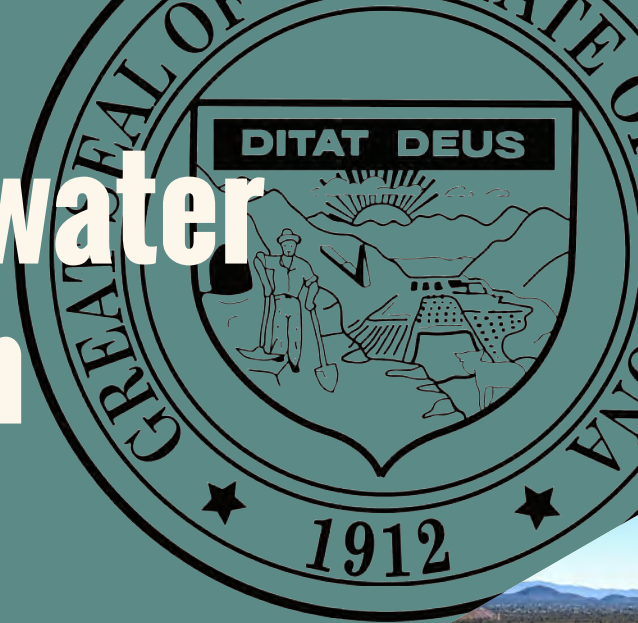


Pesticide Groundwater Quality Protection

2023 Annual Report

Prepared by the Arizona Department of Environmental Quality



Clean Air, Safe Water,
Healthy Land for Everyone

This report has been prepared by the Arizona Department of Environmental Quality (ADEQ) as mandated by Arizona Revised Statutes (A.R.S.) §49-303(C).

The Arizona Pesticide Groundwater Quality Protection Program is responsible for evaluating mobility and persistence data submitted in support of new pesticide product registration. After completing a substantive technical review of data, ADEQ determines if the product's active ingredient poses a threat to groundwater quality.

A.R.S. § 49-303.C.1. Data gaps

There were no groundwater protection data gaps for any of the active ingredients associated with the agricultural-use pesticides registered in Arizona in 2022

A.R.S. § 49-303.C.2 and A.R.S. § 49-303.C.3 List of pesticides with active ingredients that have a potential to pollute groundwater

ADEQ reviews product chemistry and environmental fate submittal for pesticide active ingredients. The data are compared with Specific Numeric Values (SNVs) found in the Arizona Administrative Code (A.A.C.) R18-6-103.1. SNVs are based on the U.S. Environmental Protection Agency's (EPA) criteria for identifying pesticide active ingredients that have the potential to leach to groundwater based on the factors of mobility and persistence in the subsurface environment.

Agricultural-use pesticide active ingredients that fail at least one SNV from both the mobility and persistence factors or based on environmental fate analysis are considered as having the potential to pollute groundwater. As an alternative to the SNVs, evaluation procedures have been adopted in A.A.C. R18-6-103.2 that allow for consideration of new scientific approaches in determining the pollution potential of agricultural-use pesticides. Active ingredients determined to have the potential to pollute groundwater are placed on the Groundwater Protection List (GWPL). See Appendix A for the 2022 GWPL.

A.R.S. § 49-303.C.4 Amount of pesticide applied and for what purpose

Application of a pesticide with an active ingredient, the location and amount, and the purpose is reported to the Arizona Department of Agriculture. This information is located in Appendix B and Appendix C.

Appendix A. 2022 Groundwater Protection List

The GWPL includes the brand name of the pesticide, the EPA Registration Number, Active Ingredient, and the Chemical Abstracts Service (CAS) Number.

Appendix A. 2022 Groundwater Protection List					
Brand Name	EPA1	EPA2	EPA3	Active Ingredient	CAS Number
ACTIGARD 50 WG PLANT ACTIVATOR	62719	396	0	Acibenzolar-s-methyl	135158-54-2
AATREX 4L HERBICIDE	42750	61	0	Atrazine	1912-24-9
ATRAZINE 4L HERBICIDE	83772	12	0	Atrazine	1912-24-9
DREXEL ATRAZINE 4L HERBICIDE	279	3241	0	Atrazine	1912-24-9
AATREX NINE-O HERBICIDE	100	816	0	Atrazine	1912-24-9
QUADRIS FLOWABLE FUNGICIDE	62719	623	0	Azoxystrobin	131860-33-8
AFRAME	70506	8	0	Azoxystrobin	131860-33-8
ABOUT FLOWABLE FUNGICIDE	264	840	0	Azoxystrobin	131860-33-8
HERITAGE FUNGICIDE	100	1093	0	Azoxystrobin	131860-33-8
ABOUT FLOWABLE FUNGICIDE	100	1098	0	Azoxystrobin	131860-33-8
SEVIN XLR PLUS	83222	1	0	Carbaryl	63-25-2
SEVIN SL CARBARYL INSECTICIDE	432	1227	0	Carbaryl	63-25-2
SEVIN 5 BAIT	2935	366	0	Carbaryl	63-25-2
AIM EC HERBICIDE	100	816	0	Carfentrazone-ethyl	128693-02-1
DISPLAY COTTON HARVEST AID	228	607	0	Carfentrazone-ethyl	128639-02-1
ACELEPRYN	100	1093	0	Chlorantraniliprole	500008-45-7
BESIEGE INSECTICIDE	34704	924	0	Chlorantraniliprole	500008-45-7
DUPONT CORAGEN INSECT CONTROL	279	9564	0	Chlorantraniliprole	500008-45-7
STATUS HERBICIDE	34704	890	0	Dicamba, sodium salt	1982-69-0
FORUM FUNGICIDE	100	1295	0	Dimethomorph	110488-70-5
ZAMPRO FUNGICIDE	100	904	0	Dimethomorph	110488-70-5
SCORPION™ 35SL INSECTICIDE	66222	156	0	Dinotefuran	165252-70-0
VALENT VENOM INSECTICIDE	6325	22	0	Dinotefuran	165252-70-0
ADIOS COTTON DEFOLIANT	66222	137	0	Diuron	330-54-1
PROCLAIM INSECTICIDE	100	617	0	Emamectin benzoate	137512-74-4
KATANA TURF HERBICIDE	71512	12	2217	Flazasulfuron	104040-78-0
BELEAF 50SG INSECTICIDE	352	592	0	Flonicamid	158062-67-0
CARBINE 50 WG INSECTICIDE	228	608	0	Flonicamid	158062-67-0
ISK BIOSCIENCE BELEAF 50SG INSECTICIDE	70299	28	0	Flonicamid	158062-67-0
LUNA SENSATION	62719	545	0	Fluopyram	658066-35-4
VELUM ONE	264	1078	0	Fluopyram	658066-35-4
LUNA PRIVILEGE	264	1078	0	Fluopyram	658066-35-4
RELY 280	264	829	0	Glufosinate-ammonium	77182-82-2
SANDEA HERBICIDE	66222	60	0	Halosulfuron-methyl	100784-20-1
RAPTOR HERBICIDE	10163	21	0	Imazamox	114311-32-9
CLEARCAST HERBICIDE	241	437	0	Imazamox	114311-32-9
CLEARCAST 2.7G HERBICIDE	2935	559	0	Imazamox	114311-32-9
CELERO HERBICIDE	59639	155	0	Imazosulfuron	122548-33-8
ADMIRE PRO SYSTEMIC PROTECTANT INSECTICIDE	62719	623	0	Imidacloprid	138261-41-3
TRIPLE CROWN GOLF INSECTICIDE	279	3457	0	Imidacloprid	138261-41-3
LOROX DF AGRICULTURAL HERBICIDE	61842	23	0	Linuron	330-55-2
LOROX® DF HERBICIDE	100	620	0	Linuron	330-55-2
OSPREY HERBICIDE	264	802	0	Mesosulfuron-methyl	208465-21-8
ENGAME	59639	132	0	Methoxyfenozide	161050-58-4
INTREPID 2F	264	1050	0	Methoxyfenozide	161050-58-4
WITHSTAND	62719	442	0	Methoxyfenozide	161050-58-4
DUPONT VYDATE C-LV INSECTICIDE/NEMATOCIDE	352	532	0	Oxamyl	23135-22-0
CAPAROL 4L HERBICIDE	59639	132	0	Prometryn	7287-19-6

Appendix A. 2022 Groundwater Protection List					
Brand Name	EPA1	EPA2	EPA3	Active Ingredient	CAS Number
DUPONT CINCH ATZ LITE HERBICIDE	100	1295	0	S-Metolachlor	87392-12-9
IMPACT	5481	524	0	Topramezone	210631-68-8

Appendix B. Reported Use of Pesticides in Arizona by County – January 1, 2022 to December 31, 2022							
County	Type	Active ingredient	CAS	Brand name	Acres	Chem total	Unit
COCHISE	HERBICIDE	Atrazine	1912-24-9	ATRAZINE 4L HERBICIDE	16,580.52	6,672.19	GAL
COCHISE	HERBICIDE	Atrazine	1912-24-9	DREXEL ATRAZINE 4L HERBICIDE	17,822.07	5,683.15	GAL
COCHISE	FUNGICIDE	Azoxystrobin	131860-33-8	ABOUND FLOWABLE FUNGICIDE	96.00	9.00	GAL
COCHISE	FUNGICIDE	Azoxystrobin	131860-33-8	AFRAME	7,110.00	860.98	GAL
COCHISE	FUNGICIDE	Azoxystrobin	131860-33-8	QUADRIIS FLOWABLE FUNGICIDE	1,711.71	137.23	GAL
COCHISE	HERBICIDE	Carfentrazone-ethyl	128639-02-1	AIM EC HERBICIDE (AZ-130003)	2,080.50	24.21	GAL
COCHISE	HERBICIDE	Dicamba, sodium salt	1982-69-0	STATUS HERBICIDE	4,633.00	179.48	GAL
COCHISE	HERBICIDE	Dicamba, sodium salt	1982-69-0	STATUS HERBICIDE	12,830.58	3,876.53	LBS
COCHISE	INSECTICIDE	Dinotefuran	165252-70-0	VALENT VENOM INSECTICIDE	32.00	6.00	LBS
COCHISE	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	565.94	97.02	LBS
COCHISE	HERBICIDE	Imazamox	114311-32-9	RAPTOR HERBICIDE	5,057.66	102.55	GAL
COCHISE	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	150.00	9.38	GAL
COCHISE	INSECTICIDE	Oxamyl	23135-22-0	DUPONT VYDATE C-LV INSECTICIDE/NEMATICIDE	2,350.00	616.88	GAL
COCHISE	HERBICIDE	Topramezone	210631-68-8	IMPACT	2,491.03	14.20	GAL
GRAHAM	HERBICIDE	Atrazine	1912-24-9	ATRAZINE 4L HERBICIDE	11,306.00	4,802.33	GAL
GRAHAM	HERBICIDE	Atrazine	1912-24-9	DREXEL ATRAZINE 4L HERBICIDE	2,678.00	1,082.37	GAL
GRAHAM	FUNGICIDE	Azoxystrobin	131860-33-8	QUADRIIS FLOWABLE FUNGICIDE	3,090.00	217.27	GAL
GRAHAM	HERBICIDE	Carfentrazone-ethyl	128639-02-1	AIM EC HERBICIDE (AZ-130003)	456.00	5.98	GAL
GRAHAM	HERBICIDE	Dicamba, sodium salt	1982-69-0	STATUS HERBICIDE	3,158.00	1,064.39	LBS
GRAHAM	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	300.00	52.50	LBS
GRAHAM	HERBICIDE	Imazamox	114311-32-9	RAPTOR HERBICIDE	1,716.00	46.16	GAL
LA PAZ	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	4,029.57	705.18	LBS
LA PAZ	HERBICIDE	Imazamox	114311-32-9	RAPTOR HERBICIDE	3,265.70	153.12	GAL
LA PAZ	HERBICIDE	Linuron	330-55-2	LOROX DF AGRICULTURAL HERBICIDE	17.00	51.00	LBS
LA PAZ	HERBICIDE	Linuron	330-55-2	LOROX® DF HERBICIDE	38.00	114.00	LBS
LA PAZ	INSECTICIDE	Methoxyfenozide	161050-58-4	ENGAME	126.50	7.91	GAL
LA PAZ	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	419.00	73.98	GAL
LA PAZ	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	2,209.56	93.23	GAL
MARICOPA	HERBICIDE	Atrazine	1912-24-9	AATREX 4L HERBICIDE	526.89	132.90	GAL
MARICOPA	HERBICIDE	Atrazine	1912-24-9	AATREX NINE-O HERBICIDE	1,421.40	2,569.29	LBS
MARICOPA	HERBICIDE	Atrazine	1912-24-9	ATRAZINE 4L HERBICIDE	656.00	196.80	GAL
MARICOPA	FUNGICIDE	Azoxystrobin	131860-33-8	ABOUND FLOWABLE FUNGICIDE	434.89	530.04	GAL

Appendix B. Reported Use of Pesticides in Arizona by County – January 1, 2022 to December 31, 2022							
County	Type	Active ingredient	CAS	Brand name	Acres	Chem total	Unit
MARICOPA	FUNGICIDE	Azoxystrobin	131860-33-8	ABOUND FLOWABLE FUNGICIDE	375.17	279.81	GAL
MARICOPA	FUNGICIDE	Azoxystrobin	131860-33-8	AFRAME	462.84	982.01	GAL
MARICOPA	FUNGICIDE	Azoxystrobin	131860-33-8	QUADRIIS FLOWABLE FUNGICIDE	25,901.58	2,448.89	GAL
MARICOPA	INSECTICIDE	Carbaryl	63-25-2	SEVIN 5 BAIT	108.78	10,878.00	GAL
MARICOPA	INSECTICIDE	Carbaryl	63-25-2	SEVIN 5 BAIT	7,969.44	71,016.80	LBS
MARICOPA	INSECTICIDE	Carbaryl	63-25-2	SEVIN SL CARBARYL INSECTICIDE	3.44	6.32	GAL
MARICOPA	INSECTICIDE	Chlorantraniliprole	500008-45-7	ACELEPRYN	143.82	15.09	GAL
MARICOPA	INSECTICIDE	Chlorantraniliprole	500008-45-7	BESIEGE INSECTICIDE	8,410.00	530.98	GAL
MARICOPA	INSECTICIDE	Dinotefuran	165252-70-0	SCORPION™ 35SL INSECTICIDE	7,979.33	660.23	GAL
MARICOPA	INSECTICIDE	Dinotefuran	165252-70-0	VALENT VENOM INSECTICIDE	1,207.61	452.85	LBS
MARICOPA	HERBICIDE	Flazasulfuron	104040-78-0	KATANA TURF HERBICIDE	208.00	19.50	LBS
MARICOPA	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	1,291.59	217.51	LBS
MARICOPA	FUNGICIDE	Fluopyram	658066-35-4	LUNA PRIVILEGE	65.50	3.50	GAL
MARICOPA	FUNGICIDE	Fluopyram	658066-35-4	VELUM ONE	1,942.42	107.52	GAL
MARICOPA	HERBICIDE	Imazamox	114311-32-9	RAPTOR HERBICIDE	1,974.00	83.88	GAL
MARICOPA	INSECTICIDE	Imidacloprid	138261-41-3	TRIPLE CROWN GOLF INSECTICIDE	48.50	3.60	GAL
MARICOPA	HERBICIDE	Linuron	330-55-2	LOROX® DF HERBICIDE	55.00	165.00	LBS
MARICOPA	HERBICIDE	Mesosulfuron-methyl	208465-21-8	OSPREY HERBICIDE	270.20	80.22	LBS
MARICOPA	INSECTICIDE	Methoxyfenozide	161050-58-4	ENGAME	97.00	5.68	GAL
MARICOPA	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	2,617.20	374.68	GAL
MARICOPA	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	9,569.73	556.29	GAL
MARICOPA	INSECTICIDE	Methoxyfenozide	161050-58-4	WITHSTAND	160.93	10.06	GAL
MOHAVE	FUNGICIDE	Dimethomorph	110488-70-5	FORUM FUNGICIDE	16.67	0.78	GAL
MOHAVE	INSECTICIDE	Dinotefuran	165252-70-0	SCORPION™ 35SL INSECTICIDE	33.98	2.71	GAL
MOHAVE	HERBICIDE	Flazasulfuron	104040-78-0	KATANA TURF HERBICIDE	1,876.51	188.98	LBS
MOHAVE	INSECTICIDE	Flonicamid	158062-67-0	BELEAF 50SG HERBICIDE	16.67	2.92	LBS
PIMA	HERBICIDE	Atrazine	1912-24-9	AATREX 4L HERBICIDE	223.80	59.87	GAL
PIMA	FUNGICIDE	Azoxystrobin	131860-33-8	HERITAGE FUNGICIDE	12.33	8.94	LBS
PIMA	FUNGICIDE	Azoxystrobin	131860-33-8	HERITAGE FUNGICIDE	4.11	2.98	LBS
PIMA	INSECTICIDE	Chlorantraniliprole	500008-45-7	ACELEPRYN	11.22	1.37	GAL
PIMA	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	485.82	83.05	LBS
PIMA	HERBICIDE	Imazamox	114311-32-9	CLEARCAST 2.7G HERBICIDE	3.00	12.00	LBS
PIMA	HERBICIDE	Imazamox	114311-32-9	CLEARCAST HERBICIDE	0.50	0.25	GAL

Appendix B. Reported Use of Pesticides in Arizona by County – January 1, 2022 to December 31, 2022							
County	Type	Active ingredient	CAS	Brand name	Acres	Chem total	Unit
PIMA	HERBICIDE	Imazamox	114311-32-9	RAPTOR HERBICIDE	24.00	0.75	GAL
PIMA	HERBICIDE	Imazosulfuron	122548-33-8	CELERO HERBICIDE	2.00	1.00	LBS
PINAL	HERBICIDE	Atrazine	1912-24-9	AATREX 4L HERBICIDE	5,349.78	1,901.20	GAL
PINAL	HERBICIDE	Atrazine	1912-24-9	ATRAZINE 4L HERBICIDE	1,368.20	410.46	GAL
PINAL	FUNGICIDE	Azoxystrobin	131860-33-8	QUADRI FLOWABLE FUNGICIDE	14,416.50	1,440.02	GAL
PINAL	INSECTICIDE	Carbaryl	63-25-2	SEVIN 5 BAIT	3,090.00	21,304.74	LBS
PINAL	HERBICIDE	Carfentrazone-ethyl	128639-02-1	AIM EC HERBICIDE (AZ-130003)	946.50	11.03	GAL
PINAL	INSECTICIDE	Carfentrazone-ethyl	128639-02-1	DISPLAY COTTON HARVEST AID	242.80	1.03	GAL
PINAL	INSECTICIDE	Chlorantraniliprole	500008-45-7	ACELEPRYN	150.00	14.06	GAL
PINAL	HERBICIDE	Dicamba, sodium salt	1982-69-0	STATUS HERBICIDE	1,091.20	51.15	GAL
PINAL	FUNGICIDE	Dimethomorph	110488-70-5	ZAMPRO FUNGICIDE	70.28	7.69	GAL
PINAL	DEFOLIANT	Diuron	330-54-1	ADIOS COTTON DEFOLIANT	50.00	2.50	GAL
PINAL	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	8,451.77	1,449.83	LBS
PINAL	HERBICIDE	Glufosinate-ammonium	77182-82-2	RELY 280	136.00	22.31	GAL
PINAL	HERBICIDE	Halosulfuron-methyl	100784-20-1	SANDEA HERBICIDE	35.00	0.44	GAL
PINAL	HERBICIDE	Halosulfuron-methyl	100784-20-1	SANDEA HERBICIDE	35.00	3.50	LBS
PINAL	HERBICIDE	Imazamox	114311-32-9	RAPTOR HERBICIDE	7,316.84	309.28	GAL
PINAL	HERBICIDE	Imazosulfuron	122548-33-8	CELERO HERBICIDE	780.00	390.00	LBS
PINAL	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	116.50	7.00	GAL
PINAL	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	406.36	25.06	GAL
YAVAPAI	INSECTICIDE	Chlorantraniliprole	500008-45-7	BESIEGE INSECTICIDE	3.00	0.19	GAL
YAVAPAI	INSECTICIDE	Flonicamid	158062-67-0	BELEAF 50SG INSECTICIDE	1.00	0.18	LBS
YUMA	MILDEWST	Acibenzolar-s-methyl	135158-54-2	ACTIGARD 50 WG PLANT ACTIVATOR	36.00	8.94	GAL
YUMA	MILDEWST	Acibenzolar-s-methyl	135158-54-2	ACTIGARD 50 WG PLANT ACTIVATOR	12,486.81	571.64	LBS
YUMA	HERBICIDE	Atrazine	1912-24-9	ATRAZINE 4L HERBICIDE	480.00	120.00	GAL
YUMA	FUNGICIDE	Azoxystrobin	131860-33-8	ABOUND FLOWABLE FUNGICIDE	82.96	10.00	GAL
YUMA	FUNGICIDE	Azoxystrobin	131860-33-8	ABOUND FLOWABLE FUNGICIDE	97.16	11.75	GAL
YUMA	FUNGICIDE	Azoxystrobin	131860-33-8	AFRAME	677.43	72.87	GAL
YUMA	FUNGICIDE	Azoxystrobin	131860-33-8	QUADRI FLOWABLE FUNGICIDE	1,023.15	96.65	GAL
YUMA	INSECTICIDE	Carbaryl	63-25-2	SEVIN XLR PLUS	109.28	34.36	GAL
YUMA	HERBICIDE	Carfentrazone-ethyl	128639-02-1	AIM EC HERBICIDE (AZ-130003)	1,227.38	809.47	GAL
YUMA	INSECTICIDE	Chlorantraniliprole	500008-45-7	BESIEGE INSECTICIDE	13,755.33	916.21	GAL
YUMA	INSECTICIDE	Chlorantraniliprole	500008-45-7	DUPONT CORAGEN INSECT CONTROL	750.70	35.54	GAL

Appendix B. Reported Use of Pesticides in Arizona by County – January 1, 2022 to December 31, 2022							
County	Type	Active ingredient	CAS	Brand name	Acres	Chem total	Unit
YUMA	FUNGICIDE	Dimethomorph	110488-70-5	FORUM FUNGICIDE	8,474.51	392.89	GAL
YUMA	FUNGICIDE	Dimethomorph	110488-70-5	ZAMPRO FUNGICIDE	10,250.75	1,167.37	GAL
YUMA	INSECTICIDE	Dinotefuran	165252-70-0	SCORPION™ 35SL INSECTICIDE	727.25	50.56	GAL
YUMA	INSECTICIDE	Dinotefuran	165252-70-0	VALENT VENOM INSECTICIDE	536.60	301.34	LBS
YUMA	INSECTICIDE	Emamectin benzoate	137512-74-4	PROCLAIM INSECTICIDE	14,250.97	3,796.26	LBS
YUMA	INSECTICIDE	Flonicamid	158062-67-0	BELEAF 50SG INSECTICIDE	7,919.51	1,395.45	LBS
YUMA	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	19.00	4.75	GAL
YUMA	INSECTICIDE	Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	1,664.89	508.08	LBS
YUMA	INSECTICIDE	Flonicamid	158062-67-0	ISK BIOSCIENCE BELEAF 50SG INSECTICIDE	113.69	19.90	LBS
YUMA	FUNGICIDE	Fluopyram	658066-35-4	LUNA SENSATION	170.80	7.51	GAL
YUMA	HERBICIDE	Halosulfuron-methyl	100784-20-1	SANDEA HERBICIDE	130.45	1.02	GAL
YUMA	HERBICIDE	Halosulfuron-methyl	100784-20-1	SANDEA HERBICIDE	19.40	1.21	LBS
YUMA	HERBICIDE	Imazamox	114311-32-9	RAPTOR HERBICIDE	7,665.02	389.44	GAL
YUMA	INSECTICIDE	Imidacloprid	138261-41-3	ADMIRE PRO SYSTEMIC PROTECTANT INSECTICIDE	10,287.40	2,345.25	GAL
YUMA	HERBICIDE	Linuron	330-55-2	LOROX DF AGRICULTURAL HERBICIDE	58.00	140.00	LBS
YUMA	HERBICIDE	Linuron	330-55-2	LOROX® DF HERBICIDE	340.61	635.03	LBS
YUMA	HERBICIDE	Mesosulfuron-methyl	208465-21-8	OSPREY HERBICIDE	187.20	41.38	LBS
YUMA	INSECTICIDE	Methoxyfenozide	161050-58-4	ENGAME	127.22	6.15	GAL
YUMA	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	546.73	33.09	GAL
YUMA	INSECTICIDE	Methoxyfenozide	161050-58-4	INTREPID 2F	5,365.94	335.80	GAL
YUMA	INSECTICIDE	Methoxyfenozide	161050-58-4	WITHSTAND	175.62	8.64	GAL
YUMA	HERBICIDE	Prometryn	7287-19-6	CAPAROL 4L HERBICIDE	3,513.72	1,026.00	GAL
YUMA	HERBICIDE	S-metolachlor	87392-12-9	DUPONT CINCH ATZ LITE HERBICIDE	38.50	38.00	LBS

Appendix C. Total Reported Use of Pesticides in Arizona January 1, 2022 to December 31, 2022						
Active Ingredient	CAS	Brand Name	Type	Acres	Chem Total	Unit
Acibenzolar-s-methyl	135158-54-2	ACTIGARD 50 WG PLANT ACTIVATOR	MILDEWSTAT	36.00	8.94	GAL
Acibenzolar-s-methyl	135158-54-2	ACTIGARD 50 WG PLANT ACTIVATOR	MILDEWSTAT	12,486.81	571.64	LBS
Atrazine	1912-24-9	AATREX 4L HERBICIDE	HERBICIDE	6,100.47	2,093.97	GAL
Atrazine	1912-24-9	AATREX NINE-O HERBICIDE	HERBICIDE	1,421.40	2,569.29	LBS
Atrazine	1912-24-9	ATRAZINE 4L HERBICIDE	HERBICIDE	30,390.72	12,201.78	GAL
Atrazine	1912-24-9	DREXEL ATRAZINE 4L HERBICIDE	HERBICIDE	20,500.07	6,765.52	GAL
Azoxystrobin	131860-33-8	ABOUND FLOWABLE FUNGICIDE	FUNGICIDE	517.85	540.04	GAL
Azoxystrobin	131860-33-8	ABOUND FLOWABLE FUNGICIDE	FUNGICIDE	568.33	300.56	GAL
Azoxystrobin	131860-33-8	AFRAME	FUNGICIDE	8,250.27	1,915.85	GAL
Azoxystrobin	131860-33-8	HERITAGE FUNGICIDE	FUNGICIDE	12.33	8.94	LBS
Azoxystrobin	131860-33-8	HERITAGE FUNGICIDE	FUNGICIDE	4.11	2.98	LBS
Azoxystrobin	131860-33-8	QUADRIIS FLOWABLE FUNGICIDE	FUNGICIDE	46,142.94	4,340.06	GAL
Carbaryl	63-25-2	SEVIN 5 BAIT	INSECTICIDE	108.78	10,878.00	GAL
Carbaryl	63-25-2	SEVIN 5 BAIT	INSECTICIDE	11,059.44	92,321.54	LBS
Carbaryl	63-25-2	SEVIN SL CARBARYL INSECTICIDE	INSECTICIDE	3.44	6.32	GAL
Carbaryl	63-25-2	SEVIN XLR PLUS	INSECTICIDE	109.28	34.36	GAL
Carfentrazone-ethyl	128639-02-1	AIM EC HERBICIDE (AZ-130003)	HERBICIDE	4,710.38	850.69	GAL
Carfentrazone-ethyl	128639-02-1	DISPLAY COTTON HARVEST AID	INSECTICIDE	242.80	1.03	GAL
Chlorantraniliprole	500008-45-7	ACELEPRYN	INSECTICIDE	305.04	30.52	GAL
Chlorantraniliprole	500008-45-7	BESIEGE INSECTICIDE	INSECTICIDE	22,168.33	1,447.38	GAL
Chlorantraniliprole	500008-45-7	DUPONT CORAGEN INSECT CONTROL	INSECTICIDE	750.70	35.54	GAL
Dicamba, sodium salt	1982-69-0	STATUS HERBICIDE	HERBICIDE	5,724.20	230.63	GAL
Dicamba, sodium salt	1982-69-0	STATUS HERBICIDE	HERBICIDE	15,988.58	4,940.92	LBS
Dimethomorph	110488-70-5	FORUM FUNGICIDE	FUNGICIDE	8,491.18	393.67	GAL
Dimethomorph	110488-70-5	ZAMPRO FUNGICIDE	FUNGICIDE	10,321.03	1,175.05	GAL
Dinotefuran	165252-70-0	SCORPION™ 35SL INSECTICIDE	INSECTICIDE	8,740.56	713.50	GAL
Dinotefuran	165252-70-0	VALENT VENOM INSECTICIDE	INSECTICIDE	1,776.21	760.19	LBS
Diuron	330-54-1	ADIOS COTTON DEFOLIANT	DEFOLIANT	50.00	2.50	GAL
Emamectin benzoate	137512-74-4	PROCLAIM INSECTICIDE	INSECTICIDE	14,250.97	3,796.26	LBS
Flazasulfuron	104040-78-0	KATANA TURF HERBICIDE	HERBICIDE	2,084.51	208.48	LBS
Flonicamid	158062-67-0	BELEAF 50SG INSECTICIDE	INSECTICIDE	7,937.18	1,398.54	LBS
Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	INSECTICIDE	19.00	4.75	GAL
Flonicamid	158062-67-0	CARBINE 50 WG INSECTICIDE	INSECTICIDE	16,789.58	3,113.16	LBS
Flonicamid	158062-67-0	ISK BIOSCIENCE BELEAF 50SG INSECTICIDE	INSECTICIDE	113.69	19.90	LBS

Appendix C. Total Reported Use of Pesticides in Arizona January 1, 2022 to December 31, 2022						
Active Ingredient	CAS	Brand Name	Type	Acres	Chem Total	Unit
Fluopyram	658066-35-4	LUNA PRIVILEGE	FUNGICIDE	65.50	3.50	GAL
Fluopyram	658066-35-4	LUNA SENSATION	FUNGICIDE	170.80	7.51	GAL
Fluopyram	658066-35-4	VELUM ONE	FUNGICIDE	1,942.42	107.52	GAL
Glufosinate-ammonium	77182-82-2	RELY 280	HERBICIDE	136.00	22.31	GAL
Halosulfuron-methyl	100784-20-1	SANDEA HERBICIDE	HERBICIDE	165.45	1.46	GAL
Halosulfuron-methyl	100784-20-1	SANDEA HERBICIDE	HERBICIDE	54.40	4.71	LBS
Imazamox	114311-32-9	CLEARCAST 2.7G HERBICIDE	HERBICIDE	3.00	12.00	LBS
Imazamox	114311-32-9	CLEARCAST HERBICIDE	HERBICIDE	0.50	0.25	GAL
Imazamox	114311-32-9	RAPTOR HERBICIDE	HERBICIDE	27,019.22	1,085.19	GAL
Imazosulfuron	122548-33-8	CELERO HERBICIDE	HERBICIDE	782.00	391.00	LBS
Imidacloprid	138261-41-3	ADMIRE PRO SYSTEMIC PROTECTANT INSECTICIDE	INSECTICIDE	10,287.40	2,345.25	GAL
Imidacloprid	138261-41-3	TRIPLE CROWN GOLF INSECTICIDE	INSECTICIDE	48.50	3.60	GAL
Linuron	330-55-2	LOROX DF AGRICULTURAL HERBICIDE	HERBICIDE	75.00	191.00	LBS
Linuron	330-55-2	LOROX® DF HERBICIDE	HERBICIDE	433.61	914.03	LBS
Mesosulfuron-methyl	208465-21-8	OSPREY HERBICIDE	HERBICIDE	457.40	121.60	LBS
Methoxyfenozide	161050-58-4	ENGAME	INSECTICIDE	350.72	19.74	GAL
Methoxyfenozide	161050-58-4	INTREPID 2F	INSECTICIDE	3,849.43	498.13	GAL
Methoxyfenozide	161050-58-4	INTREPID 2F	INSECTICIDE	17,551.59	1,010.38	GAL
Methoxyfenozide	161050-58-4	WITHSTAND	INSECTICIDE	336.55	18.70	GAL
Oxamyl	23135-22-0	DUPONT VYDATE C-LV INSECTICIDE/NEMATOCIDE	INSECTICIDE	2,350.00	616.88	GAL
Prometryn	7287-19-6	CAPAROL 4L HERBICIDE	HERBICIDE	3,513.72	1,026.00	GAL
S-Metolachlor	87392-12-9	DUPONT CINCH ATZ LITE HERBICIDE	HERBICIDE	38.50	38.00	LBS
Topramezone	210631-68-8	IMPACT	HERBICIDE	2,491.03	14.20	GAL



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