7A | (800)799-0067 |
| 4/10-14 | Good Manuf. Pract. for Food Industry | Danville, IL | 12 | Com Core,7A,ST | (217)442-1800 |
| 4/27 | Degesch America Recert. Program | Charlottesville, VA | 4 | Com Core,ST | (540)234-9281 |

Instructions for recertification training seminar attendance and training seminar dates are posted at the MDA website: <http://www.mda.state.mi.us/industry/semsked.html>

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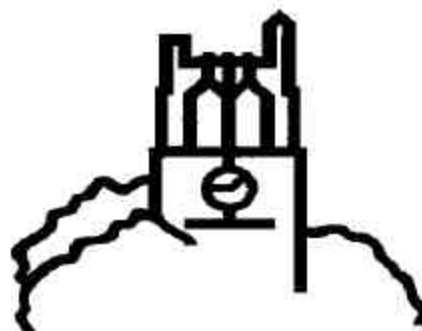
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