



**MINISTERIO DE
AGRICULTURA
Y GANADERÍA**

**GOBIERNO
DE COSTA RICA**

**SERVICIO FITOSANITARIO
DEL ESTADO**

USO APARENTE DE PLAGUICIDAS SINTÉTICOS EN COSTA RICA PERÍODO 2023 Y 2024



ELABORADO POR: UNIDAD DE REGISTRO DE AGROQUÍMICOS

APROBADO POR: JEFATURA DEL DEPARTAMENTO DE AGROQUÍMICOS,
CONTROL BIOLÓGICO Y EQUIPOS DE APLICACIÓN.

OCTUBRE, 2025

Cuadro 1. Estimación del uso de ingrediente activo por hectáreas utilizadas para el sector agropecuario 2023 y 2024 ¹

	2023	2024 ⁴
Importaciones (kg ² ia ³)	15,134,923.69	13,991,407.46
Exportaciones (kg ia)	5,684,187.76	3,269,201.61
Uso Aparente ⁵ (kg ia)	9,450,735.92	10,722,205.85
Áreas Cultivadas ⁶ (ha)	1,032,319.98	1,032,319.98
Estimación kg ia utilizados por hectárea	9.15	10.39

¹ Este cálculo únicamente contempla la cantidad de ingredientes activos grado técnico sin considerar las sustancias afines, coadyuvantes, plaguicidas botánicos, inorgánicos, microbiológicos, fertilizantes, muestras para experimentación, permisos de importaciones y patrones analíticos, además no se toman en cuenta los saldos anuales en bodega.

² kg: kilogramo.

³ ia: Ingrediente Activo.

⁴ Datos Preliminares

⁵ Uso aparente: Kilogramos en ingredientes activos importados menos los kilogramos en ingredientes activos exportados

⁶: Fuente: Censo Nacional Agropecuario 2014, sumatoria de las áreas que corresponde a las tierras de labranza, los cultivos permanentes, los pastos mejorados y los pastos de corte.

Nota: A partir de los datos correspondientes al año 2023, no se contemplan los valores provenientes de los trámites Servicios de Logística Integral (SEL) que no son nacionalizados en el país.

Cuadro 2. Cantidad de importaciones, exportaciones y uso aparente en kilogramos de los ingredientes activos utilizados para formulación de plaguicidas sintéticos correspondiente a los años comprendidos del 2023 al 2024, por tipo¹

Ingrediente Activo	Cantidad de Importaciones (kg ²)		Cantidad de Exportaciones (kg)		Uso Aparente ³ (kg)	
	2023	2024 ⁴	2023	2024 ⁴	2023	2024 ⁴
2,4-D	519,083.92	1,070,815.23	597,203.45	717,443.28	-78,119.53	353,371.95
Abamectina	681.22	3,829.55	16,860.99	377.20	-16,179.77	3,452.36
Acefato	8,924.00	32,512.00	2,223.00	0.00	6,701.00	32,512.00
Acetamiprid	19.25	446.20	0.00	0.00	19.25	446.20
Acetoclor	2,700.00	16,200.00	0.00	0.00	2,700.00	16,200.00
Acibenzolar-S-Metil	0.00	0.00	0.00	0.00	0.00	0.00
Ácido oxolínico	0.00	1,728.00	0.00	1,633.20	0.00	94.80
Alfa Cipermetrina	160.00	160.00	0.00	0.00	160.00	160.00
Ametoctradin	0.00	0.00	0.00	0.00	0.00	0.00
Ametrina	199,491.50	289,650.00	17,474.33	11,870.75	182,017.17	277,779.25
Aminopyralid	720.00	399.24	0.00	0.00	720.00	399.24
Amitraz	0.00	0.00	0.00	0.00	0.00	0.00
Amonio Cuaternario	180.00	0.00	0.00	0.00	180.00	0.00
Anilofos	0.00	0.00	1,600.00	536.58	-1,600.00	-536.58
Asulam	10,400.00	800.00	7,792.00	0.00	2,608.00	800.00
Atrazina	3,684.00	2,469.60	12,921.30	0.00	-9,237.30	2,469.60
Azoxistrobina	11,777.36	8,058.90	3,858.40	729.50	7,918.96	7,329.40
Benfuracarb	39,558.00	47,116.00	0.00	0.00	39,558.00	47,116.00
Benomil	5,450.00	14,250.00	100.00	9,600.00	5,350.00	4,650.00
Bensulfuron	0.00	0.00	0.00	0.00	0.00	0.00
Bentazon	54,574.40	115,813.44	1,296.00	17,280.00	53,278.40	98,533.44
Benzoato de Emamectina	186.15	249.75	0.00	0.00	186.15	249.75
Betaciflutrina	24.38	0.00	0.00	0.00	24.38	0.00
Bifentrina	3,307.85	8,955.85	609.96	205.60	2,697.89	8,750.25
Bispiribac de Sodio	0.00	4,208.00	1,081.70	1,064.00	-1,081.70	3,144.00
Boscalid	10,511.21	9,724.40	3,701.76	3,330.23	6,809.45	6,394.17
Brodifacouma	3.98	3.57	0.00	0.00	3.98	3.57
Bromadiolona	0.96	1.02	0.00	0.00	0.96	1.02
Buprofezin	3,744.15	2,819.71	0.00	0.00	3,744.15	2,819.71
Butaclor	23,820.00	4,200.00	0.00	0.00	23,820.00	4,200.00
Cadusafós	36,720.00	47,736.00	0.00	0.00	36,720.00	47,736.00
Captan	1,640.00	12,468.00	400.00	0.00	1,240.00	12,468.00
Carbaril	97,134.00	114,162.20	0.00	0.00	97,134.00	114,162.20

Ingrediente Activo	Cantidad de Importaciones (kg ²)		Cantidad de Exportaciones (kg)		Uso Aparente ³ (kg)	
	2023	2024 ⁴	2023	2024 ⁴	2023	2024 ⁴
Carbendazina	133,934.73	265,806.75	40,632.79	28,158.00	93,301.94	237,648.75
Carbosulfán	0.00	0.00	0.00	0.00	0.00	0.00
Carboxín	0.00	0.00	400.00	0.00	-400.00	0.00
Carfentrazone - Etil	730.56	1,140.48	0.00	0.00	730.56	1,140.48
Cartap	700.00	3,800.00	0.00	0.00	700.00	3,800.00
Ciflutrina	0.00	920.00	204.10	90.25	-204.10	829.75
Cihalofop - butil	180.00	360.00	0.00	0.00	180.00	360.00
Cimoxanil	1,503.20	1,281.60	1,615.90	1,650.22	-112.70	-368.62
Cipermetrina	47,071.60	75,960.40	39,109.63	15,323.00	7,961.97	60,637.40
Ciproconazol	2,631.60	2,190.40	1,675.08	84.60	956.52	2,105.80
Ciromazina	475.50	739.50	0.00	0.00	475.50	739.50
Cletodim	11,160.00	24,942.72	6,919.35	2,644.80	4,240.65	22,297.92
Clofentizina	170.00	523.00	0.00	1,250.00	170.00	-727.00
Clomazona	4,695.72	4,921.77	816.00	0.00	3,879.72	4,921.77
Clorantraniliprol	1,065.00	1,259.04	0.00	0.00	1,065.00	1,259.04
Clorfenapir	4,608.00	4,272.00	1,804.80	938.40	2,803.20	3,333.60
Clorhidrato de Oxitetraciclina	1,301.68	0.00	0.00	0.00	1,301.68	0.00
Cloropicrina	4,172.52	23,387.34	0.00	0.00	4,172.52	23,387.34
Clorotalonil	191,966.08	1,480.00	101,045.52	0.00	90,920.56	1,480.00
Clorpirifós	245,216.85	229,622.73	15,722.91	19,562.63	229,493.94	210,060.10
Cromafenozida	0.00	0.00	0.00	0.00	0.00	0.00
Cyazofamid	480.00	160.00	0.00	0.00	480.00	160.00
Dazomet	0.00	131,338.00	0.00	0.00	0.00	131,338.00
Deltametrina	1,172.00	1,715.80	521.05	182.50	650.95	1,533.30
Diafentiuron	195.00	222.00	0.00	0.00	195.00	222.00
Diazinón	609,031.20	318,784.00	18,518.64	17,986.20	590,512.56	300,797.80
Dicamba	0.00	0.00	0.00	0.00	0.00	0.00
Dicloropropeno	75,232.74	82,000.14	0.00	0.00	75,232.74	82,000.14
Diclorvós	0.00	0.00	0.00	0.00	0.00	0.00
Difacinona	0.00	0.00	0.00	0.00	0.00	0.00
Difenoconazol	19,545.20	32,304.20	4,133.50	2,813.00	15,411.70	29,491.20
Diflubenzurón	0.00	3,495.52	0.00	0.00	0.00	3,495.52
Dimetoato	71,828.58	76,460.00	13,606.19	18,174.35	58,222.39	58,285.65
Dimetomorf	5,378.94	11,733.51	2,504.79	15,252.02	2,874.15	-3,518.51
Diquat	46,425.60	63,304.80	920.00	2,568.00	45,505.60	60,736.80
Diurón	474,260.40	331,802.80	10,839.49	10,816.00	463,420.91	320,986.80
Endosulfán	0.00	0.00	0.00	0.00	0.00	0.00

Ingrediente Activo	Cantidad de Importaciones (kg ²)		Cantidad de Exportaciones (kg)		Uso Aparente ³ (kg)	
	2023	2024 ⁴	2023	2024 ⁴	2023	2024 ⁴
Epoxiconazol	19,304.00	20,102.50	4,725.48	482.13	14,578.52	19,620.38
Estreptomicina	0.00	0.00	0.00	0.00	0.00	0.00
Ethaboxam	400.00	700.00	0.00	0.00	400.00	700.00
Etoprofós	360,960.00	209,630.40	43,245.01	103,127.85	317,714.99	106,502.55
Etoxisulfurón	0.00	0.00	0.00	0.00	0.00	0.00
Etridiazol	236.25	271.25	0.00	0.00	236.25	271.25
Famoxadona	282.60	0.00	0.00	0.00	282.60	0.00
Fenamidona	310.50	472.50	0.00	0.00	310.50	472.50
Fenamifós	50,760.00	16,920.00	6,747.96	5,559.94	44,012.04	11,360.06
Fenpicoxamid	460.20	2,425.80	0.00	0.00	460.20	2,425.80
Fenpropidin	30,000.00	30,000.00	0.00	750.00	30,000.00	29,250.00
Fenpropimorf	606,883.20	338,685.60	10,904.08	2,032.80	595,979.12	336,652.80
Fenpyroximate	0.00	72.00	0.00	0.00	0.00	72.00
Ferbam	45,379.60	10,054.80	2,660.00	0.00	42,719.60	10,054.80
Fipronil	4,896.80	1,561.60	0.00	60.00	4,896.80	1,501.60
Flazasulfuron	0.80	1.25	0.00	0.00	0.80	1.25
Flocoumafen	5.11	7.22	0.18	0.00	4.94	7.22
Florpyrauxifen-benzyl	25.20	90.60	0.00	0.00	25.20	90.60
Fluazifop-P-Butil	4,187.45	15,021.37	3,511.44	2,494.88	676.01	12,526.50
Fludioxonil	6,273.48	4,710.75	0.00	0.00	6,273.48	4,710.75
Fluopicolide	190.50	0.00	0.00	0.00	190.50	0.00
Fluopiram	16,722.00	18,160.00	0.00	0.00	16,722.00	18,160.00
Flupiradifurona	0.00	0.00	0.00	0.00	0.00	0.00
Fluroxipir	11,087.28	4,366.00	620.80	0.00	10,466.48	4,366.00
Flutolanil	1,110.00	2,010.00	0.00	0.00	1,110.00	2,010.00
Fluxapiroxad	10,092.00	13,674.00	63.00	0.00	10,029.00	13,674.00
Folpet	6,080.00	12,704.00	0.00	0.00	6,080.00	12,704.00
Fomesafen	449.00	14,784.00	2,854.25	5,328.00	-2,405.25	9,456.00
Forato	58,296.67	72,872.06	69,635.80	55,673.50	-11,339.13	17,198.56
Fosetil-Al	135,323.94	129,552.00	2,398.67	7,298.69	132,925.27	122,253.31
Gentamicina	0.00	0.00	0.00	0.00	0.00	0.00
Glifosato	825,530.76	767,010.46	382,268.59	182,835.81	443,262.17	584,174.66
Glufosinato de Amonio	42,070.50	129,702.00	12,472.20	12,820.20	29,598.30	116,881.80
Halosulfurón Metil	243.00	414.00	0.00	0.00	243.00	414.00
Haloxifop-Metil	2,997.60	6,494.40	0.00	0.00	2,997.60	6,494.40
Hexaconazol	0.00	0.00	135.70	50.00	-135.70	-50.00
Hexazinona	35,812.50	51,675.00	0.00	750.00	35,812.50	50,925.00
Hexitiazox	80.00	80.00	0.00	0.00	80.00	80.00



Ingrediente Activo	Cantidad de Importaciones (kg ²)		Cantidad de Exportaciones (kg)		Uso Aparente ³ (kg)	
	2023	2024 ⁴	2023	2024 ⁴	2023	2024 ⁴
Hidrametilnon	734.86	640.90	0.00	0.00	734.86	640.90
Imazalil	0.00	1,905.00	0.00	0.00	0.00	1,905.00
Imazapic	0.00	2,450.00	61.85	0.00	-61.85	2,450.00
Imazapir	3,065.23	63.81	332.86	23.18	2,732.37	40.63
Imzetapir	0.00	1,070.00	0.00	0.00	0.00	1,070.00
Imidacloprid	21,631.11	51,592.85	956.30	2,580.75	20,674.81	49,012.10
Indaziflam	1,944.00	2,184.00	0.00	0.00	1,944.00	2,184.00
Indoxacarb	564.00	786.75	0.00	0.00	564.00	786.75
Iprodiona	1,080.00	6,525.00	0.00	0.00	1,080.00	6,525.00
Isoprotiolano	0.00	0.00	0.00	0.00	0.00	0.00
Isotianil	0.00	2,939.20	0.00	0.00	0.00	2,939.20
Isoxaflutole	0.00	0.00	0.00	0.00	0.00	0.00
Kasugamicina	643.50	1,188.00	0.00	0.00	643.50	1,188.00
Kresoxim-metil	1,860.00	1,518.75	0.00	0.00	1,860.00	1,518.75
Lambda- Cihalotrina	2,637.68	2,019.37	0.00	75.00	2,637.68	1,944.37
Linurón	1,105.00	8,353.50	0.00	67.05	1,105.00	8,286.45
Lufenurón	40.00	88.46	0.00	0.00	40.00	88.46
Malatión	14,295.89	26,833.51	6,493.58	6,109.68	7,802.31	20,723.83
Mancozeb	8,225,291.70	6,332,138.80	3,654,489.93	1,558,145.46	4,570,801.77	4,773,993.34
Mandipropamid	2,742.00	3,577.00	0.00	0.00	2,742.00	3,577.00
Mcpa	8,145.00	2,712.00	2,909.01	3,650.23	5,235.99	-938.23
Metalaxil	66,678.90	52,638.48	3,805.28	3,843.26	62,873.62	48,795.22
Metalaxil M	543.52	160.00	0.00	0.00	543.52	160.00
Metaldehido	796.20	3,018.80	85.50	62.50	710.70	2,956.30
Metam Sodio	114,370.56	178,149.12	2,652.00	2,758.08	111,718.56	175,391.04
Metamidofós	6,800.00	6,912.00	0.00	0.00	6,800.00	6,912.00
Metil Tiofanato	27,377.20	26,535.51	24,581.53	17,235.38	2,795.67	9,300.13
Metiram	30,024.40	29,085.00	6,170.50	1,050.00	23,853.90	28,035.00
Metomil	684.00	4,392.00	6,265.80	0.00	-5,581.80	4,392.00
Metoxifenoazida	1,520.64	1,152.00	0.00	0.00	1,520.64	1,152.00
Metribuzin	1,357.44	939.50	0.00	0.00	1,357.44	939.50
Metsulfuron Metil	5,354.02	12,398.55	3,585.86	4,936.47	1,768.16	7,462.08
Miclobutanil	691.20	576.00	0.00	0.00	691.20	576.00
Milbemectina	11.00	5.30	0.00	0.00	11.00	5.30
Msma	37,506.96	44,099.28	2,232.00	1,808.64	35,274.96	42,290.64
Naled	11,967.49	734.48	10,945.33	4,045.50	1,022.16	-3,311.02
Nicosulfuron	0.00	592.00	0.00	0.00	0.00	592.00
Novalurón	2,141.20	168.00	0.00	0.00	2,141.20	168.00

Ingrediente Activo	Cantidad de Importaciones (kg ²)		Cantidad de Exportaciones (kg)		Uso Aparente ³ (kg)	
	2023	2024 ⁴	2023	2024 ⁴	2023	2024 ⁴
Ortofenilfenol de Sodio	0.00	0.00	0.00	0.00	0.00	0.00
Oxadiazón	0.00	0.00	0.00	0.00	0.00	0.00
Oxamil	106,760.48	126,154.08	31,250.52	34,275.15	75,509.96	91,878.93
Oxifluorfén	37,132.44	55,626.00	8,766.90	9,782.40	28,365.54	45,843.60
Oxitetraciclina	330.00	1,230.00	0.00	0.00	330.00	1,230.00
Paraquat	347,603.28	459,937.76	98,564.93	42,525.00	249,038.35	417,412.76
Pencycuron	0.00	0.00	0.00	0.00	0.00	0.00
Pendimetalina	60,753.82	117,169.50	6,910.00	7,180.00	53,843.82	109,989.50
Permetrina	124.80	3,979.20	0.00	0.00	124.80	3,979.20
Picloram	19,762.24	104,168.29	128,483.98	166,181.91	-108,721.74	-62,013.62
Pimetrozina	1,312.00	1,050.00	0.00	0.00	1,312.00	1,050.00
Piperofos	0.00	0.00	0.00	0.00	0.00	0.00
Piraclostrobin	24,277.34	16,447.38	2,588.19	2,681.40	21,689.16	13,765.98
Pirazosulfuron Etil	100.00	87.10	0.00	0.00	100.00	87.10
Pirimetanil	15,960.00	12,240.00	8,840.00	4,636.00	7,120.00	7,604.00
Pirimifós metil	438.00	618.00	0.00	0.00	438.00	618.00
Piriproxifén	8,589.83	10,029.99	0.00	0.00	8,589.83	10,029.99
Pretilaclor	0.00	0.00	2,000.00	0.00	-2,000.00	0.00
Procloraz	9,564.60	22,150.60	535.07	0.00	9,029.53	22,150.60
Profenofós	2,700.00	2,934.00	0.00	0.00	2,700.00	2,934.00
Profoxidim	676.00	736.00	0.00	0.00	676.00	736.00
Propamocarb	22,342.56	26,780.24	0.00	0.00	22,342.56	26,780.24
Propanil	9,850.00	99,908.00	97,182.44	37,192.74	-87,332.44	62,715.26
Propaquizafop	270.00	100.00	0.00	0.00	270.00	100.00
Propargita	900.00	0.00	0.00	0.00	900.00	0.00
Propiconazol	32,941.08	66,790.00	3,341.25	548.06	29,599.83	66,241.94
Propineb	58,586.50	60,478.60	840.00	0.00	57,746.50	60,478.60
Quinclorac	0.00	2.50	340.00	0.00	-340.00	2.50
Quintoceno (PCNB)	4,136.80	0.00	0.00	0.00	4,136.80	0.00
Quizalofop -P-Etil	8,593.40	6,553.00	610.13	522.72	7,983.27	6,030.28
Saflufenacil	43.05	36.75	0.00	0.00	43.05	36.75
S-Metolachlor	14,250.24	1,152.00	0.00	0.00	14,250.24	1,152.00
Spinetoram	767.71	1,477.54	0.00	0.00	767.71	1,477.54
Spinosad	392.98	496.80	0.00	0.00	392.98	496.80
Spiromesifén	736.80	288.00	0.00	0.00	736.80	288.00
Spirotetramato	9,240.60	3,614.40	0.00	0.00	9,240.60	3,614.40
Spiroxamina	100,016.00	63,424.00	640.00	0.00	99,376.00	63,424.00
Sulfato de Estreptomicina	1,301.68	0.00	0.00	0.00	1,301.68	0.00

Ingrediente Activo	Cantidad de Importaciones (kg ²)		Cantidad de Exportaciones (kg)		Uso Aparente ³ (kg)	
	2023	2024 ⁴	2023	2024 ⁴	2023	2024 ⁴
Sulfloramida	68.25	48.75	0.00	0.00	68.25	48.75
Sulfoxaflor	752.83	1,374.34	0.00	0.00	752.83	1,374.34
TCMTB	5,040.00	2,520.00	2,325.71	1,526.49	2,714.29	993.51
Tebuconazol	5,901.24	18,029.50	7,153.33	485.00	-1,252.10	17,544.50
Tebufenozide	0.00	240.00	0.00	0.00	0.00	240.00
Teflubenzuron	873.60	61.20	0.00	0.00	873.60	61.20
Temefos	0.00	5,700.00	0.00	14,250.00	0.00	-8,550.00
Terbufós	135,257.56	332,754.82	52,340.00	32,100.10	82,917.56	300,654.72
Terbutilazina	7,604.08	3,060.00	325.00	0.00	7,279.08	3,060.00
Terbutrina	58,230.00	29,202.40	630.00	0.00	57,600.00	29,202.40
Thifluzamide	0.00	483.84	0.00	0.00	0.00	483.84
Tiabendazol	7,624.40	3,619.60	282.00	75.00	7,342.40	3,544.60
Tiacloprid	195.00	315.00	0.00	0.00	195.00	315.00
Tiametoxán	9,971.11	18,697.90	1,101.25	69.03	8,869.86	18,628.88
Tiobencarb	6,369.73	0.93	0.00	0.72	6,369.73	0.21
Tiociclam Hidrogenoxalato	84,768.00	35,320.00	21,131.10	17,070.00	63,636.90	18,250.00
Tiodicarb	0.00	0.00	0.00	0.00	0.00	0.00
Tiram	7,056.00	25,383.00	0.00	0.00	7,056.00	25,383.00
Tolclofos Metil	1,500.00	1,500.00	0.00	0.00	1,500.00	1,500.00
Triadimefón	875.00	1,888.00	0.00	0.00	875.00	1,888.00
Triadimenol	420.26	262.80	1,284.80	0.00	-864.54	262.80
Triazofós	0.00	4,300.00	4,058.64	5,015.40	-4,058.64	-715.40
Triciclazol	300.00	0.00	0.00	0.00	300.00	0.00
Triclopir	28,136.32	39,200.00	6,389.42	5,865.24	21,746.90	33,334.76
Trifloxiestrobina	438.14	0.00	350.00	0.00	88.14	0.00
Validamicina A	3,974.25	4,080.00	0.00	0.00	3,974.25	4,080.00
Zetacipermetrina	1,829.04	1,032.00	0.00	0.00	1,829.04	1,032.00
Ziram	7,600.00	7,600.00	0.00	0.00	7,600.00	7,600.00
Total	15,134,923.69	13,991,407.46	5,684,187.76	3,269,201.61	9,450,735.92	10,722,205.85

¹ Este cálculo únicamente contempla la cantidad de ingredientes activos grado técnico sintéticos sin considerar las sustancias afines, coadyuvantes, plaguicidas botánicos, inorgánicos, microbiológicos, fertilizantes, muestras para experimentación y patrones analíticos, además no se toman en cuenta los saldos anuales en bodega.

² kg: kilogramo.

³ Uso aparente: Kilogramos de ingredientes activos importados menos los kilogramos de ingredientes activos exportados, por año.

⁴ Datos Preliminares

Nota: A partir de los datos correspondientes al año 2023, no se contemplan los valores provenientes de los trámites Servicios de Logística Integral (SEL) que no son nacionalizados en el país

Cuadro 3. Uso aparente en kilogramos de ingredientes activos utilizados para formulación de insecticidas correspondiente al período año 2023 y 2024^{1 y 2}

Ingrediente Activo	Cantidad de Importaciones(kg)		Cantidad de Exportaciones (kg)		Uso Aparente (kg) ³	
	2023	2024 ²	2023	2024 ²	2023	2024 ²
Abamectina	681.22	3,829.55	16,860.99	377.20	-16,179.77	3,452.36
Acefato	8,924.00	32,512.00	2,223.00	0.00	6,701.00	32,512.00
Acetamiprid	19.25	446.20	0.00	0.00	19.25	446.20
Alfa Cipermetrina	160.00	160.00	0.00	0.00	160.00	160.00
Benfuracarb	39,558.00	47,116.00	0.00	0.00	39,558.00	47,116.00
Benzoato de Emamectina	186.15	249.75	0.00	0.00	186.15	249.75
Betaciflutrina	24.38	0.00	0.00	0.00	24.38	0.00
Bifentrina	3,307.85	8,955.85	609.96	205.60	2,697.89	8,750.25
Buprofezin	3,744.15	2,819.71	0.00	0.00	3,744.15	2,819.71
Cadusafós	36,720.00	47,736.00	0.00	0.00	36,720.00	47,736.00
Carbaril	97,134.00	114,162.20	0.00	0.00	97,134.00	114,162.20
Cartap	700.00	3,800.00	0.00	0.00	700.00	3,800.00
Ciflutrina	0.00	920.00	204.10	90.25	-204.10	829.75
Cipermetrina	47,071.60	75,960.40	39,109.63	15,323.00	7,961.97	60,637.40
Ciromazina	475.50	739.50	0.00	0.00	475.50	739.50
Clofentizina	170.00	523.00	0.00	1,250.00	170.00	-727.00
Clorantraniliprol	1,065.00	1,259.04	0.00	0.00	1,065.00	1,259.04
Clorfenapir	4,608.00	4,272.00	1,804.80	938.40	2,803.20	3,333.60
Clorpirifós	245,216.85	229,622.73	15,722.91	19,562.63	229,493.94	210,060.10
Deltametrina	1,172.00	1,715.80	521.05	182.50	650.95	1,533.30
Diafentiuron	195.00	222.00	0.00	0.00	195.00	222.00
Diazinón	609,031.20	318,784.00	18,518.64	17,986.20	590,512.56	300,797.80
Diflubenzurón	0.00	3,495.52	0.00	0.00	0.00	3,495.52
Dimetoato	71,828.58	76,460.00	13,606.19	18,174.35	58,222.39	58,285.65
Etoprofós	360,960.00	209,630.40	43,245.01	103,127.85	317,714.99	106,502.55
Fenamifós	50,760.00	16,920.00	6,747.96	5,559.94	44,012.04	11,360.06
Fenpyroximate	0.00	72.00	0.00	0.00	0.00	72.00
Fipronil	4,896.80	1,561.60	0.00	60.00	4,896.80	1,501.60
Fluopiram	16,722.00	18,160.00	0.00	0.00	16,722.00	18,160.00
Forato	58,296.67	72,872.06	69,635.80	55,673.50	-11,339.13	17,198.56
Hexitiazox	80.00	80.00	0.00	0.00	80.00	80.00
Hidrametilnon	0.00	288.99	0.00	0.00	0.00	288.99
Imidacloprid	21,631.11	51,592.85	956.30	2,580.75	20,674.81	49,012.10
Indoxacarb	564.00	786.75	0.00	0.00	564.00	786.75
Lambda- Cihalotrina	2,637.68	2,019.37	0.00	75.00	2,637.68	1,944.37
Lufenurón	40.00	88.46	0.00	0.00	40.00	88.46

Ingrediente Activo	Cantidad de Importaciones(kg)		Cantidad de Exportaciones (kg)		Uso Aparente (kg) ³	
	2023	2024 ²	2023	2024 ²	2023	2024 ²
Malatión	14,295.89	26,833.51	6,493.58	6,109.68	7,802.31	20,723.83
Metaldehido	796.20	3,018.80	85.50	62.50	710.70	2,956.30
Metamidofós	6,800.00	6,912.00	0.00	0.00	6,800.00	6,912.00
Metomil	684.00	4,392.00	6,265.80	0.00	-5,581.80	4,392.00
Metoxifenoza	1,520.64	1,152.00	0.00	0.00	1,520.64	1,152.00
Milbemectina	11.00	5.30	0.00	0.00	11.00	5.30
Naled	11,967.49	734.48	10,945.33	4,045.50	1,022.16	-3,311.02
Novalurón	2,141.20	168.00	0.00	0.00	2,141.20	168.00
Oxamil	106,760.48	126,154.08	31,250.52	34,275.15	75,509.96	91,878.93
Permetrina	124.80	3,979.20	0.00	0.00	124.80	3,979.20
Pimetrozina	1,312.00	1,050.00	0.00	0.00	1,312.00	1,050.00
Pirimifós metil	438.00	618.00	0.00	0.00	438.00	618.00
Piriproxifén	8,589.83	10,029.99	0.00	0.00	8,589.83	10,029.99
Profenofós	2,700.00	2,934.00	0.00	0.00	2,700.00	2,934.00
Propargita	900.00	1,477.54	0.00	0.00	900.00	1,477.54
Spinetoram	767.71	0.00	0.00	0.00	767.71	0.00
Spinosad	392.98	496.80	0.00	0.00	392.98	496.80
Spiromesifén	736.80	288.00	0.00	0.00	736.80	288.00
Spirotetramato	9,240.60	3,614.40	0.00	0.00	9,240.60	3,614.40
Sulfluramida	68.25	48.75	0.00	0.00	68.25	48.75
Sulfoxaflor	752.83	1,374.34	0.00	0.00	752.83	1,374.34
Tebufenozide	0.00	240.00	0.00	0.00	0.00	240.00
Teflubenzuron	873.60	61.20	0.00	0.00	873.60	61.20
Temefos	0.00	5,700.00	0.00	14,250.00	0.00	-8,550.00
Terbufós	135,257.56	332,754.82	52,340.00	32,100.10	82,917.56	300,654.72
Tiacloprid	195.00	315.00	0.00	0.00	195.00	315.00
Tiametoxán	9,971.11	18,697.90	1,101.25	69.03	8,869.86	18,628.88
Tiociclam Hidrogenoxalato	84,768.00	35,320.00	21,131.10	17,070.00	63,636.90	18,250.00
Triazofós	0.00	4,300.00	4,058.64	5,015.40	-4,058.64	-715.40
Zetacipermetrina	1,829.04	1,032.00	0.00	0.00	1,829.04	1,032.00
Total	2,092,475.99	1,943,535.83	363,438.07	354,164.51	1,729,037.92	1,589,371.32

¹ Este cálculo únicamente contempla la cantidad de ingredientes activos grado técnico sin considerar las sustancias afines, coadyuvantes, plaguicidas botánicos, inorgánicos, microbiológicos, fertilizantes, muestras para experimentación, permisos de importaciones y patrones analíticos, además no se toman en cuenta los saldos anuales en bodega.

² Datos Preliminares

³ Uso aparente: Kilogramos de ingredientes activos importados menos los kilogramos de ingredientes activos exportados

Nota: A partir de los datos correspondientes al año 2023, no se contemplan los valores provenientes de los trámites Servicios de Logística Integral (SEL) que no son nacionalizados en el país

Cuadro 4. Uso aparente en kilogramos de ingredientes activos utilizados para formulación de fungicidas correspondiente al período 2023 y 2024^{1 y 2}

Ingrediente Activo	Cantidad de Importaciones (kg)		Cantidad de Exportaciones (kg)		Uso Aparente (kg) ³	
	2023	2024 ²	2023	2024 ²	2023	2024 ²
Ácido oxolínico	0.00	1,728.00	0.00	1,633.20	0.00	94.80
Amonio Cuaternario	180.00	0.00	0.00	0.00	180.00	0.00
Azoxistrobina	11,777.36	8,058.90	3,858.40	729.50	7,918.96	7,329.40
Benomil	5,450.00	14,250.00	100.00	9,600.00	5,350.00	4,650.00
Boscalid	10,511.21	9,724.40	3,701.76	3,330.23	6,809.45	6,394.17
Captan	1,640.00	12,468.00	400.00	0.00	1,240.00	12,468.00
Carbendazina	133,934.73	265,806.75	40,632.79	28,158.00	93,301.94	237,648.75
Carboxín	0.00	0.00	400.00	0.00	-400.00	0.00
Cimoxanil	1,503.20	1,281.60	1,615.90	1,650.22	-112.70	-368.62
Ciproconazol	2,631.60	2,190.40	1,675.08	84.60	956.52	2,105.80
Clorhidrato de Oxitetraciclina	1,301.68	0.00	0.00	0.00	1,301.68	0.00
Clorotalonil	191,966.08	1,480.00	101,045.52	0.00	90,920.56	1,480.00
Cyazofamid	480.00	160.00	0.00	0.00	480.00	160.00
Difenoconazol	19,545.20	32,304.20	4,133.50	2,813.00	15,411.70	29,491.20
Dimetomorf	5,378.94	11,733.51	2,504.79	15,252.02	2,874.15	-3,518.51
Epoxiconazol	19,304.00	20,102.50	4,725.48	482.13	14,578.52	19,620.38
Ethaboxam	400.00	700.00	0.00	0.00	400.00	700.00
Etridiazol	236.25	271.25	0.00	0.00	236.25	271.25
Famoxadona	282.60	0.00	0.00	0.00	282.60	0.00
Fenamidona	310.50	472.50	0.00	0.00	310.50	472.50
Fenicoxamid	460.20	2,425.80	0.00	0.00	460.20	2,425.80
Fenpropidin	30,000.00	30,000.00	0.00	750.00	30,000.00	29,250.00
Fenpropimorf	606,883.20	338,685.60	10,904.08	2,032.80	595,979.12	336,652.80
Ferbam	45,379.60	10,054.80	2,660.00	0.00	42,719.60	10,054.80
Fludioxonil	6,273.48	4,710.75	0.00	0.00	6,273.48	4,710.75
Fluopicolide	190.50	0.00	0.00	0.00	190.50	0.00
Flutolanil	1,110.00	2,010.00	0.00	0.00	1,110.00	2,010.00
Fluxapiroxad	10,092.00	13,674.00	63.00	0.00	10,029.00	13,674.00
Folpet	6,080.00	12,704.00	0.00	0.00	6,080.00	12,704.00
Fosetil-Al	135,323.94	129,552.00	2,398.67	7,298.69	132,925.27	122,253.31
Hexaconazol	0.00	0.00	135.70	50.00	-135.70	-50.00
Imazalil	0.00	1,905.00	0.00	0.00	0.00	1,905.00
Iprodiona	1,080.00	6,525.00	0.00	0.00	1,080.00	6,525.00
Isotianil	0.00	2,939.20	0.00	0.00	0.00	2,939.20
Kasugamicina	643.50	1,188.00	0.00	0.00	643.50	1,188.00
Kresoxim-metil	1,860.00	1,518.75	0.00	0.00	1,860.00	1,518.75

Ingrediente Activo	Cantidad de Importaciones (kg)		Cantidad de Exportaciones (kg)		Uso Aparente (kg) ³	
	2023	2024 ²	2023	2024 ²	2023	2024 ²
Mancozeb	8,225,291.70	6,332,138.80	3,654,489.93	1,558,145.46	4,570,801.77	4,773,993.34
Mandipropamid	2,742.00	3,577.00	0.00	0.00	2,742.00	3,577.00
Metalaxil	66,678.90	52,638.48	3,805.28	3,843.26	62,873.62	48,795.22
Metalaxil M	543.52	160.00	0.00	0.00	543.52	160.00
Metil Tiofanato	27,377.20	26,535.51	24,581.53	17,235.38	2,795.67	9,300.13
Metiram	30,024.40	29,085.00	6,170.50	1,050.00	23,853.90	28,035.00
Miclobutanil	691.20	576.00	0.00	0.00	691.20	576.00
Oxitetraciclina	330.00	1,230.00	0.00	0.00	330.00	1,230.00
Piraclostrobin	24,277.34	16,447.38	2,588.19	2,681.40	21,689.16	13,765.98
Pirimetanil	15,960.00	12,240.00	8,840.00	4,636.00	7,120.00	7,604.00
Procloraz	9,564.60	22,150.60	535.07	0.00	9,029.53	22,150.60
Propamocarb	22,342.56	26,780.24	0.00	0.00	22,342.56	26,780.24
Propiconazol	32,941.08	66,790.00	3,341.25	548.06	29,599.83	66,241.94
Propineb	58,586.50	60,478.60	840.00	0.00	57,746.50	60,478.60
Quintoceno (PCNB)	4,136.80	0.00	0.00	0.00	4,136.80	0.00
Spiroxamina	100,016.00	63,424.00	640.00	0.00	99,376.00	63,424.00
Sulfato de Estreptomicina	1,301.68	0.00	0.00	0.00	1,301.68	0.00
TCMTB	5,040.00	2,520.00	2,325.71	1,526.49	2,714.29	993.51
Tebuconazol	5,901.24	18,029.50	7,153.33	485.00	-1,252.10	17,544.50
Thifluzamide	0.00	483.84	0.00	0.00	0.00	483.84
Tiabendazol	7,624.40	3,619.60	282.00	75.00	7,342.40	3,544.60
Tiram	7,056.00	25,383.00	0.00	0.00	7,056.00	25,383.00
Tolclofos Metil	1,500.00	1,500.00	0.00	0.00	1,500.00	1,500.00
Triadimefón	875.00	1,888.00	0.00	0.00	875.00	1,888.00
Triadimenol	420.26	262.80	1,284.80	0.00	-864.54	262.80
Triciclazol	300.00	0.00	0.00	0.00	300.00	0.00
Trifloxiestrobina	438.14	0.00	350.00	0.00	88.14	0.00
Validamicina A	3,974.25	4,080.00	0.00	0.00	3,974.25	4,080.00
Ziram	7,600.00	7,600.00	0.00	0.00	7,600.00	7,600.00
Total	9,915,744.53	7,720,243.27	3,898,182.25	1,664,090.43	6,017,562.29	6,056,152.84

¹ Este cálculo únicamente contempla la cantidad de ingredientes activos grado técnico sin considerar las sustancias afines, coadyuvantes, plaguicidas botánicos, inorgánicos, microbiológicos, fertilizantes, muestras para experimentación, permisos de importaciones y patrones analíticos, además no se toman en cuenta los saldos anuales en bodega.

² Datos Preliminares

³ Uso aparente: Kilogramos de ingredientes activos importados menos los kilogramos de ingredientes activos exportados

Nota: A partir de los datos correspondientes al año 2023, no se contemplan los valores provenientes de los trámites Servicios de Logística Integral (SEL) que no son nacionalizados en el país

Cuadro 5. Uso aparente en kilogramos de ingredientes activos utilizados para formulación de herbicidas correspondiente al período 2023 y 2024^{1 y 2}

Ingrediente Activo	Cantidad de Importaciones (kg)		Cantidad de Exportaciones (kg)		Uso Aparente (kg) ³	
	2023	2024 ²	2023	2024 ²	2023	2024 ²
2,4-D	519,083.92	1,070,815.23	597,203.45	717,443.28	-78,119.53	353,371.95
Acetoclor	2,700.00	16,200.00	0.00	0.00	2,700.00	16,200.00
Ametrina	199,491.50	289,650.00	17,474.33	11,870.75	182,017.17	277,779.25
Aminopyralid	720.00	399.24	0.00	0.00	720.00	399.24
Anilofos	0.00	0.00	1,600.00	536.58	-1,600.00	-536.58
Asulam	10,400.00	800.00	7,792.00	0.00	2,608.00	800.00
Atrazina	3,684.00	2,469.60	12,921.30	0.00	-9,237.30	2,469.60
Bentazon	54,574.40	115,813.44	1,296.00	17,280.00	53,278.40	98,533.44
Bispiribac de Sodio	0.00	4,208.00	1,081.70	1,064.00	-1,081.70	3,144.00
Butaclor	23,820.00	4,200.00	0.00	0.00	23,820.00	4,200.00
Carfentrazone - Etil	730.56	1,140.48	0.00	0.00	730.56	1,140.48
Cihalofop - butil	180.00	360.00	0.00	0.00	180.00	360.00
Cletodim	11,160.00	24,942.72	6,919.35	2,644.80	4,240.65	22,297.92
Clomazona	4,695.72	4,921.77	816.00	0.00	3,879.72	4,921.77
Diquat	46,425.60	63,304.80	920.00	2,568.00	45,505.60	60,736.80
Diurón	474,260.40	331,802.80	10,839.49	10,816.00	463,420.91	320,986.80
Flazasulfuron	0.80	1.25	0.00	0.00	0.80	1.25
Florpyrauxifen -benzyl	25.20	90.60	0.00	0.00	25.20	90.60
Fluazifop-P- Butil	4,187.45	15,021.37	3,511.44	2,494.88	676.01	12,526.50
Fluroxipir	11,087.28	4,366.00	620.80	0.00	10,466.48	4,366.00
Fomesafen	449.00	14,784.00	2,854.25	5,328.00	-2,405.25	9,456.00
Glifosato	825,530.76	767,010.46	382,268.59	182,835.81	443,262.17	584,174.66
Glufosinato de Amonio	42,070.50	129,702.00	12,472.20	12,820.20	29,598.30	116,881.80
Halosulfurón Metil	243.00	414.00	0.00	0.00	243.00	414.00
Haloxifop- Metil	2,997.60	6,494.40	0.00	0.00	2,997.60	6,494.40
Hexazinona	35,812.50	51,675.00	0.00	750.00	35,812.50	50,925.00
Imazapic	0.00	2,450.00	61.85	0.00	-61.85	2,450.00
Imazapir	3,065.23	63.81	332.86	23.18	2,732.37	40.63
Imazetapir	0.00	1,070.00	0.00	0.00	0.00	1,070.00

Ingrediente Activo	Cantidad de Importaciones (kg)		Cantidad de Exportaciones (kg)		Uso Aparente (kg) ³	
	2023	2024 ²	2023	2024 ²	2023	2024 ²
Indaziflam	1,944.00	2,184.00	0.00	0.00	1,944.00	2,184.00
Linurón	1,105.00	8,353.50	0.00	67.05	1,105.00	8,286.45
Mcpa	8,145.00	2,712.00	2,909.01	3,650.23	5,235.99	-938.23
Metribuzin	1,357.44	939.50	0.00	0.00	1,357.44	939.50
Metsulfuron Metil	5,354.02	12,398.55	3,585.86	4,936.47	1,768.16	7,462.08
Msma	37,506.96	44,099.28	2,232.00	1,808.64	35,274.96	42,290.64
Nicosulfuron	0.00	592.00	0.00	0.00	0.00	592.00
Oxifluorfén	37,132.44	55,626.00	8,766.90	9,782.40	28,365.54	45,843.60
Paraquat	347,603.28	459,937.76	98,564.93	42,525.00	249,038.35	417,412.76
Pendimetalina	60,753.82	117,169.50	6,910.00	7,180.00	53,843.82	109,989.50
Picloram	19,762.24	104,168.29	128,483.98	166,181.91	-108,721.74	-62,013.62
Pirazosulfuron Etil	100.00	87.10	0.00	0.00	100.00	87.10
Pretilaclor	0.00	0.00	2,000.00	0.00	-2,000.00	0.00
Profoxidim	676.00	736.00	0.00	0.00	676.00	736.00
Propanil	9,850.00	99,908.00	97,182.44	37,192.74	-87,332.44	62,715.26
Propaquizafop	270.00	100.00	0.00	0.00	270.00	100.00
Quinclorac	0.00	2.50	340.00	0.00	-340.00	2.50
Quizalofop -P-Etil	8,593.40	6,553.00	610.13	522.72	7,983.27	6,030.28
Saflufenacil	43.05	36.75	0.00	0.00	43.05	36.75
S-Metolachlor	14,250.24	1,152.00	0.00	0.00	14,250.24	1,152.00
Terbutilazina	7,604.08	3,060.00	325.00	0.00	7,279.08	3,060.00
Terbutrina	58,230.00	29,202.40	630.00	0.00	57,600.00	29,202.40
Tiobencarb	6,369.73	0.93	0.00	0.72	6,369.73	0.21
Triclopir	28,136.32	39,200.00	6,389.42	5,865.24	21,746.90	33,334.76
Total	2,932,182.43	3,912,390.03	1,419,915.27	1,248,188.59	1,512,267.16	2,664,201.44

¹ Este cálculo únicamente contempla la cantidad de ingredientes activos grado técnico sin considerar las sustancias afines, coadyuvantes, plaguicidas botánicos, inorgánicos, microbiológicos, fertilizantes, muestras para experimentación, permisos de importaciones y patrones analíticos, además no se toman en cuenta los saldos anuales en bodega.

² Datos Preliminares

³ Uso aparente: Kilogramos de ingredientes activos importados menos los kilogramos de ingredientes activos exportados

Nota: A partir de los datos correspondientes al año 2023, no se contemplan los valores provenientes de los trámites Servicios de Logística Integral (SEL) que no son nacionalizados en el país

Cuadro 6. Uso aparente en kilogramos de ingredientes activos utilizados para formulación de clasificados como otros, correspondientes al período 2023 y 2024^{1 y 2}

Ingrediente Activo	Cantidad de Importaciones (kg)		Cantidad de Exportaciones (kg)		Uso Aparente (kg) ³	
	2023	2024	2023	2024	2023	2024
Brodifacouma	3.98	3.57	0.00	0.00	3.98	3.57
Bromadiolona	0.96	1.02	0.00	0.00	0.96	1.02
Cloropicrina	4,172.52	23,387.34	0.00	0.00	4,172.52	23,387.34
Dazomet	0.00	131,338.00	0.00	0.00	0.00	131,338.00
Dicloropropeno	75,232.74	82,000.14	0.00	0.00	75,232.74	82,000.14
Flocoumafen	5.11	7.22	0.18	0.00	4.94	7.22
Hidrametilnon	734.86	351.91	0.00	0.00	734.86	351.91
Metam Sodio	114,370.56	178,149.12	2,652.00	2,758.08	111,718.56	175,391.04
Total	194,520.73	415,238.33	2,652.18	2,758.08	191,868.56	412,480.25

¹ Este cálculo únicamente contempla la cantidad de ingredientes activos grado técnico sin considerar las sustancias afines, coadyuvantes, plaguicidas botánicos, inorgánicos, microbiológicos, fertilizantes, muestras para experimentación, permisos de importaciones y patrones analíticos, además no se toman en cuenta los saldos anuales en bodega.

² Datos Preliminares

³ Uso aparente: Kilogramos de ingredientes activos importados menos los kilogramos de ingredientes activos exportados

Nota: A partir de los datos correspondientes al año 2023, no se contemplan los valores provenientes de los trámites Servicios de Logística Integral (SEL) que no son nacionalizados en el país.