

Regulatory Bulletin 177

KENTUCKY  
ECONOMIC POISONS  
REPORT, 1962



**Strawberry Crown Borer Grub Tunneling  
In The Crown Of A Strawberry Plant**

University of Kentucky  
Agricultural Experiment Station  
Lexington

FEED AND FERTILIZER DEPARTMENT  
KENTUCKY AGRICULTURAL EXPERIMENT STATION

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\*Died August 4, 1962

## COMPANIES LICENSED UNDER KENTUCKY ECONOMIC POISONS LAW IN 1961

Abbott Laboratories, 1400 Sheridan Road, North Chicago, Illinois  
Ace Products Company, 3001 Rodman Street, Louisville, Kentucky  
Aceline Products Corporation, Box 236, Rochester 1, New York  
Acme Quality Paints, Inc., 8250 St. Aubin Avenue, Detroit 11, Michigan  
Aero-Master, Inc., 325 West Pacific Avenue, St. Louis 19, Missouri  
"Ag" Supply Company, Old Clarksville Road, Hopkinsville, Kentucky  
Agricultural Specialists, 12200 Denton Drive, Dallas 34, Texas  
Airkem, Incorporated, 241 East 44th Street, New York 17, New York  
Airosol Company, Inc., 525 North 11th Street, Neodesha, Kansas  
Alco Chemical Company, 19220 Pioneer Boulevard, Artesia, California  
Allen-Crowl Company, 1559 Allentown Road - Box 627, Lima, Ohio  
Allied Chemical Corp., Plastics Div., 40 Rector St., New York 6, New York  
Allied Chemical Corp., Gen. Chemical Div., Box 70, Morristown, N. J.  
Allied Drug Products Company, 16th & Gulf Streets, Chattanooga 1, Tennessee  
Amchem Products, Ambler, Pennsylvania  
American Agricultural Chemical Company, P. O. Box 464, London, Kentucky  
American Chemical Products of Lansing, 800 Prudden Bldg., Lansing, Mich.  
American Cyanamid Company, P. O. Box 383, Princeton, New Jersey  
American Exterminator, Inc., 817 Race Street, Cincinnati, Ohio  
American Lace Paper Co., 4425 N. Port Washington Rd., Milwaukee 12, Wisc.  
American-Marietta Company, 901 N. Greenwood Avenue, Kankakee, Illinois  
American Mineral Spirits Co., Mountain View Avenue, Murray Hill, N. J.  
American Mothproofing Co., 2510 Hampton Avenue, St. Louis 10, Missouri  
American Oil Company, 910 S. Michigan Avenue, Chicago 80, Illinois  
A-M-R Chemical Co., Inc., 985 East 35th Street, Brooklyn 10, New York  
American Scientific Laboratories, P. O. Box 1288, Madison 1, Wisconsin  
American Sterilizer Company, 2424 West 23rd Street, Erie, Pennsylvania  
The Antimite Co., 5137 Southwest Avenue, St. Louis 10, Missouri  
Armour Fertilizer Works, 5184 Broerman Avenue, Cincinnati 17, Ohio  
Arnold Laboratories, P. O. Box 111, 206 Spring Street, New Castle, Indiana  
Arnott Chemical & Exterminating Co., 249 Massachusetts Ave, Indianapolis, Ind.  
Asgrow Seed Company, 272 George Street, New Haven 2, Connecticut  
Associated Sales & Supply Co., 5137 Southwest Ave., St. Louis 10, Missouri  
Atla Chemical Company, 415 S. Spring Street, Greensboro, North Carolina  
Auto Chlor System, 746 Poplar, Memphis, Tennessee  
Avon Products, Inc., 30 Rockefeller Plaza, New York 20, New York  
B. T. Babbitt, Inc., 20 Broadway, Albany 1, New York  
Babson Bros. Company, 2843 West 19th Street, Chicago 23, Illinois  
Banz Manufacturing Company, Portageville, Missouri  
W. H. Barber Company, 3650 South Homan Avenue, Chicago 32, Illinois  
Bauer & Black, Div. of the Kendall Co., 309 W. Jackson Blvd., Chicago 6, Ill.  
Beacon Products Corporation, 215 Lawyers Bldg., Greenville, South Carolina  
Beacon Division, Textron, Inc., 1401 Armour Road, Kansas City 16, Missouri  
Berlou Manufacturing Company, 421 Monroe Street, Marion, Ohio  
Big Four Feed & Implement Company, Maple & Cemetery Sts., Scottsville, Ky.  
Bissell, Incorporated, Grand Rapids 1, Michigan  
Black Leaf Products Company, 6147 N. Broadway, Chicago, Illinois  
Black Panther Company, Inc., P. O. Box 690, Stanford, North Carolina  
Bluegrass Plant Foods, Inc., 447 North Main, Cynthiana, Kentucky  
Bohlender Plant Chemicals, Inc., Tipp City, Ohio  
Bonewitz Chemicals, Inc., 1731 N. Roosevelt Ave., Burlington, Iowa  
Bonide Chemical Company, 382 N. Genesee Street, Utica 4, New York  
Borderland Products, Inc., 560 Fulton Street, Buffalo, New York  
The Bourbon Company, P. O. Box 466, Lexington, Kentucky  
Boyer Chemical Company, 1161 Church Street, Evanston, Illinois  
Boyle-Midway, Inc., 22 East 40th Street, New York 16, New York  
E. L. Bruce Company, P. O. Box 397, Memphis 1, Tennessee  
Burlin & Company, Inc., 2939-45 Columbia Avenue, Indianapolis 7, Indiana  
Bunny Bear, Inc., 210 Broadway, Everette, Massachusetts  
Burley Belt Plant Food Works, Route 4, Lexington, Kentucky  
Burris Chemical Co., Inc., Starjk Industrial Park, Charleston, South Carolina

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Cabell Chemical Company, 101 22nd Street, Huntington, West Virginia  
 California Chemical Company, Lucas & Ortho Way, Richmond 4, California  
 Camp Chemical Company, Second Avenue & 13th Street, Brooklyn 15, N. Y.  
 Carajon Chemical Company, 426-432 W. Main Street, Fremont, Michigan  
 Carbola Chemical Company, Inc., Natural Bridge, New York  
 Carbolineum Wood Preserving Co., 6683 N. 40th St., Milwaukee 3, Wisconsin  
 Cardinal Chemasan, 200 Lynch Street, St. Louis 18, Missouri  
 Carson Chemicals, Inc., P. O. Box 288, New Castle, Indiana  
 Cato Oil & Grease Company, 915 N. Eastern, Oklahoma City, Oklahoma  
 Cenol Company, Inc., 3240 West Chicago Avenue, Chicago 51, Illinois  
 Center Chemical Company, P. O. Box 1888, Atlanta, Georgia  
 Central City Chemicals Co., 3240 W. Chicago Avenue, Chicago 51, Illinois  
 Chambers-Godfrey Manufacturing Co., 302-04 Broadway, Martin, Tennessee  
 Chapman Chemical Company, 60 N. Third Street, Memphis 1, Tennessee  
 Chase Products Company, 20th & Gardner Road, Broadview, Illinois  
 Chemagro Corporation, P. O. Box 4913, Kansas City 20, Missouri  
 Chemical Corporation of America, Monroe St. Station, Tallahassee, Florida  
 Chemical Formulators, Inc., P. O. Box 26, Nitro, West Virginia  
 Chemistry Hall Laboratories, Inc., P. O. Box 255, Bradenton, Florida  
 Chemley Products Company, 5744 North Western Ave., Chicago 45, Illinois  
 Chemway Corporation, Fairfield Road, Wayne, New Jersey  
 Chestnut & Anderson Feed & Supply, East Ninth St., Hopkinsville, Kentucky  
 Chipman Chemical Company, Inc., Bound Brook, New Jersey  
 John Clarke & Company, Inc., 420 Lexington Avenue, New York 17, New York  
 Clean Home Products, Inc., 2805 Locust Street, St. Louis 3, Missouri  
 W. A. Cleary Corporation, P. O. Box 749, New Brunswick, New Jersey  
 Click Chemical Corporation, 601 South Columbus Ave., Mount Vernon, N. Y.  
 Clorox Company, P. O. Box 599, Cincinnati 1, Ohio  
 Colgate-Palmolive Company, 300 Park Avenue, New York 22, New York  
 Colonial Products, Inc., 6207 Georgia Avenue, West Palm Beach, Florida  
 Columbian Hog & Cattle Powder Company, 1457 Genesee St., Kansas City, Mo.  
 Combs Associates, Inc., 1630 N. Broadway, Lexington, Kentucky  
 Commercial Solvents Corporation, 1331 South 1st Street, Terre Haute, Indiana  
 Commonwealth Fertilizer Co., Inc., P. O. Box 388, Russellville, Kentucky  
 Common Sense Manufacturing Co., Inc., 1392 Niagara St., Buffalo 13, N. Y.  
 Continental Chemiste Corporation, 2256 West Odgen Ave., Chicago 12, Illinois  
 Cook Chemical Company, 2550 Summitt, Kansas City, Missouri  
 Coopers Creek Chemical Corp., River Road, W. Conshohocken, Pennsylvania  
 Wm. Cooper & Nephews, Inc., 1909 North Clifton, Chicago 14, Illinois  
 Cooperative Fert. Serv., Inc., Box 15067 Camp Taylor Sta., Louisville 13, Ky.  
 Cowles Chemical Company, 7016 Euclid Avenue, Cleveland 3, Ohio  
 S. L. Cowley & Sons Manufacturing Co., 708 West McAlester, Hugo, Oklahoma  
 Cre-O-Tox Chemical Products Company, 2670 Broad Avenue, Memphis, Tenn.  
 Cumberland Manufacturing Co., 501 25th Avenue, N., Nashville, Tennessee  
 Cutter Laboratories, Fourth & Parker Streets, Berkeley 10, California  
 The d-Con Company, Inc., 1450 Broadway, New York 18, New York  
 Dacus Drug Company, Inc., Box 241, Tupelo, Mississippi  
 Dameron Enterprises, 427 S. 20th Street, Louisville, Kentucky  
 Darling & Company, 4201 South Ashland Avenue, Chicago 8, Illinois  
 Darworth, Incorporated, P. O. Box 308, Simsbury, Connecticut  
 Daubert Chemical Company, 4700 South Central Avenue, Chicago 38, Illinois  
 Davis Brothers Company, 205 West Main Street, Greenfield, Indiana  
 DeKalb Agricultural Association, Inc., 310 North Fifth Street, DeKalb, Illinois  
 DeSoto Chemical Company, Inc., North DeSota Avenue, Arcadia, Florida  
 Dettelbach Insecticide Co., 4103 Peachtree Rd., N.E., Atlanta 19, Georgia  
 Dewitt Chemical Company, P. O. Box 343, Atlanta 1, Georgia  
 Diamond Alkali Company, 300 Union Commerce Bldg., Cleveland 14, Ohio  
 The Dill Company, Washington St. & McKinley Ave., Norristown, Pennsylvania  
 Dixi Chemical Company, P. O. Box 1711, Chattanooga, Tennessee  
 Douglas Chemical Company, 620 E. 16th Avenue, North Kansas City, Missouri  
 The Dow Chemical Company, Midland, Michigan  
 The Drackett Products Co., 5020 Spring Grove Ave., Cincinnati 32, Ohio  
 Dun Win Company, 136 Elm Street, Williamsport, Pennsylvania

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Eagle Chemical Company, P. O. Box 8127, Chattanooga, Tennessee  
E. I. du Pont de Nemours & Co., 6054 DuPont Bldg., Wilmington 98, Delaware  
Economics Laboratory, 914 Guardian Building, St. Paul 1, Minnesota  
Elanco Products Company, 740 South Alabama Street, Indianapolis 6, Indiana  
Electrolux Corporation, 500 Fifth Avenue, New York 36, New York  
Emery Industries, 4200 Carew Tower, Cincinnati 2, Ohio  
Empire Laboratories, 700 Marietta Street, N. W., Atlanta, Georgia  
Empire Manufacturing Company, 1110 Grand Avenue, Kansas City, Missouri  
Henry A. Enrich & Company, Inc., 6 East 32 Street, New York 16, New York  
Erbrich Products Company, 1120 East 32nd Street, Indianapolis, Indiana  
Esso, Incorporated, Linden, New Jersey  
E-Z Flo Chemical Company, P. O. Box 808, Lansing, Michigan  
Fairfield Chemicals, 100 North Niagara, Middleport, New York  
Far-Best Corporation, 6715 McKinley Avenue, Los Angeles 1, California  
Farnam Companies, 711 N. First Street, Phoenix, Arizona  
Federal Chemical Company, 646 Starks Building, Louisville 2, Kentucky  
Federal Chemical Company, Inc., 2701 Winthrop Ave., Indianapolis 5, Indiana  
Ferry-Morse Seed Company, Box 100, Mountain View, California  
Florida Agricultural Supply Co., 1611 Talleyrand Ave., Jacksonville 1, Florida  
Fly-Cord, Incorporated, P. O. Box 2006, Savannah, Georgia  
FMC Corporation, 633 Third Avenue, New York 17, New York  
Fox Hardware, 19 East Center Street, Madisonville, Kentucky  
The Frank Tea & Spice Company, 538 East Fifth Street, Cincinnati 2, Ohio  
Franklin Research Company, 5312 Lancaster Avenue, Philadelphia 31, Penn.  
Frontier Chemical Company, Box 545, Wichita, Kansas  
The Fuller Brush Company, 88 Long Hill Street, East Hartford 8, Connecticut  
Furst-McNess Company, 120 East Clark Street, Freeport, Illinois  
Gamble-Skogmo, Inc., 15 North Eighth Street, Minneapolis 3, Minnesota  
Garden Products Company, 3246 S. Grand Boulevard, St. Louis 18, Missouri  
Garden Hose Spray Company, Inc., 7 Upland Rd., Cambridge 40, Massachusetts  
Gaston Johnston Corporation, 24-64 45th Street, Long Island City 3, New York  
Gaylord Container Div. Crown Zellerbach Corp., 143 Arsenal St., St. Louis 18, Mo.  
Geigy Agricultural Chemicals, P. O. Box 430, Yonkers, New York  
General Insecticide Company, Inc., 750 Herkimer Road, Utica, New York  
Glamorene, Inc., 175 Entin Road, Clifton, New Jersey  
The Glidden Company, 900 Union Commerce Building, Cleveland 14, Ohio  
Globe Laboratories, 116 Commerce Street, Fort Worth 2, Texas  
H. Clay Glover Company, Inc., 1001 Franklin Avenue, Garden City, New York  
Good-Life Chemicals, Inc., 310 South First Street, Effington, Illinois  
W. R. Grace & Co., Davison Chemical Div., Box 7665, Nashville 9, Tennessee  
W. R. Grace & Co., Davison Chemical Div., 101 N. Charles St., Baltimore, Md.  
The Great Atlantic & Pacific Tea Co., 3041 Wilson Ave., Louisville, Kentucky  
Great Lakes Chemical Corporation, 753 Warner Building, Washington 4, D. C.  
Greever's, Incorporated, Chilhowie, Virginia  
Earl Grissmer Company, P. O. Box 20092, Indianapolis 20, Indiana  
Gro-Green Chemical Company, Box 132, Shelbyville, Kentucky  
Guarantee Pest Control Company, 23 N. 31-West Bypass, Bowling Green, Ky.  
Gulf Oil Corporation, P. O. Box 1519, Houston 1, Texas  
Handcraft Company, Reedsburg, Wisconsin  
J. M. Harris & Company, Inc., P. O. Box 411, Roanoke, Virginia  
P. F. Harris Mfg. Co., 101 West Eighth, North Little Rock, Arkansas  
Harris Products Company, Inc., P. O. Box 4, Miami Beach 39, Florida  
Harrison Oil Company, P. O. Box 5585, Milwaukee 11, Wisconsin  
Hartz Mountain Products Corp., 50 Cooper Square, New York 3, New York  
Harvest Brand, Inc., Box 46, Pittsburg, Kansas  
Hat-Ra Chemical Company, 1100 North Adams Street, Henderson, Kentucky  
Haver-Lockhart Laboratories, 915 Broadway, Kansas City 41, Missouri  
Health-Mor, Inc., 203 North Wabash Avenue, Chicago 1, Illinois  
Heco, Incorporated, 13000 Athens Avenue, Cleveland 9, Ohio  
Heller Laboratories, Inc., Calumet Ave. & 40th St., Chicago 53, Illinois  
Hercules Powder Company, 910 Market Street, Wilmington, Delaware  
Hess & Clark, Inc., Seventh & Orange Streets, Ashland, Ohio  
Hexol, Incorporated, 1500-17th Street, San Francisco 7, California

Hillenmeyer Nurseries, Route #6, Lexington, Kentucky  
 Hillyard Sales Company (Eastern), P. O. Box 909, St. Joseph 1, Missouri  
 The Hilo Company, Lexington & Revere Ave., Bethpage, Long Island, New York  
 Hinton & Company, 67 Murray Street, New York, New York  
 J. I. Holcomb Mfg. Co., 1601 Barth Avenue, Indianapolis 7, Indiana  
 R. M. Hollingshead Corporation, 840 Cooper Drive, Camden 2, New Jersey  
 Hollywood Termite Control, Inc., 938 N. Eastern Ave., Los Angeles 63, Calif.  
 Hooker Chemical Corporation, 666 5th Avenue, New York 19, New York  
 Horizon Industries, Box 3968, Shaker Heights Station, Cleveland 20, Ohio  
 Hot Shot Quality Products, Inc., 701 N. Main Street, Memphis, Tennessee  
 House of Houston, Inc., 1450 Broadway, New York 18, New York  
 Sam Houston Company, P. O. Box 662, Talladega, Alabama  
 Hudson Associates, Inc., 34 N. Main Street, Hudson, Ohio  
 The Huge Company, Inc., 884-886 Hodiament Ave., St. Louis 12, Missouri  
 Hulman & Company Laboratories, 900 Wabash Ave., Terre Haute, Indiana  
 Humble Oil Company, Box 2180, Houston 1, Texas  
 Humco Laboratory, Inc., 1008 Whitaker Street, Texarkana, Texas  
 Hutson Chemical Company, Railroad Avenue, Murray, Kentucky  
 Hydroponic Chemical Company, Box 97-C, Copley 21, Ohio  
 Hy-G Corporation, 130 Russ Street, San Francisco 3, California  
 Indiana Farm Bureau Coop. Ass'n., 47 S. Pennsylvania St., Indianapolis 9, Ind.  
 Industrial Fumigant, 923 State Line, Kansas City, Missouri  
 International Distributors, Inc., 725 South Fifth Street, Memphis, Tennessee  
 International Min. & Chem. Corp., P. O. Box 67 Lockland Sta., Cincinnati, Ohio  
 International Salt Company, Clarks Summit, Pennsylvania  
 Irwin-Willert Company, 4044 Park Avenue, St. Louis 10, Missouri  
 Jewel Tea Company, Inc., 1955 West North Avenue, Melrose Park, Illinois  
 S. C. Johnston & Sons, Inc., 1525 Howe Street, Racine, Wisconsin  
 H. D. Jones, 312 West Main Street, Glasgow, Kentucky  
 Eck Jones, Route #1, Central City, Kentucky  
 Joro Incorporated, Box 411, Roanoke, Virginia  
 The K-R-O Company, 19 1/2 North Limestone Street, Springfield, Ohio  
 Carl Kaster Company, 516 W. Main Street, Louisville 2, Kentucky  
 Kentucky Fertilizer Works, 222 Cook Street, Winchester, Kentucky  
 King Chemical Company, 2342 South Lauderdale, Memphis 6, Tennessee  
 Klenzade Products, Inc., P. O. Box 1020, Beloit, Wisconsin  
 H. Kohnstamm & Company, Inc., 161 Avenue of the Americas, New York 13, N.Y.  
 Kolker Chemical Corporation, Box 545, Wichita, Kansas  
 Koppers Company, Inc., 430 Park Avenue, New York 22, New York  
 H. B. Fred Kuhls, 6413 Third Avenue, Brooklyn 20, New York  
 Lamb Products Company, 3728 Hilltop Lane, Nashville, Tennessee  
 Lang Brothers, 213 Broadway, Paducah, Kentucky  
 Dr. L. D. LeGear, Inc., 4161 Beck Avenue, St. Louis 16, Missouri  
 LeHigh Chemical Company, Inc., 8511 Grade Lane, Louisville 14, Kentucky  
 Lehn & Fink Products Corporation, 445 Park Avenue, New York 22, New York  
 Lester Laboratories, Inc., P. O. Box 4897, Atlanta 2, Georgia  
 O. E. Linck Company, Inc., Route 46 & Valley Road, Clifton, New Jersey  
 Louisiana Fortifying & Mixing Plant, Abbeville, Louisiana  
 Louisville Chemical Company, 601 East Jefferson Street, Louisville, Kentucky  
 Lowe's Incorporated, 212 York Street, Cassopolis, Michigan  
 McConnon & Company, 25 McConnon Drive, Winona, Minnesota  
 McCormick & Company, Inc., 414 Light Street, Baltimore 2, Maryland  
 McKesson & Robbins, Inc., P. O. Box 548, Bridgeport, Connecticut  
 McLaughlin Gormley King Company, 2107 Fairways Lane, St. Paul 13, Minn.  
 The Mabex Company, Umbria & Lemonte Streets, Philadelphia 27, Pennsylvania  
 Maloney Chemical Company, 1520 N. Irwin Avenue, Green Bay, Wisconsin  
 Mariah Rodenticide Company, Inc., Hi-Way 41, North, Vincennes, Indiana  
 C. J. Martin & Sons, Inc., 1181 Airport Blvd., Austin, Texas  
 Martin-Marietta Company, 901 N. Greenwood Avenue, Kankakee, Illinois  
 Masury-Young Company, 76 Roland Street, Boston 29, Massachusetts  
 Me-Hi Enterprises, Inc., 4910 W. Jefferson Blvd., Los Angeles 16, California  
 Charles R. Mehle Insecticides, 2712 Baker Avenue, Cincinnati 11, Ohio  
 Merck & Company, Inc., Rahway, New Jersey

Miami Products & Chemical Company, 520 Lonoke Street, Dayton 3, Ohio  
Michigan Chemical Corporation, 500 N. Bankson St., St. Louis, Michigan  
Midland Laboratories, 210-220 Jones Street, Dubuque, Iowa  
Midwest American Aerovap, 1125 University, Des Moines 14, Iowa  
Miles Laboratories, Inc., 1127 Myrtle Street, Elkhart, Indiana  
Miller Chemical Company, 3006 W. Cold Spring Lane, Baltimore 15, Maryland  
Miller Products Company, 607 Del Monte Way, St. Louis 12, Missouri  
Dumas Milner Corporation, Northside Station, Jackson, Mississippi  
Minit Spray, 1001 Northwest Highway, Des Plaines, Illinois  
Minnesota Paints, Inc., 1101 South Third Street, Minneapolis 15, Minnesota  
Monsanto Chemical Company, 800 N. Lindbergh Boulevard, St. Louis 16, Mo.  
Montgomery Ward & Co., Inc., 10th & Washington Sts., Chicago Heights, Ill.  
E. R. Moore, Georgetown 3, Kentucky  
Moorman Manufacturing Company, Quincy, Illinois  
Morton Chemical Company, 110 N. Wacker Drive, Chicago 6, Illinois  
Motomco, Incorporated, 89 Terminal Avenue, Clark, New Jersey  
Multi-Clean Products, Inc., 2277 Ford Parkway, St. Paul 16, Minnesota  
Muncie Laboratories, 405 East Main Street, Muncie, Indiana  
Murphy Chemical Company, 695 Grand Avenue, Ridgefield, New Jersey  
Murphy Products Company, 100 Dodge Street, Burlington, Wisconsin  
Edgar A. Murray Company, Electronic Road, Clinton Corners, New York  
Mutual Products Company, 509 N. Fourth Street, Minneapolis, Minnesota  
Myzon Laboratories, 3129 West 47th Street, Chicago 32, Illinois  
Naphthalene Products Company, P. O. Box 6328, Tarrant, Alabama  
Nash & Kinsella Laboratories, Inc., 3638 Olive Street, St. Louis 8, Missouri  
National Chemsearch Corporation, Box 10087, Dallas 7, Texas  
National Laboratories, Inc., 4934, Lewis Avenue, Toledo 13, Ohio  
National Paint & Oil Company, 207 North Second Street, Nashville, Tennessee  
H. W. Naylor Company, Morris, New York  
Niagara Chemical Div. Food Mach. & Chem. Corp., 100 Niagara St., Middleport, N. Y.  
Nip-Co Manufacturing, Inc., 200 Main Street, New Rochelle, New York  
North American Fertilizer Company, Inc., 1419 S. Preston St., Louisville 17, Ky.  
Northern Industries, Inc., 407 E. Michigan Street, Milwaukee 2, Wisconsin  
Nott Manufacturing Company, Inc., 200 South Water St., Poughkeepsie, N. Y.  
Nuodex Products Company, 110 E. 42nd Street, New York 17, New York  
Nutralite Products, Inc., 5600 Beach Boulevard, Buena Park, California  
Odor-Aire, Inc., 1019 E. Second Street, Wichita, Kansas  
Ohio Valley Fertilizer Company, Box 799, Maysville, Kentucky  
Olin Mathieson Chemical Corporation, Mathieson Bldg., Baltimore 3, Maryland  
Olin Mathieson Chemical Corporation, P. O. Box 991, Little Rock, Arkansas  
One-Spot Company, Jessup, Maryland  
Osborn Sales Company, 3504 Robin Drive, Louisville 16, Kentucky  
Paper Products, Inc., 18554 South Susana Road, Long Beach 5, California  
Parke, Davis & Company, Jos. Campau at the River, Detroit 32, Michigan  
PAX Company, 580 W. 13th South Salt Lake City, Utah  
Paxton Enterprises, Drawer A, Palacios, Texas  
Peck's Products Company, 610 E. Clarence St. Louis 15, Missouri  
S. B. Penick & Company, 100 Church Street, New York 8, New York  
Pennsalt Chemical Corporation, 3 Penn Center Plaza, Philadelphia 2, Penn.  
Pennsalt of Washington, 2901 Taylor Way, Tacoma 1, Washington  
Pennsylvania Engineering Co., 1109-21 North Howard St., Philadelphia 23, Penn.  
Pennsylvania Refining Co., Commonwealth Bank & Trust Bldg., Butler, Penn.  
L. Perrigo Company, Bridge & Brady Streets, Allegan, Michigan  
Pest Guard Products, Inc., 731 West Davis, Dallas 8, Texas  
Pet Chemicals, Inc., 1038 N. W., 21st Street Terrace, Miami, Florida  
Pfanstiehl Detergent Chemicals, Inc., 669 S. Market St., Waukegan, Illinois  
The Pfeiffer Company, 3965 Laclede Avenue, St. Louis 8, Missouri  
Chas. Pfizer & Company, Inc., 11 Bartlett Street, Brooklyn 6, New York  
Phelan-Faust Paint Mfg. Company, Box 7231, St. Louis 77, Missouri  
Phelps Dodge Refining Corporation, 300 Park Avenue, New York 22, New York  
Piatt & Smillie Chemical, Inc., 3419 Gratiot Street, St. Louis 3, Missouri  
The Piper Company, Inc., 2152 Yale Avenue, St. Louis 17, Missouri  
Pitman-Moore Company, Div. Allied Labs., P. O. Box 1656, Indianapolis 6, Ind.

Pittsburgh Chemical Laboratory, Century Bldg., 130 7th St., Pittsburgh 22, Penn.  
Pittsburgh Plate Glass Company, New Albany Road, Moorestown, New Jersey  
Plantabbs Corporation, 1105 Maryland Avenue, Baltimore 1, Maryland  
Plasti-Kote, Inc., 9801 Harvard Avenue, Cleveland, Ohio  
Plough, Inc., 3022 Jackson Avenue, Memphis, Tennessee  
Polk Miller Products Corporation, 2007 N. Hamilton Street, Richmond 30, Va.  
Porter Paint Company, 1320 Cedar Street, Louisville, Kentucky  
B. G. Pratt Company, 204 21st Street, Paterson, New Jersey  
Pratt & Lambert, Inc., 75 Tonawanda Street, Buffalo 7, New York  
The Proctor & Gamble Company, P. O. Box 599, Cincinnati 1, Ohio  
Protection Products Mfg. Company, 2305 Superior Avenue, Kalamazoo, Michigan  
Purex Corporation, Ltd., 9300 Rayo Avenue, South Gate, California  
Pyrrole Chemical Corporation, 817 Spring Lane, Portsmouth, Ohio  
Ralston Purina Company, 835 South Eighth Street, St. Louis, Missouri  
The W. T. Rawleigh Company, 22-225 East Main Street, Freeport, Illinois  
W. G. Reardon Laboratories, Inc., 330 N. Main Street, Port Chester, New York  
Reasor-Hill Corporation, P. O. Box 36, Jacksonville, Arkansas  
Reefer-Galler, Inc., 521 Fifth Avenue, New York 17, New York  
Reilly Tar & Chemical Corp., 1615 Merchants Bank Bldg., Indianapolis 4, Indiana  
Remark Chemical Company, Inc., 64 N. E. 73rd Street, Miami, Florida  
Rex Research Corporation, 600 Montrose Avenue, Toledo 7, Ohio  
Rexair, Incorporated, 700 N. Wheeling Street, Toledo 5, Ohio  
Rexall Drug Company, 8480 Beverly Blvd., Los Angeles 54, California  
Ricketts Drug Company, 416 Main Street, Carrollton, Kentucky  
Rigo Manufacturing Company, Inc., 638 Benton Ave., Nashville, Tennessee  
Riley Brothers, Inc., 209 North Main Street, Burlington, Iowa  
Judd Ringer Corporation, 3355 Republic Avenue, Minneapolis, Minnesota  
Riverdale Chemical Company, 220 E. 17th Street, Chicago Heights, Illinois  
Robeson Preservo Company, 208 Merchants Street, Port Huron, Michigan  
G. S. Robins & Company, 126 Chouteau Avenue, St. Louis 2, Missouri  
Rodent Control Fund, US Fish & Wildlife Serv., UK Ag. Exp. Sta., Lexington, Ky.  
Rohm & Haas Company, 222 W. Washington Square, Philadelphia 5, Pennsylvania  
Rokey Chemical Company, Second Street at St. Clair, Marietta, Ohio  
Roman Cleanser Company, 2700 E. McNichols Bldg., Detroit 12, Michigan  
Rotenone Products Company, 110 Eaton Place, East Orange, New Jersey  
Royal Appliance Manufacturing Co., 1975 E. 61st St., Cleveland 3, Ohio  
I. D. Russell Company Laboratories, 2463 Harrison St., Kansas City 41, Mo.  
Rust-Oleum Corporation, 2425 Oakton Street, Evanston, Illinois  
Sabine Chemical Company, P. O. Box 1206, Port Arthur, Texas  
Dr. Salsbury's Laboratories, 500 Gilbert Street, Charles City, Iowa  
The Sanfax Company, P. O. Box 604, Atlanta 1, Georgia  
Sanford Feed Service, 728 Paris Road, Mayfield, Kentucky  
Sapo Elixir Chemical Company, 9870 Big Bend Blvd., Kirkwood 22, Missouri  
O. M. Scott & Sons Company, Marysville, Ohio  
Seaboard Sea Company, 701 South Front Street, Philadelphia 47, Pennsylvania  
Sears, Roebuck & Company, 925 South Homan Ave., Dept. 671, Chicago 7, Ill.  
Sennewald Drug Company, Inc., 2723 Chouteau Ave., St. Louis 3, Missouri  
Senoret Chemical Company, 610 Gratiot Street, St. Louis 2, Missouri  
John Sexton & Company, Box 1531, Indianapolis, Indiana  
Shell Chemical Company, 110 West 51st Street, New York 20, New York  
Shell Oil Company, 50 West 50th Street, New York 20, New York  
Sherman Laboratories, 5031 Grandy Avenue, Detroit 11, Michigan  
Sherwin-Williams Company, 8250 St. Aubin Avenue, Detroit 11, Michigan  
Shulton, Inc., 697 Route 46, Clifton, New Jersey  
The Sinclair Manufacturing Co., 6120 North Detroit Avenue, Toledo 12, Ohio  
Skasol Corporation, 112 Glencoe Avenue, Webster Grove, Missouri  
Smith Chemical Company, 1113 Clark Avenue, Ames, Iowa  
Smith-Douglas Company, P. O. Box 419, Norfolk, Virginia  
Sno-Bol Company, 22nd & Eldorado Streets., Decatur, Illinois  
Sno-Wash Distributors, 1523 Obyrne Street, Henderson, Kentucky  
Southern Agricultural Insecticides, Inc., P. O. Box 218, Palmetto, Florida  
Southern States Cooperative, Inc., 7th & Main Streets, Richmond 13, Virginia  
Stalford Pressure Pak, Inc., 2012 Hammonds Ferry Rd., Baltimore 27, Md.



Standard Laboratories, Inc., 201 Tabor Road, Morris Plains, New Jersey  
Standard Oil Company (Ky.), 430 West Bloom Street, Louisville, Kentucky  
Standard Oil Company (Ohio), 1823 Midland Building, Cleveland 15, Ohio  
Standard Packaging Company, 200 East 42nd Street, New York 17, New York  
Stanley Home Products, Inc., 42 Arnold Street, Westfield, Massachusetts  
Stark Brothers Nurseries & Orchards Company, Louisiana, Missouri  
State Chemical & Manufacturing Co., 2435 Superior Ave., Cleveland 14, Ohio  
Stauffer Chemical Company, 555 5th Avenue, New York 17, New York  
Stearn's Electric Paste Company, 8 South Dearborn Street, Chicago 3, Illinois  
The Sterling Company, Inc., 2801-05 Locust Street, St. Louis 3, Missouri  
Sterno, Incorporated, 300 Park Avenue, New York 22, New York  
Sterwin Chemicals, Inc., 1450 Broadway, New York 18, New York  
Stim-U-Plant Laboratories, Inc., 2077 Parkwood Avenue, Columbus 19, Ohio  
J. Strickland & Company, 1400 Ragan, Memphis, Tennessee  
Stull's Chemical, Inc., 3400 Nacogdoches Road, San Antonio, Texas  
W. R. Sweeney Manufacturing, Inc., 340 South Main, Salisbury, Missouri  
Swift & Company, Agricultural Chemical Division, National Stock Yards, Ill.  
Syncro-Mist Control, Inc., 270 Madison Avenue, New York 16, New York  
Tabrol Company, 7003 Deerfield Road, Baltimore 3, Maryland  
The Taylor-Reed Corporation, Glenbrook, Connecticut  
Tennessee Copper Company, 617-29 Grant Building, Atlanta 1, Georgia  
Tennessee Corporation, Lockland Station, Cincinnati 15, Ohio  
L. Teweles Seed Company, 222 South 3rd Street, Milwaukee 1, Wisconsin  
Texas Refining Corporation, P. O. Box 711, Fort Worth, Texas  
Texize Chemicals, Inc., 215 Lawyers Building, Greenville, South Carolina  
Thompson Chemicals Corporation, 3600 Monon Street, Los Angeles, California  
Thompson-Hayward Chemical Co., 2915 Southwest Blvd., Kansas City 8, Mo.  
Time Chemical, Inc., 3950 Karlov Avenue, Chicago 32, Illinois  
Tobacco States Chemical Company, P. O. Box 479, Lexington, Kentucky  
Tom-Cat Products Company, 208 Front Street, Jonesboro, Arkansas  
Toxite Laboratories, Inc., Box 29241, Cumberland, Indiana  
Trylon Products Corporation, 2750 N. Wolcott Avenue, Chicago 14, Illinois  
Tull Chemical Company, P. O. Box 246, Oxford, Alabama  
Turco Products, Inc., 24600 Main Street, Wilmington, California  
Tykor Products, Div. Borden Co., 350 Madison Avenue, New York 17, N. Y.  
Union Carbide Consumer Products Co., 270 Park Avenue, New York 17, N. Y.  
Union Carbide Corporation, 270 Park Avenue, New York 17, New York  
Unit Chemical Corporation, 4161 Redwood Ave., Los Angeles 66, California  
United Cooperatives, Inc., 111 Glamorgan Street, Alliance, Ohio  
United States Borax & Chem. Corp., 530 Shatto Place, Los Angeles 5, California  
United States Rubber Co., 1230 Avenue of the Americas, New York 20 N. Y.  
Universal Milking Machine, First Avenue at College, Albert Lea, Minnesota  
The Upjohn Company, 7000 Portage Road, Kalamazoo, Michigan  
R. T. Vanderbilt Company, Inc., 230 Park Avenue, New York 17, New York  
Vaporette, Inc., 2416 South Harwood, Dallas 15, Texas  
Vaughan's Seed Company, 601 West Jackson, Chicago 6, Illinois  
Vestal Laboratories, Inc., 4963 Manchester, St. Louis 10, Missouri  
Vicrylite Candle Company, P. O. Box 890, Oshkosh, Wisconsin  
Vineland Chemical Sales Corporation, W. Wheat Rd., Vineland, New Jersey  
Virginia-Carolina Chem. Corp., Murray Rd., St. Bernard Sta., Cincinnati 17, O.  
Virginia-Carolina Chem. Corp., 401 East Main Street, Richmond, Virginia  
Virginia Smelting Company, West Norfolk, Virginia  
Walgreen Laboratories, 4300 Peterson Avenue, Chicago 46, Illinois  
Walton-March, 1592 Deerfield Road, Highland Park, Illinois  
Warren Seed & Chemical Company, 147 N. Delaware St., Indianapolis, Indiana  
Watkins Products, Inc., 150 Liberty Street, Winona, Minnesota  
Weco Products Company, 20 North Wacker Drive, Chicago 6, Illinois  
Weevil-Cide Company, 1323 Union Avenue, Kansas City 1, Missouri  
Weil-Elliott Chemical Company, Inc., 401 N. 37th Street, Louisville 12, Ky.  
S. C. Wells & Company, One Church Street, LeRoy, New York  
West Chemical Products, Inc., 42-16 West St., Long Island City 1, New York  
Westchester Veterinary Products, 180 Mamaroneck Ave., White Plains, N. Y.  
Whitmire Research Laboratories, Inc., 339 S. Vandeventer, St. Louis 10, Mo.

Winn Chemical Company, Box 612, Anniston, Alabama  
Winston Sales Company, 4100 West Grand Avenue, Chicago, Illinois  
Wood Treating Chemical Company, 5137 Southwest Avenue, St. Louis 10, Mo.  
Woodlets, Inc., 2048 Niagara Street, Buffalo 7, New York  
Woolfolk Chemical Works, Ltd., East Main Street, Fort Valley, Georgia  
Worden Manufacturing Company, Airport, P. O. Box 525, Grand Island, Neb.  
Wyandotte Chemicals Corporation, 1609 Biddle Avenue, Wyandotte, Michigan  
Wyeth Laboratories, P. O. Box 8299, Philadelphia 1, Pennsylvania  
Yopp Seed Company, 300 South Second Street, Paducah, Kentucky  
Zep Manufacturing Corporation, 1310 Seaboard Ind. Blvd. N. W., Atlanta 1, Ga.  
Wm. F. Zummach, Inc., 120 E. Mineral Street, Milwaukee, Wisconsin

## INTRODUCTION

This bulletin contains results of analyses of 261 official pesticide samples secured during the period January 1 through December 31, 1962.

A total of 388 samples were analyzed during this period. Reported on pages 23 and 24 are the results of the analyses of 127 single core samples taken from fertilizer-pesticide mixtures. These cores were taken and analyzed in an effort to determine the uniformity of these mixtures.

## LABELING REQUIREMENTS

Chemicals that require registration under the Kentucky Economic Poisons Law must bear a label stating directions for use, which if compiled with, are considered adequate for the protection of the public. With few exceptions, the label must contain a warning or caution statement, designed to prevent injury to man and other vertebrate animals, vegetation, or other useful living things.

The label of the product must also contain a guaranteed analysis which shows either the name and percentage of each active ingredient together with the total percentage of the inert ingredients or the names of each active ingredient in the descending order of their percentages together with the name of each and the total percentage of the inert ingredients. The ingredient statement of any product may be of either form except in the case of compounds which are highly toxic to man. The ingredient statement for products containing highly toxic compounds must list the name and percentage of each active ingredient. Highly toxic materials may also be required to be colored or discolored for the protection of the public health.

The label provides the public with information on the uses of and the precautions to be taken in the use of all economic poisons sold in Kentucky.

The name and address of the manufacturer, the net weight or measure of the contents of any package or bottle and the brand or trade mark under which the product is sold must appear on the label.

## FIELD INSPECTION

In order to adequately enforce the provision of the act, field inspectors are authorized to collect samples of economic poisons and devices and to enter into any car, warehouse, store, etc., supposed to contain economic poisons or devices, for the purpose of inspection or sampling. They are also authorized to issue and enforce a written or printed stop sale or removal order on a lot of economic poison when the material being offered for sale is in violation of any of the provisions of the Kentucky Economic Poisons Law and to hold this material at a designated place.

Field inspectors are in a position to explain the various aspects of the Kentucky Economic Poisons Law so that dealers and users of pesticide products will have an understanding of this act.

## FERTILIZER-PESTICIDE MIXTURES

An important group of specialty products are the products in which an insecticide, herbicide, or other economic poison is incorporated into a fertilizer. Because of the nature of these products, special regulations are employed in their registration. For example, an insecticide incorporated into a fertilizer is manufactured usually to be applied to the ground and, therefore, will be effective only against certain soil-inhabiting pests. Another inherent restriction in the use of these products may be in the method or in the time of application of either of the component parts of the product.

## EXPLANATION OF TABLES

The following tables are compiled by active ingredient. Manufacturers are listed alphabetically above their respective products. The examinations reported are official samples of pesticide products offered for sale in Kentucky.

Of the 261 samples reported, 47 samples were found to be deficient in one or more of the active ingredients guaranteed. Thirty-one products were not registered when the sample was taken.

The symbols in the right hand column of each table have the following meaning:

- P (Passed) denotes the amount of active ingredient found was not significantly at variance from the amount guaranteed.
- D (Deficient) denotes the amount of active ingredient found was significantly below the amount guaranteed.
- X (Not registered) denotes the product was not registered in Kentucky at the time the sample was taken.
- M (Mislabelled) denotes the product did not meet the label requirements in all respects.

## ANALYSES OF ALDRIN IN FERTILIZER

Registrant Product	Aldrin		Remarks
	Guarantee %	Found %	
AMERICAN AGRICULTURAL CHEMICAL CO.			
3- 9-6 Sulfate with Aldrin	0.15	0.22	P
4-16-4 Sulfate with Aldrin	0.30	<u>0.14</u>	<u>D</u>
Do	0.30	0.24	P
Do	0.30	0.32	P
Do	0.30	0.41	P
Do	0.30	0.37	P
Do	0.30	0.28	P
Do	0.30	0.28	P
Do	0.30	0.31	P
Do	0.30	0.27	P
Do	0.30	0.26	P
Do	0.30	0.24	P
5-10-15 Sulfate with Aldrin	0.15	0.18	P
Do	0.15	<u>0.02</u>	<u>D</u>
Do	0.15	<u>0.11</u>	<u>D</u>
Do	0.15	<u>0.26</u>	<u>P</u>
Do	0.15	0.22	P
6- 6-18 Sulfate with Aldrin	0.15	0.13	P
6-12-12 Muriate with Aldrin	0.40	<u>0.25</u>	<u>D</u>
8- 8-18 Sulfate with Aldrin	0.15	<u>0.24</u>	<u>P</u>
Do	0.15	0.17	P
10- 6- 4 Muriate with Aldrin	0.30	<u>0.21</u>	<u>D</u>
ARMOUR AGRICULTURAL CHEMICAL CO.			
3-12-12 Muriate with Aldrin	0.25	<u>0.10</u>	<u>D</u>
5-10- 5 Sulfate with Aldrin	0.15	0.20	P
5-10-10 Muriate with Aldrin	0.15	0.50	<u>M</u>
Do	0.15	0.73	<u>M</u>
5-10-15 Sulfate with Aldrin	0.15	0.13	P
5-20-20 Muriate with Aldrin	0.50	0.48	P
6-12-12 Sulfate with Aldrin	0.15	0.15	P
6-12-18 Sulfate with Aldrin	0.15	0.13	P
Do	0.15	0.18	P
Do	0.15	<u>0.07</u>	<u>D</u>
10-10-20 Sulfate with Aldrin	0.15	0.16	<u>X</u>
Do	0.15	0.18	P
BLUEGRASS PLANT FOODS, INC.			
4-12- 8 Muriate with Aldrin	0.31	0.32	P
4-16- 4 Sulfate with Aldrin	0.31	0.35	P
Do	0.31	0.27	P
5-10-10 Muriate with Aldrin	0.50	0.42	P
5-10-10 Sulfate with Aldrin	0.20	0.22	P
5-10-15 Sulfate with Aldrin	0.15	0.23	P
Do	0.15	0.12	P
5-15- 0 Sulfate with Aldrin	0.31	0.29	P
Do	0.31	0.27	P
Do	0.31	0.31	P
6- 8- 6 Sulfate with Aldrin	1.00	<u>0.42</u>	<u>D</u>
8-10-15 Sulfate with Aldrin	0.15	<u>0.10</u>	<u>D</u>
BURLEY BELT PLANT FOOD WORKS, INC.			
4-16- 4 Sulfate with Aldrin	0.31	0.29	P

(Continued)

## ANALYSES OF ALDRIN IN FERTILIZER (Cont'd.)

Registrant Product	Aldrin		Remarks
	Guarantee %	Found %	
COMMONWEALTH FERTILIZER CO.			
4-12- 8 Muriate with Aldrin	0.50	0.42	P
5-10-15 Sulfate with Aldrin	0.30	0.25	P
COOPERATIVE FERTILIZER SERVICE			
4-16- 4 Sulfate with Aldrin	0.31	0.33	P
Do	0.31	0.32	P
Do	0.31	0.34	P
Do	0.31	0.35	P
Do	0.31	0.34	P
5-10-15 Sulfate with Aldrin	0.15	0.13	P
Do	0.15	0.15	P
Do	0.15	0.16	P
Do	0.15	0.16	P
Do	0.15	0.15	P
Do	0.15	0.17	P
10-10-10 Muriate with Aldrin	0.50	0.44	P
Do	0.50	0.40	P
FARMERS FERTILIZER CO.			
0-12-20 Sulfate with Aldrin	0.17	<u>0.08</u>	<u>D</u>
8-10-12 Sulfate with Aldrin	0.12	0.10	P
FEDERAL CHEMICAL CO.			
4-16- 4 Sulfate with Aldrin	0.15	0.13	<u>X</u>
Do	0.18	<u>0.14</u>	<u>D</u>
Do	0.18	<u>0.16</u>	P
Do	0.18	0.20	P
5-10-15 Sulfate with Aldrin	0.15	<u>0.11</u>	<u>D</u>
Do	0.15	<u>0.08</u>	<u>D</u>
Do	0.15	<u>0.07</u>	<u>D</u>
Do	0.15	<u>0.11</u>	<u>D</u>
Do	0.15	0.19	P
Do	0.15	0.15	P
Do	0.15	0.12	P
Do	0.15	<u>0.10</u>	<u>D</u>
6- 6-18 Sulfate with Aldrin	0.15	0.20	P
Do	0.15	<u>0.09</u>	<u>D</u>
6-12-12 Muriate with Aldrin	0.50	<u>0.31</u>	<u>D</u>
9-10-15 Sulfate with Aldrin	0.50	0.24	<u>D</u>
Do	0.50	<u>0.39</u>	<u>D</u>
10-10-10 Muriate with Aldrin	0.50	<u>0.39</u>	<u>D</u>
W. R. GRACE & CO., DAVISON CHEM. DIV.			
5-10-15 Sulfate with Aldrin	0.50	<u>0.36</u>	<u>D</u>
Do	0.50	<u>0.34</u>	<u>D</u>
6- 6-18 Sulfate with Aldrin	0.15	0.15	P
GRO-GREEN CHEMICAL CO.			
4-16- 4 Sulfate with Aldrin	0.31	0.26	P
Do	0.31	0.28	P
5-10-15 Sulfate with Aldrin	0.15	0.19	P
HUTSON CHEMICAL CO.			
3-12- 8 Muriate with Aldrin	1.00	1.10	P

(Continued)

## ANALYSES OF ALDRIN IN FERTILIZER (Cont'd.)

Registrant Product	Aldrin		Remarks
	Guarantee %	Found %	
INTERNATIONAL MIN. & CHEM. CORP.			
5-10-15 Sulfate with Aldrin	0.15	0.13	P
6-12-12 Muriate with Aldrin	0.33	<u>0.24</u>	<u>DX</u>
KENTUCKY FERTILIZER WORKS, INC.			
4-16- 4 Sulfate with Aldrin	0.31	0.35	P
Do	0.31	0.31	P
5-10-15 Sulfate with Aldrin	0.15	0.14	P
Do	0.15	0.14	P
6- 6-18 Sulfate with Aldrin	0.15	<u>None</u>	<u>D</u>
Do	0.16	0.14	<u>P</u>
NORTH AMERICAN FERTILIZER CO.			
5-10-15 Sulfate with Aldrin	0.15	<u>0.11</u>	<u>D</u>
6- 6-18 Sulfate with Aldrin	0.15	<u>0.16</u>	<u>P</u>
OHIO VALLEY FERTILIZER, INC.			
4-16- 4 Sulfate with Aldrin	0.31	0.26	P
Do	0.31	0.28	P
Do	0.31	0.28	P
5-10-15 Sulfate with Aldrin	0.15	0.13	P
5-10-20 Sulfate with Aldrin	0.15	0.19	P
6- 6-18 Sulfate with Aldrin	0.15	0.13	P
8-10-15 Sulfate with Aldrin	0.15	0.12	P
10-10-20 Sulfate with Aldrin	0.15	<u>0.08</u>	<u>D</u>
F. S. ROYSTER GUANO CO., PRICE CHEM. DIV.			
4-16- 4 Sulfate with Aldrin	0.31	<u>0.15</u>	<u>D</u>
Do	0.31	<u>0.19</u>	<u>D</u>
Do	0.31	<u>0.19</u>	<u>D</u>
Do	0.31	0.33	P
Do	0.31	0.29	P
TENNESSEE CORPORATION			
5-10-15 Sulfate with Aldrin	0.33	<u>0.17</u>	<u>DX</u>
VIRGINIA-CAROLINA CHEMICAL CORPORATION			
4-16- 4 Sulfate with Aldrin	0.15	0.15	P
Do	0.31	<u>0.23</u>	<u>D</u>
Do	0.31	0.30	P
5-10-15 Sulfate with Aldrin	0.15	0.14	P
6- 6-18 Sulfate with Aldrin	0.15	<u>0.08</u>	<u>D</u>

## ANALYSES OF DIELDRIN IN FERTILIZER

Registrant Product	Dieldrin		Remarks
	Guarantee %	Found %	
ARMOUR AGRICULTURAL CHEMICAL CO.			
5-10- 5 Sulfate with Dieldrin	0.18	0.20	P
Do	0.18	0.22	P
Do	0.18	0.19	P
Do	0.18	0.27	P

## ANALYSES OF PRODUCTS CONTAINING ARSENIC

Registrant Product	Arsenic		Remarks
	Guaranteed %	Found %	
CALIFORNIA CHEM. CO., ORTHO DIV. Ortho Liquid Crab Grass Killer	4.00 <sup>1</sup>	3.98	P
NOTT MANUFACTURING CO., INC. Nott's Super Artox Liquid Crab- grass Killer	4.20 <sup>1</sup>	4.22	X
UNITED COOPERATIVES, INC. Unico Crabgrass Granules	27.47 <sup>2</sup>	29.70	P

<sup>1</sup>Derived from Octyl Ammonium Methyl Arsonate and Dodecyl Ammonium Methyl Arsonate.

<sup>2</sup>Derived from Tri Calcium Arsenate.

## ANALYSES OF PRODUCTS CONTAINING CHLORDANE

Registrant Product	Chlordane		Remarks
	Guaranteed %	Found %	
O. M. SCOTT & SONS CO. Scott's Halts	23.00	24.00	P

## ANALYSES OF PRODUCTS CONTAINING DACHTHAL

Registrant Product	Dachthal		Remarks
	Guaranteed %	Found %	
SWIFT & CO., AGR. CHEM. DIV. Vito Gro Crabgrass Preventer	2.53	2.50	P

## ANALYSES OF PRODUCTS CONTAINING ENDRIN

Registrant Product	Endrin		Remarks
	Guaranteed %	Found %	
CALIFORNIA CHEM. CO., ORTHO DIV. Ortho Endrin 1.6 Emulsive	18.60	19.70	P
STAUFFER CHEMICAL CO. Stauffer - Endrin (1-6 E Emulsifiable Liquid	19.80	19.40	P
TOBACCO STATES CHEMICAL CO. Tobacco States Endrin Emulsifiable Concentrate	19.50	19.50	P



## ANALYSES OF PRODUCTS CONTAINING MALEIC HYDRAZIDE

Registrant Product	Maleic Hydrazide		Remarks
	Guaranteed %	Found %	
U.S. RUBBER, NAUGATUCK CHEM. DIV.			
MH-30 Plant Growth Inhibitor	30.00	30.80	P
Do	30.00	30.40	P
Do	30.00	29.80	P
Do	30.00	30.60	P
Do	30.00	30.20	P
Do	30.00	30.20	P
Do	30.00	30.60	P
Do	30.00	30.80	P
Do	30.00	30.30	P
Do	30.00	30.00	P
Do	30.00	30.60	P
Do	30.00	30.00	P
Do	30.00	30.40	P
Do	30.00	30.20	P

## ANALYSES OF PRODUCTS CONTAINING METHOXYCHLOR

Registrant Product	Methoxychlor		Remarks
	Guaranteed %	Found %	
"AG" SUPPLY CO. 5% Methoxychlor	5.00	5.20	P

## ANALYSES OF PRODUCTS CONTAINING METHYL PARATHION

Registrant Product	Methyl Parathion		Remarks
	Guaranteed %	Found %	
CALIFORNIA CHEM. CO., ORTHO DIV. Ortho Methyl Parathion 2 Emulsive	24.00	23.80	P

## ANALYSES OF PRODUCTS CONTAINING SESONE

Registrant Product	Sesone		Remarks
	Guaranteed %	Found %	
AMCHEM PRODUCTS, INC.			
Amchem Sesone	90.00	90.00	P
Do	90.00	93.00	P
CARBIDE & CARBON CHEMICAL CO.			
Crag Herbicide - 1	90.00	90.00	P
Do	90.00	93.00	P

## ANALYSES OF PRODUCTS CONTAINING SEVIN

Registrant Product	Sevin		Remarks
	Guaranteed %	Found %	
"AG" SUPPLY CO. AG Sevin 5 Dust	5.00	4.96	P
CABELL CHEMICAL CO. Cabell's Sevin Dust	2.00	<u>1.62</u>	<u>DX</u>
CALIFORNIA CHEMICAL CO., ORTHO DIV. Ortho Sevin 50 Wettable	50.00	50.70	P
Do	50.00	48.90	P
CHEMICAL FORMULATORS, INC. Chemform Brand '7' Dust	2.50	2.66	P
Do	2.50	<u>1.79</u>	<u>D</u>
E-Z-FLO CHEMICAL CO. E-Z-Flo Dust No. 2-S	2.00	<u>1.04</u>	<u>DX</u>
E-Z-Flo Dust No. 5-S	5.00	4.56	<u>X</u>
Do	5.00	4.72	<u>X</u>
Do	5.00	4.14	<u>DX</u>
Do	5.00	<u>4.25</u>	<u>DX</u>
Do	5.00	5.25	<u>X</u>
Do	5.00	4.78	<u>X</u>
JORO, INC. NOK-OUT 175 Dust	1.75	1.67	P
Do	1.75	1.73	P
MILLER CHEMICAL & FERT. CORP. Miller Sevin 50% Wettable Powder	50.00	49.50	<u>X</u>
Do	50.00	49.30	<u>X</u>
Do	50.00	49.60	<u>X</u>
Do	50.00	49.30	<u>X</u>
NIAGARA CHEMICAL DIV., FMC CORP. Niagara Sevin 2 Dust Insecticide	2.00	1.86	P
Do	2.00	1.85	P
Niagara Sevin 5 Dust Tobacco and Vegetable Insecticide	5.00	<u>4.11</u>	<u>D</u>
Do	5.00	4.79	P
Niagara Sevin 50 Wettable Powder	50.00	50.70	P
Do	50.00	50.90	P
RIGO MANUFACTURING CO. Kill-Ko Vegetable Dust	1.75	2.09	P
Do	5.00	5.07	<u>X</u>
Do	5.00	4.75	<u>X</u>
SOUTHERN STATES COOPERATIVE, INC. Statesman Bean & Potato Dust	5.00	5.17	P
Do	5.00	5.29	P
STAUFFER CHEMICAL CO. Stauffer Sevin 4 Flowable	39.00	42.30	P
Do	39.00	38.20	P

(Continued)

## ANALYSES OF PRODUCTS CONTAINING SEVIN (Cont'd.)

Registrant Product	Sevin		Remarks
	Guaranteed %	Found %	
TOBACCO STATES CHEMICAL CO.			
Tobacco States 1 3/4% Bean Dust	1.75	<u>1.43</u>	D
Do	1.75	<u>0.92</u>	D
Do	1.75	<u>1.15</u>	D
Do	1.75	1.56	P
Do	1.75	<u>0.91</u>	D
Tobacco States Flea Beetle Dust	5.00	<u>4.02</u>	D
Do	5.00	<u>4.19</u>	D
Do	5.00	4.73	P
Tobacco States Vegetable Dust	5.00	<u>4.25</u>	D
Do	5.00	4.78	P
Tobacco States Insect Dust	10.00	9.58	P
Do	10.00	9.86	P
UNION CARBIDE CHEMICALS CO.			
Crag Brand Sevin 50-W Insecticide	50.00	49.30	P
Crag Brand Sevin Sprayable Insecticide	80.00	78.70	X
Do	80.00	79.60	X
Do	80.00	79.80	X
Do	80.00	82.60	X
Do	80.00	83.90	X
Do	80.00	80.20	X
WEIL-ELLIOTT CHEMICAL CO.			
Ken-Ko 5% Sevin Garden Dust	5.00	4.99	X
WOOLFOLK CHEMICAL WORKS, LTD.			
Security Brand Sevin Bean Dust	1.75	1.71	P
Do	1.75	1.57	P
Do	1.75	1.58	P
Security Brand 5% Sevin Garden Dust	5.00	4.79	X
Do	5.00	4.72	P
Do	5.00	4.57	P

## ANALYSES OF PRODUCTS CONTAINING THIODAN

Registrant Product	Thiodan		Remarks
	Guaranteed %	Found %	
E-Z-FLO CHEMICAL CO.			
E-Z-Flo Thiodan Emulsion	24.00	23.40	X
Do	24.00	23.00	P
Do	24.00	23.40	P
Do	24.00	23.50	P
Do	24.00	23.70	P
Do	24.00	23.50	P
NIAGARA CHEMICAL DIV., FMC CORP.			
Niagara Thiodan 3 Dust	3.00	3.16	P
Niagara Thiodan Miscible	24.00	23.80	P
Do	24.00	24.50	P
Do	24.00	23.10	P
Do	24.00	23.20	P

(Continued)

## ANALYSES OF PRODUCTS CONTAINING THIODAN (Cont'd.)

Registrant Product	Thiodan		Remarks
	Guaranteed %	Found %	
TOBACCO STATES CHEMICAL CO.			
Tobacco States Thiodan			
2 Emulsifiable	24.00	23.10	P
Do	24.00	23.70	P
UNITED COOPERATIVE, INC.			
Unico Thiodan Emulsifiable Conc.	22.80	22.90	P

## ANALYSES OF PRODUCTS CONTAINING WARFARIN

Registrant Product	Warfarin		Remarks
	Guaranteed %	Found %	
ATHENS INSECTICIDE CO.			
Uncle Joe's Wonder Warfarin			
Rat & Mouse Killer	0.025	0.023	<u>X</u>
BLACK LEAF PRODUCTS CO.			
WARF Pellets	0.025	0.026	P
BLACK PANTHER CO., INC.			
Black Panther Rat & Mouse Killer	0.025	0.024	P
BOYLE-MIDWAY, INC.			
Black Flag Warfarin Rat &			
Mouse Killer	0.025	0.026	P
CAMP CHEMICAL CO., INC.			
Camp Rodent-Go Rat Bait Killer	0.025	<u>0.018</u>	<u>DX</u>
THE D-CON COMPANY, INC.			
d-Con Exclusive Blend Lx 3-2-1	0.025	0.024	P
d-Con Mouse-Prufe	0.050	0.051	P
DACUS DRUG CO.			
KILZ with Death Dealing Warfarin	0.025	0.026	P
EAGLE CHEMICAL CO., INC.			
Eagle's 7 Rat Pellets	0.025	0.025	P
Do	0.025	0.025	P
GREEVER'S, INC.			
Greever's Ready Mixed Warfarin Bait	0.025	0.025	P
Greever's Warfarin Water Soluble	0.500	0.550	P
GUARANTEE PEST CONTROL CO.			
Guarantee Warfarin Rat Bait	0.025	0.023	P
HESS & CLARK, INC.			
Warfarat Pellets	0.025	0.027	P
HOPKINS AGRICULTURAL CHEM. CO.			
Warfarin Redi-Mix Rat & Mouse			
Killer	0.025	0.025	P

(Continued)

## ANALYSES OF PRODUCTS CONTAINING WARFARIN (Cont'd.)

Registrant Product	Warfarin		Remarks
	Guaranteed %	Found %	
HYDROPONIC CHEMICAL CO., INC. Raponex Warfarin Prepared Mouse Killer Bait	0.025	0.025	P
DR. LEGEAR, INC. Dr. LeGear's Warfarin Rat & Mouse Bait	0.025	0.024	P
Dr. LeGear's Warfarin Mouse Killer	0.050	0.049	P
LAMB PRODUCTS CO. Lam-Kill Mouse Killer	0.025	0.023	P
PERK PRODUCTS CO. Blam Kill Rat Killer	0.025	0.022	P
THE PIPER COMPANY, INC. Paket Brand Warfarin Mouse & Rat Mix	0.0375	0.038	P
Do	0.0375	0.038	P
Paket Brand Warfarin Rat Bait	0.025	0.026	P
ED PURDUE PRODUCTS Purdue Warfarin Rat & Mouse Killer	0.025	0.022	X
RIGO MANUFACTURING CO., INC. Kill-Ko Warfarin Rat & Mouse Bait	0.025	0.026	P
TOM CAT PRODUCTS CO. Tom Cat Super Bait Rat & Mouse Killer	0.025	0.024	P
UNITED COOPERATIVES, INC. Unico Warfarin Pellets	0.025	0.026	P
Do	0.025	0.026	P
Unico Rodenticide Concentrate	0.500	0.490	P

## ANALYSES OF PRODUCTS CONTAINING ZYTRON

Registrant Product	Zytron		Remarks
	Guaranteed %	Found %	
DOW CHEMICAL CO. Dow Crab Grass Killer Granules	4.40	4.70	P
Do	4.40	4.70	P

## ANALYSES OF PRODUCTS CONTAINING MIXTURES OF PESTICIDES

Registrant	Product	Guaranteed	Found	Remarks
	Active Ingredient	%	%	
ELANCO PRODUCTS CO. DIV. ELI LILLY				
	Greenfield Triple Action Crab Grass Killer w/10-5-5 Lawn Food & Insecticide			
	Heptachlor	0.46	0.45	P
	Treflan	0.34	0.43	P
Do	Heptachlor	0.46	0.42	P
	Treflan	0.34	0.36	P
TOBACCO STATES CHEMICAL CO.				
	Tobacco States 1% Parathion & 10% Sevin Dust			
	Parathion	1.00	0.92	P
	Sevin	10.00	10.30	P
	Tobacco States Hopper & Worm Spray			
	Dieldrin	2.31	2.20	P
	DDD (TDE)	24.71	*	P
Do	Dieldrin	2.13	2.50	P
	DDD (TDE)	22.70	24.00	P
WEIL-ELLIOTT CHEMICAL CO.				
	Ken-Ko Tobacco Worm & Grass- hopper Spray			
	Dieldrin	2.19	2.50	P
	DDD (TDE)	23.36	23.20	P
Do	Dieldrin	2.19	2.70	P
	DDD(TDE)	23.36	25.40	P
WOOLFOLK CHEMICAL WORKS, LTD.				
	Security 5% Sevin-1% Parathion Tobacco Dust			
	Parathion	1.00	0.86	P
	Sevin	5.00	5.05	P

\*Product not analyzed for this ingredient.

RESULT OF ANALYSES OF CORE SAMPLES

The following table is a report of the results of analysis of individual core samples of fertilizer containing aldrin and dieldrin. The first number for each lot in the found column is the result obtained from analyzing a composite of the five cores from the lot represented.

Company	Lot	Aldrin		Company	Lot	Aldrin			
		Guar. %	Found %			Guar. %	Found %		
Company A	1	0.31	0.30	Company B (cont'd.)	5	0.15	0.22		
	Core 1		0.34		Core 1		0.18		
	Core 2		0.27		Core 2		0.24		
	Core 3		0.17		Core 3		0.33		
	Core 4		0.14		Core 4		0.24		
	Core 5		0.29		Core 5		0.11		
	2	0.15	0.15		6	0.15	0.24		
	Core 1		0.17		Core 1		0.24		
	Core 2		0.18		Core 2		0.12		
	Core 3		0.16		Core 3		0.19		
	Core 4		0.15		Core 4		0.18		
	Core 5		0.14		Core 5		0.14		
	Company B	1	0.30		0.27	7	0.15	0.11	
		Core 1			0.26	Core 1		0.17	
		Core 2			0.34	Core 2		0.15	
Core 3			0.25	Core 3		0.16			
Core 4			0.20	Core 4		0.10			
Core 5			0.01	Core 5		0.06			
2		0.30	0.21	8	0.15	0.22			
Core 1			0.28	Core 1		0.15			
Core 2			0.10	Core 2		0.19			
Core 3			0.17	Core 3		0.44			
Core 4			0.12	Core 4		0.23			
Core 5			0.40	Core 5		0.17			
Resample of 2		0.30	0.24	5 cores from 1 bag		0.38			
Core 1			0.15	Company C	1	0.31	0.35		
Core 2			0.39		Core 1		0.37		
Core 3		0.10	Core 2			0.36			
Core 4		0.26	Core 3			0.35			
Core 5		0.15	Core 4			0.35			
3	0.30	0.28	Core 5			0.36			
Core 1		0.21	2		0.31	0.33			
Core 2		0.31	Core 1			0.35			
Core 3		0.37	Core 2			0.33			
Core 4		0.36	Core 3			0.34			
Core 5		0.23	Core 4			0.31			
4	0.30	0.21	Core 5			0.32			
Core 1		0.39	5 cores from 1 bag			0.36			
Core 2		0.23	Company D		1	0.15	0.73		
Core 3		0.06			Core 1		0.27		
Core 4		0.30		Core 2		0.81			
Core 5		0.19		Core 3		0.70			
				Core 4		0.86			
				Core 5		0.77			

(Continued)

## RESULT OF ANALYSES OF CORE SAMPLES (Cont'd.)

Company	Lot	Aldrin		Company	Lot	Aldrin				
		Guar. %	Found %			Guar. %	Found %			
Company D (cont'd.)	2	0.15	0.15	Company G	1	0.31	0.19			
	Core 1		0.24		Core 1		0.19			
	Core 2		0.15		Core 2		0.26			
	Core 3		0.11		Core 3		0.15			
	Core 4		0.25		Core 4		0.14			
	Core 5		0.39		Core 5		0.08			
Company E	1	0.31	0.28	Company H	2	0.31	0.33			
	Core 1		0.27		Core 1		0.25			
	Core 2		0.26		Core 2		0.33			
	Core 3		0.28		Core 3		0.34			
	Core 4		0.24		Core 4		0.35			
	Core 5		0.24		Core 5		0.34			
Company F	1	0.35	0.32	Company I	1	0.18	0.27			
	Core 1		0.32		Core 1		0.24			
	Core 2		0.36		Core 2		0.23			
	Core 3		0.32		Core 3		0.24			
	Core 4		0.30		Core 4		0.23			
	Core 5		0.30		Core 5		0.24			
	2	0.31	0.31		2	0.18	0.22			
	Core 1		0.30					Core 1		0.54
	Core 2		0.35					Core 2		0.17
	Core 3		0.33					Core 3		0.09
	Core 4		0.29					Core 4		0.18
	Core 5		0.31		Core 5		0.15			
	3	0.50	0.24							
	Core 1		0.47							
	Core 2		0.38							
Core 3		0.53								
Core 4		0.47								
Core 5		0.13								
4	1.00	0.42								
Core 1		0.55								
Core 2		0.44								
Core 3		0.47								
Core 4		0.48								
Core 5		0.46								

This table indicates some manufacturers are doing a very good job of mixing pesticides in their fertilizers.



## KENTUCKY ECONOMIC POISON LAW

An act concerning regulation of the manufacture, sale, transportation, distribution and use of economic poisons and devices including fungicides, rodenticides and herbicides.

217.540 Definitions for KRS 217.540 to 217.640. As used in KRS 217.540 to 217.640, unless the context requires otherwise:

- (1) "Economic poison" means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any insects, rodents, fungi, bacteria, weeds or other form of plant or animal life or viruses (except viruses on or in living man or other animals) which the Director shall declare to be a pest;
- (2) "Device" means any instrument or contrivance intended for trapping, destroying, repelling or mitigating insects or rodents or destroying, repelling or mitigating fungi, bacteria or weeds, or such other pests as may be designated by the Director, but not including simple mechanical devices such as rat traps or equipment used for the application of economic poisons when sold separately therefrom;
- (3) "Insecticide" means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any insects which may be present in any environment whatsoever;
- (4) "Fungicide" means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any fungi or plant disease;
- (5) "Rodenticide" means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating rodents or any other vertebrate animal which the Director shall declare to be a pest;
- (6) "Herbicide" means any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any weed;
- (7) "Weed" means any plant which grows where not wanted;
- (8) "Insect" means any of the numerous small invertebrate animals generally having the body more or less obviously segmented, for the most part belonging to the class Insecta, comprising six-legged, usually winged forms as for example, beetles, bugs, bees, flies and to other allied classes of arthropods whose members are wingless and usually have more than six legs, as for example, spiders, mites, ticks, centipedes, and wood lice, also nematodes and other worms, or any other invertebrates which are destructive, constitute a liability, and may be classed as pests;
- (9) "Fungi" means all non-chlorophyll bearing thallophytes (that is, all non-chlorophyll bearing plants of a lower order than mosses and liverworts) as for example, rusts, smuts, mildews, molds, yeasts, bacteria and viruses, except those on or in living man or other animals;
- (10) "Ingredient statement" or "guaranteed analysis statement" means either (1) a statement of the name and percentage of each active ingredient, together with the total percentage of the inert ingredients, in the economic poisons; and in addition, in case the economic poisons contain arsenic in any form, a statement of the percentage of total and water soluble arsenic, each stated as elemental (metallic) arsenic; or (2) a statement of the name of each active ingredient in the descending order of percentages, together with the name of each and total percentage of the inert ingredients, if any there be, in the economic poison (except option one shall apply if the preparation is highly toxic to man, determined as provided in KRS 217.580), and in case the economic poisons contain arsenic in any form a statement of the percentage of total and water soluble arsenic, each stated as elemental (metallic) arsenic;
- (11) "Active ingredient" means an ingredient which will prevent, destroy, repel or mitigate insects, fungi, rodents, weeds or other pests;
- (12) "Inert ingredient" means an ingredient which is not an active ingredient.
- (13) "Antidote" means the most practical immediate treatment in case of poisoning and includes first aid treatment;
- (14) "Person" means any individual, partnership, association, corporation or organized group of persons whether incorporated or not;
- (15) "Director" means the Director of the Kentucky Agricultural Experiment Station;
- (16) "Registrant" means the person registering any economic poison pursuant to the provisions of KRS 217.540 to 217.640;
- (17) "Label" means the written, printed or graphic matter on or attached to, the economic poison or device, or the immediate container thereof, and the outside container or wrapper of the retail package, if any there be, of the economic poison or device;
- (18) "Labeling" means all labels and other written, printed or graphic matter;

- (a) Upon the economic poison or device or any of its containers or wrappers;
  - (b) Accompanying the economic poison or device at any time;
  - (c) To which reference is made on the label or in literature accompanying the economic poison or device, except when accurate, non-misleading reference is made to current official publications of the Kentucky Agricultural Experiment Station, the College of Agriculture of the University of Kentucky, the Department of Agriculture, Labor and Statistics, the Department of Health, or similar Federal institutions or other official agencies of this state or other states when such agencies are authorized to conduct research in the field of economic poisons;
- (19) "Adulterated" means any economic poison the strength or purity of which falls below the professed standard or quality as expressed on labeling or under which it is sold, or any substance of which has been substituted wholly or in part, or any valuable constituent of which has been wholly, or in part, abstracted;
- (20) "Misbranded" shall mean any economic poison or device:
- (a) The labeling of which bears any statement, design or graphic representation relative thereto or to its ingredients which is false or misleading in any particular;
  - (b) Which is an imitation of or is offered for sale under the name of another economic poison;
  - (c) The labeling of which bears any false reference to registration under KRS 217.540 to 217.640;
  - (d) The accompanying label of which does not contain directions for use which are necessary and, if complied with, adequate for the protection of the public;
  - (e) The label of which does not contain a warning or caution statement which may be necessary and, if complied with, adequate to prevent injury to living man and other vertebrate animals, vegetation, and useful invertebrate animals;
  - (f) The label of which does not bear an ingredient statement or guaranteed analysis statement on that part of the immediate container and on the outside container or wrapper, if there be one, through which the ingredient statement or guaranteed analysis statement on the immediate container cannot be clearly read, of the retail package which is presented or displayed under customary conditions of purchase;
  - (g) In which any word, statement, or other information required by or under the authority of KRS 217.540 to 217.640 to appear on the labeling is not prominently placed thereon with such conspicuousness (as compared with other words, statements, designs or graphic matter in the labeling) and in such terms as to render it likely to be read and understood by the ordinary individual under customary conditions of purchase and use; or
  - (h) Which, in the case of insecticide, fungicide or herbicide, when used as directed or in accordance with commonly recognized safe practice, shall be injurious to living man or other vertebrate animals or vegetation, to which it is applied, or to the person applying such economic poison, excepting pests and weeds. (1956 c. 218, 1; effective July 1, 1956)

217.550 Prohibitions relating to the distribution, sale or transportation of economic poisons. It shall be unlawful for any person to distribute, sell or offer for sale within the state or deliver for transportation or transport in intrastate commerce or between points within this state through any point outside this state any of the following:

- (1) Any economic poison which is not registered pursuant to the provisions of KRS 217.570, or any economic poison if any of the claims made for it or any of the directions for its use differ in substances from the representation made in connection with its registration, or if the composition of an economic poison differs from its composition as represented in connection with its registration; provided, that in the discretion of the Director, a change in the labeling or formula of an economic poison may be made, within a registration period, without requiring a re-registration of the product;
- (2) Any economic poison, except in the registrant's or the manufacturer's broken immediate container, unless there is affixed to the container, and to the outside container or wrapper of the retail package, if there be one, through which the required information on the immediate container cannot be clearly read, a label bearing:
  - (a) The name and address of the manufacturer, registrant or person for whom manufactured;
  - (b) The name, brand or trade-mark under which said article is sold; and
  - (c) The net weight or measure of the content subject, however to such reasonable variations as the Director may permit;
- (3) Any economic poison which contains any substance or substances in quantities highly toxic to man, determined as provided in KRS 217.580, unless the label shall bear, in addition to any other matter required by KRS 217.540 to 217.640:

(a) The skull and crossbones;  
(b) The word "poison" prominently in red, on a background of distinctly contrast color; and

(c) A statement of an antidote for the economic poison;

(4) The economic poisons commonly known as lead arsenate, basic lead arsenate, calcium arsenate, magnesium arsenate, zinc arsenate, zinc arsenite, sodium fluoride, sodium fluosilicate, and barium fluosilicate unless they have been distinctly colored or discolored as provided by regulations issued in accordance with KRS 217.540 to 217.640, or any other white powder economic poison which the Director, after investigation of and after public hearing on the necessity for such action for the protection of the public health and the feasibility of such coloration or discoloration, shall by regulation, require to be distinctly colored or discolored; unless it has been so colored or discolored; provided, that the Director may exempt any economic poison, to the extent that it is intended for a particular use or uses, from the coloring or discoloring required or authorized by this subsection if he determines that such coloring or discoloring for such use or uses is not necessary for the protection of the public health;

(5) Any economic poison which is adulterated or misbranded, or any device which is misbranded. (1956, c. 218, 2; effective July 1, 1956)

217.560 Unlawful practices. It shall be unlawful:

(1) For any person to detach, alter, deface, or destroy, in whole or in part, any label or labeling provided for in KRS 217.540 to 217.640 or the rules and regulations promulgated hereunder, or to add any substance to, or take any substance from an economic poison in a manner that may defeat the purposes of KRS 217.540 to 217.640;

(2) For any person to use for his own advantage or to reveal, other than to the Director, or officials or employees of the state or officials or employees of the United States Department of Agriculture, or other Federal agencies, or to the courts in response to a subpoena, or to physicians, and in emergencies to pharmacists and other qualified persons for use in the preparation of antidotes, in accordance with such directions as the Director may prescribe, any information relative to formulas of products acquired by authority of KRS 217.570;

(3) For any person to oppose or interfere in any way with the Director or his duly authorized agents in carrying out the duties imposed by KRS 217.540 to 217.640 (1956 c. 218, 3; effective July 1, 1956)

217.570 Registration of economic poisons; renewal.

(1) Every economic poison which is distributed, sold or offered for sale within this state or delivered for transportation or transported in intrastate commerce or between points within the state through any point outside this state shall be registered with the Director. The Director may register and permit the sale of any such economic poison which has been duly registered without protest under the provisions of the Federal Insecticide, Fungicide and Rodenticide Act, but products so registered shall be subject to the inspection fees provided for herein, and to all other provisions of KRS 217.540 to 217.640. All registration of products shall expire on the thirty-first day of December following date of issuance, unless such registration shall be renewed annually, in which event expiration date shall be extended for each year of renewal registration, or until otherwise terminated; provided that:

(a) Products which have the same formula, and are manufactured by the same person, the labeling of which contains the same claims, and the labels of which bear a designation identifying the product as the same economic poison may be registered as a single economic poison; additional names and labels shall be added by supplement statements during the current period of registration.

(b) Within the discretion of the Director, or his authorized representative, a change in the labeling or formulas of an economic poison may be made within the current period of registration, without requiring a re-registration of the product, provided the name of the item is not changed.

(2) The registrant shall file with the Director, a statement containing:

(a) The name and address of the registrant and the name and address of the person whose name will appear on the label, if other than the registrant;

(b) The name of the economic poison;

(c) A complete copy of the labeling accompanying the economic poison and a statement of all claims made and to be made for it including directions for use; and

(d) If requested by the Director, a full description of the tests made and results thereof upon which the claims are based. In the case of renewal of registration, a statement shall be required only with respect to information which is different from that

furnished when the economic poison was registered or last re-registered;

(3) The registrant, before selling or offering for sale any economic poison in this state, shall register each brand or grade of such economic poison with the Director upon forms furnished by the Director, and for the purposes of defraying expenses connected with the enforcement of KRS 217.540 to 217.640, shall pay to the Director an annual inspection fee of five dollars for each and every brand or grade to be offered for sale in this state provided, however, that any registrant may register annually any number of brands after the payment of annual fees aggregating fifty dollars. There shall be issued to the registrant by the Director a license entitling the registrant to sell all duly registered brands in this state until the expiration of the license;

(4) The Director, whenever he deems it necessary in the administration of KRS 217.540 to 217.640, may require the submission of the complete formula of any economic poison. If it appears to the Director that the composition of the article is such as to warrant the proposed claims for it and if the article and its labeling and other material required to be submitted comply with the requirements of KRS 217.540 to 217.640, he shall register the article;

(5) If it does not appear to the Director that the article is such as to warrant the proposed claims for it or if the article and its labeling and other material required to be submitted do not comply with the provisions of KRS 217.540 to 217.640, he shall notify the registrant of the manner in which the article, labeling, or other material required to be submitted fail to comply with KRS 217.540 to 217.640, so as to afford the registrant an opportunity to make the necessary corrections;

(6) If, upon receipt of such notice, the registrant insists that such corrections are not necessary and requests in writing that the article be registered, the commissioner shall register the article under protest, and such registration shall be accompanied by a warning in writing to the registrant of the apparent failure of the article to comply with the provisions of KRS 217.540 to 217.640;

(7) The Director is authorized and empowered to refuse to register, or to cancel the registration of, any brand of economic poison as herein provided, upon satisfactory proof that the registrant has been guilty of fraudulent and deceptive practices in evasions or attempted evasions of the provisions of KRS 217.540 to 217.640 or any rules and regulations promulgated thereunder; provided, that no registration shall be revoked or refused until the registrant shall have been given a hearing by the Director;

(8) Notwithstanding any other provisions of KRS 217.540 to 217.640, registration is not required in the case of an economic poison shipped from one plant within this state to another plant within this state operated by the same person. (1956, c. 218, 5; effective July 1, 1956)

#### 217.580 Authority of Director.

(1) The Director is authorized, after opportunity for a hearing:

- (a) To declare as a pest any form of plant or invertebrate animal life or virus which is injurious to plants, animals, articles or substances;
- (b) To determine whether economic poisons are highly toxic to man;
- (c) To determine standards of coloring or discoloring for economic poisons and to subject economic poisons to the requirements for coloration or discoloration imposed by KRS 217.540 to 217.640;

(2) The Director is further authorized:

- (a) To effect the collection and examination of samples of economic poisons and devices to determine compliance with the requirements of KRS 217.540 to 217.640; and he shall have the authority at all reasonable hours to enter into any car, warehouse, store, building, boat, vessel or place supposed to contain economic poisons or devices, for the purpose of inspection or sampling, and to procure samples for analysis or examination from any lot, package or parcel of economic poison, or any device;
- (b) To publish from time to time, in such forms as he may deem proper, reports of the results of the analyses based on official samples of economic poisons sold within the state;

(c) After due public hearing, to make, promulgate, alter, change, rescind such rules and regulations relating to the sale and distribution of economic poisons as he may find necessary to carry into effect the full intent and meaning of KRS 217.540 to 217.640;

(d) To cooperate with, and enter into agreements with, any other agency of this state, the United States Department of Agriculture, and any other state or agency thereof for the purpose of carrying out the provisions of KRS 217.540 to 217.640 and securing uniformity of regulations. (1956, c. 218, 6; effective July 1, 1956)

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217.590 Violation of KRS 217.540 to 217.640, duties of Director relating to; penalties.

(1) If it shall appear from examination or evidence that any of the provisions of KRS 217.540 to 217.640 or the rules and regulations issued thereunder have been violated, the Director may cause notice of such violations to be given to the registrant, distributor and processor, from whom any samples or evidence was taken. Any party so notified shall be given an opportunity to be heard under such rules and regulations as may be prescribed by the Director. If it appears after such hearing that there have been a sufficient number of violations of KRS 217.540 to 217.640 or the rules and regulations issued thereunder, the Director may certify the facts to the Commonwealth's attorney or the county attorney for the county in which the violation shall have occurred and furnish that officer with a copy of the results of any examination of such sample duly authenticated by the officer making the examination. It shall be the duty of every such attorney to whom the Director shall report any violation of KRS 217.540 to 217.640 to cause proceedings to be prosecuted without delay for the fines and penalties in such cases. Any person convicted of violating any provisions of KRS 217.540 to 217.640 or the rules and regulations issued thereunder shall be adjudged guilty of a misdemeanor and shall be subject to a penalty of not less than twenty-five dollars nor more than five hundred dollars;

(2) Nothing in this section shall be construed as requiring the Director to report minor violations for the institution of proceedings under KRS 217.540 to 217.640 whenever the Director believes that the public interest will be adequately served in the circumstances by a suitable written notice or warning. (1956, c. 218, 7; effective July 1, 1956)

217.600 When penalties not applicable. The penalties provided for violations of KRS 217.550 shall not apply to:

(1) Any carrier, while lawfully engaged in transporting an economic poison within this state, if such carrier shall, upon request, permit the Director or his designated agent to copy all records showing the transactions in and movements of the articles;

(2) Public officials of this state and of the federal government engaged in the performance of their official duties;

(3) The manufacturer or shipper of an economic poison for experimental use only:

(a) By or under the supervision of an agency of this state or of the federal government authorized by law to conduct research in the field of economic poisons; or

(b) By others if the economic poison is not sold and if the container thereof is plainly and conspicuously marked "For experimental use only - Not to be sold," together with the manufacturer's name and address' provided, however, that if a written permit has been obtained from the Director, economic poisons may be sold for experimental purposes subject to such restrictions and conditions as may be set forth in the permit;

(4) Any preparation, drug or chemical intended to be used or sold solely for medicinal use or for toilet purposes. (1956, c. 218, 8; effective July 1, 1956)

217.610 Director to issue written "stop sale, use or removal" order; when; appeal.

It shall be the duty of the Director to issue and enforce a written or printed "stop sale, use or removal" order to the owner or custodian of any lot of economic poison and to hold at a designated place when the Director finds said economic poison is being offered or exposed for sale in violation of any of the provisions of KRS 217.540 to 217.640 until the law has been complied with and said economic poison is released in writing to the Director or said violation has been otherwise legally disposed of by written authority; provided, that the owner or custodian of such economic poison shall have the right to appeal from such order to a court of competent jurisdiction in the county where the said economic poison or poisons are found, praying for a judgment as to the jurisdiction of said order, and for the discharge of such economic poison from the order prohibiting the sale in accordance with the findings of the court; and provided further that the provisions of this paragraph shall not be construed as limiting the right of the enforcement officer to proceed as authorized by other provisions of KRS 217.540 to 217.640. The Director shall release the economic poison so withdrawn when the requirements of the provisions of KRS 217.540 to 217.640 have been complied with and upon payment of all costs and expenses incurred in connection with the withdrawal. (1956, c. 218, 9; effective July 1, 1956)

217.620 Seizure of economic poison; when. Any lot of economic poison not in compliance with the provisions of KRS 217.540 to 217.640 shall be subject to seizure on complaint of the Director to a court of competent jurisdiction in the county in which said economic poison is located. In the event the court finds the said economic poison

to be in violation of KRS 217.540 to 217.640 and orders the condemnation of said economic poison, it shall be disposed of in any manner consistent with the quality of the economic poison and the laws of the state, provided, that in no instance shall the disposition of said economic poison be ordered by the court without first giving the claimant an opportunity to apply to the court for release of said economic poison or for permission to process or relabel said product to bring it into compliance with KRS 217.540 to 217.640. (1956, c. 218, 10; effective July 1, 1956)

217.630 Authority vested in Director may be executed by employees of Agricultural Experiment Station. All authority vested in the Director by virtue of the provisions of KRS 217.540 to 217.640 may, with like force and effect, be executed by such employees of the Kentucky Agricultural Experiment Station as the Director may from time to time designate for said purpose. (1956, c. 218, 11; effective July 1, 1956)

217.640 Jurisdiction vested in Director; repealing clause. Jurisdiction in all matters pertaining to the distribution, sale and transportation of economic poisons is by KRS 217.540 to 217.640 vested exclusively in the Director and all acts and parts of acts inconsistent with KRS 217.540 to 217.640 are hereby expressly repealed including the provisions of Sections 217.010 and 217.400 of the Kentucky Revised Statutes which cover economic poisons subject to KRS 217.540 to 217.640. (1956, c. 218, 13; effective July 1, 1956)

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