

Appendix G. T-REX Output

CLOVER

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	clover
Formulation	0
Application Rate	1 lbs a.i./acre
Half-life	6.6 days
Application Interval	7 days
Maximum # Apps./Year	2
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		355.06	
Tall Grass		162.74	
Broadleaf plants/sm Insects		199.72	
Fruits/pods/seeds/lg insects		22.19	

AVIAN RQs: CLOVER

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small 20 g	mid 100 g	large 1000 g
Short Grass	404.38	230.60	103.24
Tall Grass	185.34	105.69	47.32
Broadleaf plants/sm Insects	227.46	129.71	58.07
Fruits/pods/seeds/lg insects	25.27	14.41	6.45

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	116.24	52.07	16.50
Tall Grass	53.28	23.86	7.56
Broadleaf plants/sm insects	65.39	29.29	9.28
Fruits/pods/seeds/lg insects	7.27	3.25	1.03

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	1.59	35.51
Tall Grass	0.73	16.27
Broadleaf plants/sm Insects	0.89	19.97
Fruits/pods/seeds/lg insects	0.10	2.22

MAMMALIAN RQs: CLOVER

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	338.53	233.97	54.25			
Tall Grass	155.16	107.23	24.86			
Broadleaf plants/sm Insects	190.42	131.61	30.51			
Fruits/pods/seeds/lg insects	21.16	14.62	3.39	4.70	3.25	0.75

Dose-based RQs (Dose-based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	12.84	616.11	10.96	526.28	5.88	282.10
Tall Grass	5.88	282.38	5.03	241.21	2.69	129.30
Broadleaf plants/sm insects	7.22	346.56	6.17	296.03	3.31	158.68
Fruits/pods/lg insects	0.80	38.51	0.69	32.89	0.37	17.63
Seeds (granivore)	0.18	8.56	0.15	7.31	0.08	3.92

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	71.01
Tall Grass	#DIV/0!	32.55
Broadleaf plants/sm insects	#DIV/0!	39.94
Fruits/pods/seeds/lg insects	#DIV/0!	4.44

WALNUT

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	Walnut
Formulation	0
Application Rate	2 lbs a.i./acre
Half-life	6.6 days
Application Interval	2 days
Maximum # Apps./Year	3
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		1184.42	
Tall Grass		542.86	
Broadleaf plants/sm Insects		666.23	
Fruits/pods/seeds/lg insects		74.03	

AVIAN RQs: WALNUT

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small	mid	large
	20 g	100 g	1000 g
Short Grass	1348.93	769.22	344.39
Tall Grass	618.26	352.56	157.85
Broadleaf plants/sm Insects	758.77	432.69	193.72
Fruits/pods/seeds/lg insects	84.31	48.08	21.52

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	387.76	173.69	55.05
Tall Grass	177.72	79.61	25.23
Broadleaf plants/sm insects	218.11	97.70	30.97
Fruits/pods/seeds/lg insects	24.23	10.86	3.44

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	5.29	118.44
Tall Grass	2.42	54.29
Broadleaf plants/sm Insects	2.97	66.62
Fruits/pods/seeds/lg insects	0.33	7.40

MAMMALIAN RQs: WALNUT

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	1129.25	780.46	180.95			
Tall Grass	517.57	357.71	82.94			
Broadleaf plants/sm Insects	635.20	439.01	101.79			
Fruits/pods/seeds/lg insects	70.58	48.78	11.31	15.68	10.84	2.51

Dose-based RQs (Dose-based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	42.82	2055.21	36.57	1755.55	19.61	941.04
Tall Grass	19.62	941.97	16.76	804.63	8.99	431.31
Broadleaf plants/sm insects	24.08	1156.06	20.57	987.50	11.03	529.34
Fruits/pods/lg insects	2.68	128.45	2.29	109.72	1.23	58.82
Seeds (granivore)	0.59	28.54	0.51	24.38	0.27	13.07

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	236.88
Tall Grass	#DIV/0!	108.57
Broadleaf plants/sm insects	#DIV/0!	133.25
Fruits/pods/seeds/lg insects	#DIV/0!	14.81

CITRUS

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	Citrus
Formulation	0
Application Rate	5 lbs a.i./acre
Half-life	6.6 days
Application Interval	45 days
Maximum # Apps./Year	2
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		1210.63	
Tall Grass		554.87	
Broadleaf plants/sm Insects		680.98	
Fruits/pods/seeds/lg insects		75.66	

AVIAN RQs: CITRUS

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small	mid	large
	20 g	100 g	1000 g
Short Grass	1378.79	786.25	352.01
Tall Grass	631.95	360.36	161.34
Broadleaf plants/sm Insects	775.57	442.26	198.01
Fruits/pods/seeds/lg insects	86.17	49.14	22.00

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	396.34	177.53	56.27
Tall Grass	181.66	81.37	25.79
Broadleaf plants/sm insects	222.94	99.86	31.65
Fruits/pods/seeds/lg insects	24.77	11.10	3.52

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	5.40	121.06
Tall Grass	2.48	55.49
Broadleaf plants/sm Insects	3.04	68.10
Fruits/pods/seeds/lg insects	0.34	7.57

MAMMALIAN RQs: CITRUS

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	1154.25	797.74	184.96			
Tall Grass	529.03	365.63	84.77			
Broadleaf plants/sm Insects	649.26	448.73	104.04			
Fruits/pods/seeds/lg insects	72.14	49.86	11.56	16.03	11.08	2.57

Dose-based RQs (Dose-based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	43.76	2100.70	37.38	1794.41	20.04	961.87
Tall Grass	20.06	962.82	17.13	822.44	9.18	440.86
Broadleaf plants/sm insects	24.62	1181.65	21.03	1009.35	11.27	541.05
Fruits/pods/lg insects	2.74	131.29	2.34	112.15	1.25	60.12
Seeds (granivore)	0.61	29.18	0.52	24.92	0.28	13.36

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	242.13
Tall Grass	#DIV/0!	110.97
Broadleaf plants/sm insects	#DIV/0!	136.20
Fruits/pods/seeds/lg insects	#DIV/0!	15.13

SUNFLOWER AND SAFFLOWER

Chemical Name:	Methidathion
Use	Sunflower, safflower
Formulation	0
Application Rate	0.5 lbs a.i./acre
Half-life	6.6 days
Application Interval	7 days
Maximum # Apps./Year	3
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		205.11	
Tall Grass		94.01	
Broadleaf plants/sm Insects		115.38	
Fruits/pods/seeds/lg insects		12.82	

AVIAN RQs: SUNFLOWER AND SAFFLOWER

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small 20 g	mid 100 g	large 1000 g
Short Grass	233.60	133.21	59.64
Tall Grass	107.07	61.06	27.34
Broadleaf plants/sm Insects	131.40	74.93	33.55
Fruits/pods/seeds/lg insects	14.60	8.33	3.73

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	67.15	30.08	9.53
Tall Grass	30.78	13.79	4.37
Broadleaf plants/sm insects	37.77	16.92	5.36
Fruits/pods/seeds/lg insects	4.20	1.88	0.60

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	0.92	20.51
Tall Grass	0.42	9.40
Broadleaf plants/sm Insects	0.52	11.54
Fruits/pods/seeds/lg insects	0.06	1.28

MAMMALIAN RQs: SUNFLOWER AND SAFFLOWER

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	195.56	135.16	31.34			
Tall Grass	89.63	61.95	14.36			
Broadleaf plants/sm Insects	110.00	76.03	17.63			
Fruits/pods/seeds/lg insects	12.22	8.45	1.96	2.72	1.88	0.44

Dose-based RQs (Dose- based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	7.41	355.92	6.33	304.02	3.40	162.97
Tall Grass	3.40	163.13	2.90	139.34	1.56	74.69
Broadleaf plants/sm insects	4.17	200.20	3.56	171.01	1.91	91.67
Fruits/pods/lg insects	0.46	22.24	0.40	19.00	0.21	10.19
Seeds (granivore)	0.10	4.94	0.09	4.22	0.05	2.26

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	41.02
Tall Grass	#DIV/0!	18.80
Broadleaf plants/sm insects	#DIV/0!	23.08
Fruits/pods/seeds/lg insects	#DIV/0!	2.56

COTTON

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	Cotton
Formulation	0
Application Rate	1 lbs a.i./acre
Half-life	6.6 days
Application Interval	5 days
Maximum # Apps./Year	4
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		515.59	
Tall Grass		236.31	
Broadleaf plants/sm Insects		290.02	
Fruits/pods/seeds/lg insects		32.22	

AVIAN RQs: COTTON

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small	mid	large
	20 g	100 g	1000 g
Short Grass	587.20	334.85	149.92
Tall Grass	269.14	153.47	68.71
Broadleaf plants/sm Insects	330.30	188.35	84.33
Fruits/pods/seeds/lg insects	36.70	20.93	9.37

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	168.79	75.61	23.96
Tall Grass	77.36	34.65	10.98
Broadleaf plants/sm insects	94.95	42.53	13.48
Fruits/pods/seeds/lg insects	10.55	4.73	1.50

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	2.30	51.56
Tall Grass	1.05	23.63
Broadleaf plants/sm Insects	1.29	29.00
Fruits/pods/seeds/lg insects	0.14	3.22

MAMMALIAN RQs: COTTON

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	491.57	339.74	78.77			
Tall Grass	225.31	155.72	36.10			
Broadleaf plants/sm Insects	276.51	191.11	44.31			
Fruits/pods/seeds/lg insects	30.72	21.23	4.92	6.83	4.72	1.09

Dose-based RQs (Dose- based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	18.64	894.65	15.92	764.21	8.53	409.65
Tall Grass	8.54	410.05	7.30	350.26	3.91	187.75
Broadleaf plants/sm insects	10.48	503.24	8.96	429.87	4.80	230.43
Fruits/pods/lg insects	1.16	55.92	1.00	47.76	0.53	25.60
Seeds (granivore)	0.26	12.43	0.22	10.61	0.12	5.69

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	103.12
Tall Grass	#DIV/0!	47.26
Broadleaf plants/sm insects	#DIV/0!	58.00
Fruits/pods/seeds/lg insects	#DIV/0!	6.44

KIWI

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	KIWI
Formulation	0
Application Rate	2 lbs a.i./acre
Half-life	6.6 days
Application Interval	0 days
Maximum # Apps./Year	1
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		480.00	
Tall Grass		220.00	
Broadleaf plants/sm Insects		270.00	
Fruits/pods/seeds/lg insects		30.00	

AVIAN RQs: KIWI

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small 20 g	mid 100 g	large 1000 g
Short Grass	546.67	311.74	139.57
Tall Grass	250.56	142.88	63.97
Broadleaf plants/sm Insects	307.50	175.35	78.51
Fruits/pods/seeds/lg insects	34.17	19.48	8.72

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	157.14	70.39	22.31
Tall Grass	72.02	32.26	10.23
Broadleaf plants/sm insects	88.39	39.59	12.55
Fruits/pods/seeds/lg insects	9.82	4.40	1.39

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	2.14	48.00
Tall Grass	0.98	22.00
Broadleaf plants/sm Insects	1.21	27.00
Fruits/pods/seeds/lg insects	0.13	3.00

MAMMALIAN RQs: KIWI

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	457.64	316.29	73.33			
Tall Grass	209.75	144.97	33.61			
Broadleaf plants/sm Insects	257.42	177.91	41.25			
Fruits/pods/seeds/lg insects	28.60	19.77	4.58	6.36	4.39	1.02

Dose-based RQs (Dose- based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	17.35	832.90	14.82	711.46	7.95	381.37
Tall Grass	7.95	381.75	6.79	326.08	3.64	174.79
Broadleaf plants/sm insects	9.76	468.51	8.34	400.20	4.47	214.52
Fruits/pods/lg insects	1.08	52.06	0.93	44.47	0.50	23.84
Seeds (granivore)	0.24	11.57	0.21	9.88	0.11	5.30

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	96.00
Tall Grass	#DIV/0!	44.00
Broadleaf plants/sm insects	#DIV/0!	54.00
Fruits/pods/seeds/lg insects	#DIV/0!	6.00

TREE FRUIT AND OLIVES

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	Tree fruit AND Olives
Formulation	0
Application Rate	3 lbs a.i./acre
Half-life	6.6 days
Application Interval	0 days
Maximum # Apps./Year	1
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		720.00	
Tall Grass		330.00	
Broadleaf plants/sm Insects		405.00	
Fruits/pods/seeds/lg insects		45.00	

AVIAN RQs: TREE FRUIT AND OLIVES

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small 20 g	mid 100 g	large 1000 g
Short Grass	820.01	467.60	209.35
Tall Grass	375.84	214.32	95.95
Broadleaf plants/sm Insects	461.25	263.03	117.76
Fruits/pods/seeds/lg insects	51.25	29.23	13.08

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	235.72	105.58	33.47
Tall Grass	108.04	48.39	15.34
Broadleaf plants/sm insects	132.59	59.39	18.82
Fruits/pods/seeds/lg insects	14.73	6.60	2.09

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	3.21	72.00
Tall Grass	1.47	33.00
Broadleaf plants/sm Insects	1.81	40.50
Fruits/pods/seeds/lg insects	0.20	4.50

MAMMALIAN RQs: TREE FRUIT AND OLIVES

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	686.46	474.44	110.00			
Tall Grass	314.63	217.45	50.42			
Broadleaf plants/sm Insects	386.14	266.87	61.88			
Fruits/pods/seeds/lg insects	42.90	29.65	6.88	9.53	6.59	1.53

Dose-based RQs (Dose-based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	26.03	1249.35	22.23	1067.19	11.92	572.05
Tall Grass	11.93	572.62	10.19	489.13	5.46	262.19
Broadleaf plants/sm insects	14.64	702.76	12.51	600.29	6.70	321.78
Fruits/pods/lg insects	1.63	78.08	1.39	66.70	0.74	35.75
Seeds (granivore)	0.36	17.35	0.31	14.82	0.17	7.95

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	144.00
Tall Grass	#DIV/0!	66.00
Broadleaf plants/sm insects	#DIV/0!	81.00
Fruits/pods/seeds/lg insects	#DIV/0!	9.00

ARTICHOKE

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	Artichoke
Formulation	0
Application Rate	1 lbs a.i./acre
Half-life	6.6 days
Application Interval	14 days
Maximum # Apps./Year	8
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		311.63	
Tall Grass		142.83	
Broadleaf plants/sm Insects		175.29	
Fruits/pods/seeds/lg insects		19.48	

AVIAN RQs: ARTICHOKE

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small 20 g	mid 100 g	large 1000 g
Short Grass	354.91	202.39	90.61
Tall Grass	162.67	92.76	41.53
Broadleaf plants/sm Insects	199.64	113.84	50.97
Fruits/pods/seeds/lg insects	22.18	12.65	5.66

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	102.02	45.70	14.48
Tall Grass	46.76	20.95	6.64
Broadleaf plants/sm insects	57.39	25.71	8.15
Fruits/pods/seeds/lg insects	6.38	2.86	0.91

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	1.39	31.16
Tall Grass	0.64	14.28
Broadleaf plants/sm Insects	0.78	17.53
Fruits/pods/seeds/lg insects	0.09	1.95

MAMMALIAN RQs: ARTICHOKE

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	297.11	205.34	47.61			
Tall Grass	136.18	94.12	21.82			
Broadleaf plants/sm Insects	167.13	115.51	26.78			
Fruits/pods/seeds/lg insects	18.57	12.83	2.98	4.13	2.85	0.66

Dose-based RQs (Dose- based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	11.27	540.74	9.62	461.89	5.16	247.59
Tall Grass	5.16	247.84	4.41	211.70	2.36	113.48
Broadleaf plants/sm insects	6.34	304.16	5.41	259.82	2.90	139.27
Fruits/pods/lg insects	0.70	33.80	0.60	28.87	0.32	15.47
Seeds (granivore)	0.16	7.51	0.13	6.42	0.07	3.44

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	62.33
Tall Grass	#DIV/0!	28.57
Broadleaf plants/sm insects	#DIV/0!	35.06
Fruits/pods/seeds/lg insects	#DIV/0!	3.90

NURSERY

Upper Bound Kenaga Residues For RQ Calculation

Chemical Name:	Methidathion
Use	Nursery
Formulation	0
Application Rate	0.5 lbs a.i./acre
Half-life	6.6 days
Application Interval	0 days
Maximum # Apps./Year	1
Length of Simulation	1 year

Endpoints			
Avian	Mallard duck	LD50 (mg/kg-bw)	6.70
	Bobwhite quail	LC50 (mg/kg-diet)	224.00
	Mallard duck	NOAEL(mg/kg-bw)	0.00
	Mallard duck	NOAEC (mg/kg-diet)	10.00
Mammals		LD50 (mg/kg-bw)	12.00
		LC50 (mg/kg-diet)	0.00
		NOAEL (mg/kg-bw)	0.25
		NOAEC (mg/kg-diet)	5.00
Dietary-based EECs (ppm)		Kenaga Values	
Short Grass		120.00	
Tall Grass		55.00	
Broadleaf plants/sm Insects		67.50	
Fruits/pods/seeds/lg insects		7.50	

AVIAN RQs: NURSERY

Dose-based EECs (mg/kg-bw)	Avian Classes and Body Weights		
	small 20 g	mid 100 g	large 1000 g
Short Grass	136.67	77.93	34.89
Tall Grass	62.64	35.72	15.99
Broadleaf plants/sm Insects	76.88	43.84	19.63
Fruits/pods/seeds/lg insects	8.54	4.87	2.18

Dose-based RQs (Dose-based EEC/adjusted LD50)	Avian Acute RQs		
	20 g	100 g	1000 g
Short Grass	39.29	17.60	5.58
Tall Grass	18.01	8.07	2.56
Broadleaf plants/sm insects	22.10	9.90	3.14
Fruits/pods/seeds/lg insects	2.46	1.10	0.35

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	RQs	
	Acute	Chronic
Short Grass	0.54	12.00
Tall Grass	0.25	5.50
Broadleaf plants/sm Insects	0.30	6.75
Fruits/pods/seeds/lg insects	0.03	0.75

MAMMALIAN RQs: NURSERY

Dose-Based EECs (mg/kg-bw)	Mammalian Classes and Body weight					
	Herbivores/ insectivores			Granivores		
	15 g	35 g	1000 g	15 g	35 g	1000 g
Short Grass	114.41	79.07	18.33			
Tall Grass	52.44	36.24	8.40			
Broadleaf plants/sm Insects	64.36	44.48	10.31			
Fruits/pods/seeds/lg insects	7.15	4.94	1.15	1.59	1.10	0.25

Dose-based RQs (Dose-based EEC/LD50 or NOAEL)	15 g mammal		35 g mammal		1000 g mammal	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Short Grass	4.34	208.22	3.71	177.86	1.99	95.34
Tall Grass	1.99	95.44	1.70	81.52	0.91	43.70
Broadleaf plants/sm insects	2.44	117.13	2.08	100.05	1.12	53.63
Fruits/pods/lg insects	0.27	13.01	0.23	11.12	0.12	5.96
Seeds (granivore)	0.06	2.89	0.05	2.47	0.03	1.32

Dietary-based RQs (Dietary-based EEC/LC50 or NOAEC)	Mammal RQs	
	Acute	Chronic
Short Grass	#DIV/0!	24.00
Tall Grass	#DIV/0!	11.00
Broadleaf plants/sm insects	#DIV/0!	13.50
Fruits/pods/seeds/lg insects	#DIV/0!	1.50