# AGRICULTURAL

Published by the University of Missouri-Columbia Extension Division

## Missouri restricted use list

February, 1987

This list is to be used for informational purposes only. These restricted use pesticides have been registered with the Missouri Department of Agriculture as of Spring 1987. Pesticides are frequently added or removed from the list. The label on a pesticide is the last word on its use. There are other "restricted use" pesticides that are not listed. The products containing these pesticides were not registered in the state of Missouri as of the spring of 1987.

Pesticides

### Always read and understand the label before using any pesticide.

Common name	Pesticide type*	Criteria influencing restriction
(Brand names)	*(See below)	
ALDICARB (Temik)	I, A, N	Acute toxicity.
ALUMINUM PHOSPHIDE (Phostoxin, Detia, Gastoxin, Phostek, Fumitoxin, Quick phos, "L" Fume)	Fg	Acute inhalation hazard.
AMITRAZ (Taktic)	I, A	RPAR* decision; possible oncogenicity (tumor causing).
AZINPHOS METHYL (Guthion)	I,A	Acute inhalation hazard.
CALCIUM CYANIDE (Calcium Cyanide, A-Dust, G-Fumigant)	Fg	Human inhalation hazard.
CARBOFURAN (Furadan)	I,N	Acute toxicity (oral dermal, inhalation). Causes cancer in animals 7/84. Acute inhalation toxicity (8/1/79).
CHLORDIMEFORM (Fundal, Galecron)	I,A	Causes cancer in laboratory animals. Insect ovicide (Kills insect eggs.) No antidote known.

\* Insecticide (kills insects) = I, Acaricide (kills mites, ticks) = A, Nematicide (kills nematodes) = N, Fumigants = Fg. Some or all uses and formulations of these pesticides are classified "restricted use." RPAR stands for "rebuttable presumption against re-registration."

Common name	Pesticide type*	Criteria influencing restriction
(Brand names)	*(See below)	
CHLOROPICRIN (Larvacide, Chlor-O-Pic, Bromo-O-Gas, Terr-O Gas, Timberfume, Telone C-17, Quasar)	Fg WP (Wood preservative)	Acute inhalation toxicity. Hazard to non-target organisms. Fungicide. (Kills fungus.) Nematicide (kills nematodes) when used with Dichloropropene.
CYPERMETHRIN (Cymbush, Ammo)	I	Oncogenicity (causes tumors) and hazard to non-target organisms.
DEMETON (Systox)	Ι	Acute oral and dermal toxicity.
DICROTOPHOS (Bidrin, Inject-A-Cide-B)	I,A	Acute dermal toxicity. Residue effects of avian (bird) species.
DIFLUBENZURON (Dimilin)		Lack of environmental hazard data.
DIOXATHION (Delnav, Conav, Deltic)	ture Trita	Acute dermal toxicity.
DISULFOTON (Di-Syston)	I,N	Acute dermal and inhalation toxicity.
ENDRIN (Endrin, Rid a Bird Control Liquid)	I (Avicide)	Acute dermal toxicity. Hazard to non-target organisms.
EPN (Tide Methyl, Veto, Milan)	Ι	Acute dermal and inhalation toxicity. Residue effects on avian (bird) species. Effects on aquatic organisms
ETHOPROP (Mocap)	I,N	Acute dermal toxicity.
ETHYL PARATHION (Parthion, Ethyl Parathion)	I	Human inhalation hazard. Acute dermal toxicity. Residue effects on aquatic (water), avian (bird), and mammalian (animal) species. Other hazards — accident history.
FENAMIPHOS (Nemacur)	Ν	Acute dermal toxicity.
FENSULFOTHION (Dasanit)	I,N	Acute dermal and inhalation toxicity.
FENVALERATE (Pydrin)	Ι	Possible adverse effects on acquatic (water) organisms.

\* Insecticide (kills insects) = I, Acaricide (kills mites, ticks) = A, Nematicide (kills nematodes) = N, Fumigants = Fg. Some or all uses and formulations of these pesticides are classified "restricted use."

#### Insecticides, acaricides, nematicides and fumigants - Continued

Common name	Pesticide type*	Criteria influencing restriction
(Brand names)	*(See below)	
FLUCYTHRINATE (Payoff, Aastar)	Ι	Possible adverse effects on aquatic (water) organisms.
FONOFOS (Dyfonate)	Ι	Acute dermal toxicity.
LINDANE (Lice and Mange Spray, Conav, Cooper Tox, Super Sweet Mange and Lice Control, Borer and	I	Possible oncogenicity (tumor causing).
Beetle Killer, Borer Spray, Dyna Fog, Prentox, Flea Shampoo)		
MAGNESIUM PHOSPHIDE (Magtoxin, Fumicel,	Fg	Inhalation hazard.
Fumi-Strip)		
METHAMIDOPHOS (Monitor)	I,Fg	Acute dermal toxicity. Residue effects on avian (bird) species.
METHIDATHION (Supracide)	rai un d <b>'I</b> Aria No como Magni	Residue effects on avian (bird) species.
METHOMYL (Lannate, Nudrin)	Ι	Residue effects on mammalian (animal) species. Other effects — accident history.
METHYL BROMIDE (Brom-O-Gas, Metho-O-Gas Methyl Fume, Bro-Mean, Terr-O-Gas)	Fg	Acute dermal & inhalation toxicity. Accident history
METHYL PARATHION (Penn Cap M, Dithio, Phoskill, Raider, Veto, Milan)	Ι	Hazard to bees. Acute dermal toxicity. Residue effects on avian (bird) and mammalian (animal) (animal) species. Other hazards — accident history.
MEVINPHOS (Phosdrin, Filter Fly Concentrate)	Ι	Acute dermal toxicity. Residue effects on avian (bird and mammalian (animal) species.
MONOCROTOPHOS Azodrin)	Ι	Residue effects on mammalian (animal) and avian (bird) species. Acute dermal toxicity.
NICOTINE (Nicotine)	Ι	Acute inhalation toxicity. Effects on aquatic (water) organisms.
OXAMYL (Vydate)	I,N	Acute mammalian (animal) toxicity.

\* Insecticide (kills insects) = I, Acaricide (kills mites, ticks) = A, Nematicide (kills nematodes) = N, Fumigants = Fg. Some or all uses and formulations of these pesticides are classified "restricted use."

Common name	Pesticide type*	Criteria influencing restriction
(Brand names)	*(See below)	
PERMETHRIN (Ambush, Pounce Torpedo, Demon,	unda arnina Baarsen Luciale Sect. I Stale	Possible adverse effects on aquatic (water) organisms.
Dragnet, M-Gard W320)		
PHORATE (Thimet, Aastar)	n Harrison ( ) e gradano ( ) ngi konsolo ( <mark>I</mark> konsol n	Acute dermal toxicity. Residue effects on avian (bird), and mammalian (animal) species.
PHOSPHAMIDON (Dimecron)	I,A	Acute dermal toxicity. Residue effects on avian (bird) and mammalian (animal) species.
PROFENOFOS	I,A	Acute inhalation toxicity.
(Curacron)		
PROPETAMPHOS (Safrotin)	Ι	Product for indoor, domestic use. Voluntarily restricted
SULFOTEPP (Blade Fume, Plant Fume 103,	I,A	Human inhalation hazard.
Tedion Dithio, Dithio)		
SULFURYL FLUORIDE (Vikane)	Fg	Possible acute toxicity. Hazard in humans.
SULPROFOS	Ι	Wildlife hazard.
(Bolstar)		
TERBUFOS (Counter)	I	Highly toxic to humans, fish and wildlife.
TOXAPHENE	nghala - Clainige(	Potential oncogenic (tumor causing) effects
(Duotox)	ing a state of the state of th	on humans. Acute toxicity to aquatic (water) organisms. Hazard to non-target organisms. Chronic wildlife effects.
TRALOMETHRIN (Scout)	I s. roa 5 fan	Possible mutagenic (causes mutations) effects. Toxicity to aquatic (water) organisms.

### Insecticides, acaricides, nematicides and fumigants — Continued

\* Insecticide (kills insects) = I, Acaricide (kills mites, ticks) = A, Nematicide (kills nematodes) = N, Fumigants = Fg. Some or all uses and formulations of these pesticides are classified "restricted use."

Common name	Pesticide type*	Criteria influencing restriction
(Brand names)	*(See below)	
AMITROLE (Amitrol, Amitrol-T Amizol, Amizine)	Н	Registration standard. (Could not be re-registered unless restricted.)
ARSENIC PENTOXIDE (CCA, Hollow Heart, Osmose K-33-C Concentrate, Mitrol, Wolmanace Concentrate)	WP	Possible oncogenic (tumor causing), mutagenic (causes mutations), reproductive, and/or fetotoxic (toxic to fetus in womb) effects.
CYANAZINE (Bladex)	Н	Ground water contamination. Teratogenicity (causes abnormal (monstrous) development). Fetotoxicity (toxic to fetus).
CREOSOTE (Creosote, Pole Life, Timpreg, Osmoplastic, Osmoband, Creepen, Coal Tar, Kolineum, Timberlife, Special Oil, Tritox, Osmotox, Patox)	WP	Possible oncogenic (tumor causing) and mutagenic (causes mutations) effects.
DICLOFOP METHYL (Hoelon)	Н	Voluntarily restricted — oncogenicity (tumor causing).
DODEMORPH ACETATE (Milban)	F	Corrosive to eye tissue. Voluntarily restricted.
PARAQUAT (Gramoxone, Industrial Weed and Grass Killer)	Н	Human toxicological data. Other hazards — use & accident history.
PENTACHLOROPHENOL (Penta, Chemtox PWP-40, PCP, Napclor-G, Permatox, Pol Nu, Deep Treat, Seal Treat, Patox, Osmotox, 24-12 Wood Preservative)	WP	Voluntary restriction — possible oncogenicity, (tumor causing), teratogenic (causes abnormal (monstrous) development) and fetotoxic (toxic to fetus) effects.
PICLORAM (Tordon, Access)	Н	Hazard to non-target organisms (Specifically non-target plants, both crop and non-crop)
PRONAMIDE (Kerb)	Н	RPAR decision, oncogenicity (cause tumors). (RPAR: "rebuttable presumption against re-registration.")
TRIPHENYLTIN HYDROXIDE (Du-Ter)	F	Hazard to humans due to possible mutagenic (causes mutations) effects.

\* Herbicides (kills weeds) = H, Fungicides (kills fungus) = F, Wood Preservatives = WP. Some or all uses & formulations of these pesticides are classified "restricted use."

Common name	Pesticide type*	Criteria influencing restriction
(Brand names)	*(See below)	
AVITROL (Avitrol)	Av	Hazard to fish and non-target birds.
CHLOROPHACINONE (Rozol)	R	Human hazard potential for food contamination. Possible inhalation hazard.
ENDRIN (Endrin, Rid-A-Bird Control Liquid)	Av (Insecticide)	Acute dermal toxicity. Effects on non-target organisms.
SODIUM FLUOROACETATE (1080)	R	Acute oral toxicity and hazard to non-target organisms. Use and accident history.
STRYCHNINE (Mouse Maise, Gopher Getter)	R	Acute oral toxicity. Hazard to non-target organisms. Other hazards — use and accident history.
TERGITOL (Compound PA-14, avian [bird] stressing agent)	Av	Limited to situations approved by U.S. Fish and Wildlife Service and must be supervised by govern- ment agency personnel trained in bird control.
ZINC PHOSPHIDE (Z.P. Tracking Powder, Forces Mouse, Con No. 2, Ridall-Z, 2-100 and 1-100 Field Mouse Bait)	R	Acute inhalation and oral toxicity. Hazard to non- target organisms.

\* Rodenticides (kills rats, mice, etc.) = R, Avicides (kills birds) = Av. Some or all uses and formulations of these pesticides are classified "restricted use."

■ Issued in furtherance of Cooperative Extension Work Acts of May 8 and June 30, 1914 in cooperation with the United States Department of Agriculture. John W. Oren, Director, Cooperative Extension Service, University of Missouri and Lincoln University, Columbia, Missouri 65211. An equal opportunity institution.