

IOBCwprs Working Group "Pesticides and Beneficial Organisms & IOBCwprs Commission "IP Guidelines and Endorsement" (05.12.2005 Comm.)	Type	Formulation	Concentration tested	Grams a.i./ ha	Classification of side effects to beneficial organisms																WHO toxicity class
					<p><b>N</b> = harmless or slightly harmful (Reduction field, semi-field 0-50%, lab 0-30%)  <b>M</b> = moderately harmful (Reduction field, semi-field 50-75%, lab 30-79%)  <b>T</b> = harmful (Reduction field, semi-field &gt; 75%, lab &gt;80%)</p> <p>Normal black entries = laboratory data (IOBC)  <b>Bold black face</b> = semi-field test data (IOBC)  Asterisk * marked black entries = Field test data (IOBC)  <b>Red</b> = additions by Commission (expert judgments), final classification pending  Pink marked data = data added by Commission (expert judgments)</p>																
Active ingredient	I = Insecticide  F = Fungicide  A = Acaricide  H = Herbicide  PGR = Plant Growth Regulator				Predatory mites (Typhlodromus pyri)	Predatory mites (Phytoseiulus persimilis)	Spiders (Pardosa spp.)	Spiders (Cheiracanthium mildei)	Flower bugs (Anthocoris nemoralis)	Flower bugs ( Orius laevigatus)	Lacewings (Chrysoperla carnea)	Lady bird beetles (Coccinella 7-punctata)	Rove beetles (Aleochara bilineata)	Ground beetles ( Poecilus cupreus)	Parasitoids (Aphidius rhopalosiphi)	Parasitoids (Trichogramma cacoeciae)	Hoverflies (Syrphus corollae)	Toxicity to bees	Toxicity to earthworms (Eisenia foetida)	Fish Toxicity	Coding key see appendix
					Code number of beneficial organism	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Abamectine	A	18 EC		13.5	N-T	T				T	N	N			T	T		+		+	(II)
Amitraz	A	200 g/L	0.3	360	T*	T			M		M	T	T			T	T	-		+	III
Azadirachtine	A	1% T/S		30	N	T			T	N	N*	N		N	M	T	M	-		-	(U)
Azocyclotin	A	25 WP	0.1			N					T					T		-		+	II
Benzoximate	A	200 g/L	0.15			N					M					M		-			O
Bromopropylat	A				M				N		N					N		-		+	U
Clofentezine	A	500g/L	0.04		N*	N		N	N*		N	N	N			N	N	-		-	U
Cyhexatin	A				N-M				N							T		-		+	(III)
Diafenthiuron	A	250 SC		500	N*	T				T	M	N			M	T					U
Etoxazol	A				M						M					N		-		+	(U)
Fenazaquin	A				M				M									-		+	(III)
Fenitrothion	A	550 g/L	0.1	330	T	T			T		T	T	T			T		+			II
Fenpropathrin	A	10 WP		300	T	T		T	T		M	N	T			T		-		+	II
Fenpyroximate	A	50 EC		50	N-M	T			N-M	N	N	T	N	N	T	M		-		+	(III)

Flubendizimine	A	50 WP	0.1		M*	N		N	N*		N	N	N			T		-		+	O
Formetanat	A	200 SP		500		T			T	M	T	N			T	T		+		+	lb
Hexythiazox	A	200g/L	0.025		N*	N		N	N*		N	N	N			N		-		-	U
Oxamyl	A	245 g/L	0.15		T	T			T		M	N	N			T		+			lb
Spirodiclofen	A				N-M				M		N	M				N	N	+		-	(III)
Sulphur (Bayer)	A	80 WP		1600	T*	N		N	T		N	N				T		-		-	U
Sulphur (Kumulus)	A	80 DF		8000	M*	M			M	N	M	N			M	T		-		-	U
Sulphur (Kumulus)	A	80 DF		4800											M	T		-		-	U
Sulphur (Thiovit)	A	80 WP	0.4			N			N		M					T		-		-	U
Tebufenpyrad	A	20 WP		100	M*	T			T	N	N	N		N	T	T	M	-		+	III
Tetradifon	A	80 g/L	0.2	96	N*	N					N	M	N			T		-			U
Triazophos	A	424 g/L	0.24		T	T		T	T		T	T	T			T	T	+		+	lb
Anilazine	F	480 g/L		1600	N	N		M	M		N	N	N			N		-			O
Azoxystrobine	F	250 SC		400	N*	M	N		N	N	N	N		N	N	M		-	-	+	U
Benomyl	F																		+	+	(U)
Bitertanol	F	25 WP	0.37		N*			N	N*		N	N	N	N		N		-		+	U
Bupirimate	F				N				N		N	N				N	N	-	-	-	(U)
Captan	F	83 WP		3400	N*	N			M	N	N	N*			M	M	M	-	-	+	U
Captan	F	250 g/kg	0.15			N			M		N					N		-	-	+	U
Carbendazim	F	50 DF		1000	T*	M			N	N	N	N	N	N	N	M		-	+	+	U
Carbendazim	F	50 DF		300									N	N	N	M		-	+	+	U
Carbendazim	F	WP 60	0.05			T					N					N	N	-	+	+	U
Chinomethionat	F	25 WP	0.1	150	T	T					T	T	M			T		-		+	III
Chlorothalonil	F	500 g/L	0.3	900	T	N					N	N	N			N		-	+	+	U
Copper oxychloride	F	45 WP	1.0		N*			N			N	N	N	N	N	N		-	+	+	III
Cyproconazole	F	100 SL		2500	T	N			N		N	N	N			N		-		-	III
Dichlofluanid	F	50 WG	0.15		M*	M		M	N		N	T	N			T		-		+	U
Difenoconazole	F	250 EC		500	N*	N	N		M	N	N	N	N	N	N	N		-		+	III
Ditalimfos	F	50 EC	0.075			N					N					T				+	O
Dithianon	F	223g/L	0.2		N*			N	N*		N	N	N			N		-		+	III
Ethirimol	F	280 g/L	0.18		N	N		N	N		N	N				N	N				U
Fenarimol	F	120 g/L	0.12		N*	N		N	N		N		N	N	N	M	N	-		+	U
Fenhexamid	F				N													-	-	+	U
Fenpropidin	F				N													-		+	(III)
Fenpropimorph	F	750 g/L	0.17		N	N	N	N	N		N			N	M	T	N	-		-	U
Flutriafol	F	12 SC	0.16		N		N	M	N		N	N	N	N		N		-		+	III
Folpet	F	50 WP	0.33		N*	N		N	N		N		N		N	N	M	-	-	+	U
Fosetyl-Al	F	80 WG		5500	N*	M			M	N	N	N	N		N	M		-		-	U
Hexaconazole	F	50 g/L		120	N	N			N		N	N	N			N		-		-	U
Iprodione	F	50 WP	0.15		N*			N	N		N	N	N			N		-		+	U

Kresoxim-methyl	F				N						N			N		-	-	+	(U)		
Lecithin	F	25%		900	N*	N		N		N	N			N	N	-		-	(U)		
Lime sulphur	F	7%		12 000	T	T		N	T		T	N	N		T	-		-	(U)		
Mancozeb	F	80 WG	0.1	480	T*	N				N	N	N	N		M	-	-	+	U		
Mancozeb > 2 treatments	F	80 WP		3600	T*	N			M	M	N	N	N	N	T	-	-	+	U		
Mancozeb 1-2 treatments	F	80 WP		3200	M									N	N	T	-	-	+	U	
Maneb	F	80 WP	0.5		M*			M	T		N	N	T		T	-	-	+	U		
Metiram	F	80 WG	0.42		T*	N	N	N	N		N		N		N	T	T	-	-	U	
Myclobutanil	F	125 EC			N											-		-	III		
Nuarimol	F	90 g/L	0.08		N	N		N	N		N		N		T	-			III		
Penconazole	F	10 EC	0.04		N*	N		N	N		N			N	N	M	M	-	-	U	
Penconazole	F	10 WP		375	N*	N			M	N	N	N	N	N	M	-		-	U		
Prochloraz	F	400 g/L	0.187	449	T	M					N	N	N	N		T	-		+	III	
Procymidone	F	50 WG		600	N*	N		N	M		N	N	N		N	-		+	U		
Propiconazole	F	25 EC	0.08		T	N		N	N		N			N		T	M	-	+	-	II
Propineb	F	70 WP	0.2		T*			N	N		N	T	N	N		M	-	+	+	U	
Pyrimethanil	F	40 SC		1000	N*	N			M	N	N	N*			M	T	-		-	U	
Quinoxifen	F				N											-	-	-	U		
Spiroxamine	F	500 EC		750	N	T	N		T	N	N	T			T	T	-	-	-	II	
Sulphur (Bayer)	F	80 WP		1600	T*	N		N	T		N	N-M			T	-		-	U		
Sulphur (Kumulus)	F	80 DF		8000	M*	M			M	N	M	N-M			M	T	-		-	U	
Sulphur (Kumulus)	F	80 DF		4800								M			M	T	-		-	U	
Sulphur (Thiovit)	F	80 WP	0.4			N			N		M	M			T	-		-	U		
Tebuconazole	F	250 EC		1500	N*	N			M		N	N	N	N	N	T	-		+	III	
Thiophanat-methyl	F	70 WP		400	M*	M			M	N	N	N			N	N	-		-	U	
Thiophanat-methyl	F	70 WP		2100											N	N	-		-	U	
Thiram	F	80 WG		3200	M*-T*	N			N	N	N	N	N	N	T	-		+	III		
Thiram	F	80 WG		2400									N	N		T	-		+	III	
Thiram	F	80 WP	0.2	960	T	N					N	T	M	N		M	M	-	+	III	
Tolyfluanide	F	50 WG		2500	M*				N	N	N	N	N	N	M	T	-		+	U	
Triadimefon	F	5 WG	0.1			N			N		N				N	-			III		
Triadimenol	F	250 g/L		200	N*	N		M	N		N	N	N		N	N	N	-	-	III	
Tridemorph	F	750 g/L		300	N	M			N			N	N		N	-		+	II		
Triforine	F	190 g/L		600	N	N			N	N		N	N		N	-		-	U		
Vinclozolin	F	50 WG	0.05		N	N					M				N	-		-	U		
2,4-D	H	500g/L	0.432		N				N	N		N	N	M		N	-	-	-	II	
Amitrole 30% + Diuron 56%	H	WP	1.0		T	T	N				T	T	M	N		M	-		+	U	
Atrazine	H	50 WP	0.67		N				N	N		N		N		M	M	-	-	-	U
Bentazone	H	480 g/L		1600	N	N	N	T	M		N	N	N	N		N	-		-	III	
Bromacil	H	80 WP	0.2	960	N	N					N	N	N		N	-			U		

Bromofenoxim	H	50 WP	1.7	5100	T	M				N	M	N			T	-			III	
Bromoxynil	H	235 g/L	0.33		T			N		N		N	N		T	-	+	+	II	
Chloridazon	H	65 DF		1950						M	N				N	-		-	U	
Clopyralid	H	100 g/L		480	N	N	N	M		N	N	N	N		N	-	-	-	U	
Cycloxydim	H	200 EC		600			N			N	N	N	N		M	-		-	U	
Desmetryn	H	WP 25	0.25			M				N					T	-			III	
Dicamba	H	70 WG		490						M	N	N	N		N	-		-	III	
Difenzoquat	H	200 g/L	1.0			T				N					T				II	
Ethofumesat	H	200 EC		4000	M			M		N	N	M	N		N	-	+	-	U	
Fluazifop-butyl	H	12,5 g/L	0.25		M		N	N		N					N	T	-		+	O
Fluroxypyr	H	200 EC		2000	M		N	M		N	N	N	N	N	N	-		-	U	
Glufosinate-ammonium	H	200g/L	0.5		T		T	N		M	N	N			M	-		-	III	
Glyphosate	H	360 g/L	1.0		M			N		M				N	M	-	-	-	U	
Haloxyfop	H	052 EC		1500	T			N		N	N	M	N		T	-		+	II	
Ioxynil	H	240 g/L		960	T	T		N	N	N	N	N			N	-		-	II	
Isoproturon	H	500 SC		3000	N			N		N	N	N	N		N	-	-	-	III	
Linuron	H															-	-	+	U	
Mecoprop-p	H	600 KV		1200						N	N		N	N	M	-		-	III	
Metamitron	H	70 WG		10 000	N		N	N		N	N	N	N		N	-		-	III	
Metazachlor	H	500 SC		1500			N			N	N	N		N	N	-		-	U	
Metabenzthiazuron	H	70 WP	0.67		T		M	N		N	N	N			N	+	-	-	U	
Metsulfuron-methyl	H	20 WP	0.067		N			N	N	N	N	N	N		N	-		-	U	
Monolinuron	H	50 WP	0.75			T				M					T	-	-	-	U	
Pendimethalin	H												N			-	-	+	(III)	
Prometryn	H	50 WP		10						N	N		N		M				U	
Propachlor	H	44,8 SP	1.0			T				M					T	+		+	III	
Quizalofop-ethyl	H	100 g/L		1200	T	N		N	N	M	N	N	N		N	-		-	III	
Sethoxydim	H	133 g/L		3160	M	N		M		N	N				T	-		+	III	
Simazine	H	50 WP	0.375	1125	N	N				N	M	N			N	-	-	-	U	
Tralkoxydim	H	100 g/L		2000	M	N		N	N	M	N	N			N				III	
Triasulfuron	H	75 WG		15						N	N				N	-			U	
Triclopyr	H															-	-	+	(III)	
Abamectine	I	18 EC		13.5	N-T	T			T	N	N			T	T	+		+	(II)	
Acephate	I	50 WP	0.15	450	N-T*	T				T	T	M			T	+	+	-	III	
Acetamiprid	I				N											-		-	(III)	
Aldicarb	I															+	+	+	la	
Amitraz	I	200 g/L	0.3	360	T*	T		M		M	T	T			T	T	-		+	III
Azadirachtine	I	1% T/S		30	N	T		T	N	M	N		N	M	T	M	-		-	(U)
Azinphos-methyl	I	25 EC	0.2	300	T*	M				T	T	T			T	+	+		lb	

Bifenthrin	I	80g/L															-/+		+	II
Bromophos	I	368 g/L	0.27		T	T		T	T		T	N	T		T	T	+	-	+	O
BT var. kurstaki (Pathogen)	I	85 WG		1000	N*	N		M		N	N	N	N		N		-		-	(U)
BT var. tenebrionis (Pathogen)	I	30 FC		6000	N*	T		N		N	N	N	N		N		-		-	(U)
Buprofezin	I	250 g/L		180	N	N		N	N		N	N	N		N		-		+	U
Carpofuran	I																+	+	+	(Ib)
Chlorfenvinphos	I	40 EC	0.33		T	T		T	T		N	N			T	T	+		+	Ib
Chlorpyrifos-ethyl	I	25 WP	0.25		T	T	T	T	M		T	M	T		T	T	+	+	+	II
Chlorpyrifos-methyl	I				M-T				M		T	N			T		+		+	(U)
Cyfluthrin	I	50 EC		300	T*	T			T		N	M	M	T	T		+		+	II
Cyfluthrin	I	50 EC		750	T						M						+		+	II
Cypermethrin	I	100 g/L	0.04		T*	T		T	T		M	N	T		T	T	-	-	+	II
Cyromazine (IGR)	I	75 WP		400	T	T		N	N		M	N	N		N		+		-	U
Deltamethrin	I	25 EC	0.06	9	T*	T			T		T	T	T		T		+	-	+	II
Diafenthiuron	I	250 SC		500	N*	T				T	M	N			M	T	+		+	U
Dialiphos	I	432 g/L	0.25		T*				T		N	N	T		T		-	-	-	O
Diazinon	I	40 WP	0.21		T	T		T	M		N-M	N	T		M	T	+	+	+	II
Diflubenzuron (IGR)	I	25 WP		300	N*	N		T	N	M	T	N-M	N		N		-	-	-	U
Dimethoate	I	40 EC	0.21		T*	T		M	T		T	T	T		T	T	+	+	+	II
Endosulfan	I	35 EC	0.1								N				T		-	+	+	II
Ethiophencarb	I	500 g/L	0.1	300	T	T					T	T	M		T		-	-	+	Ib
Etrimfos	I	500 g/L	0.2	620	T*	M					T	T	T		T		+			II
Fenitrothion	I	550 g/L	0.1	330	T	T			T		T	T	T		T		+			II
Fenoxycarb (IGR)	I	25 WP	0.06		N*	N		N	N*	M	M	N	N		M	N	+		+	U
Fenpropathrin	I	10 WP		300	T	T		T	T		M	N	T		T		-		+	II
Fenvalerate	I	50 g/L	0.075		T*	T			T		T				T		+		+	II
Flubendizimine	I	50 WP	0.1		M*	N		N	N*		N	N	N		T		-		+	O
Flufenoxuron (IGR)	I	100 DC		300	N*	N			M		M*		T	N						U
Fluvalinate	I	240 SC		600	T*	T			T		N	N	M	N	T		-			O
Granulosis-Virus (Pathogen)	I																			
Heptenophos	I	565 g/L	0.1	340	T	T			M		N	T	M		T		+		+	Ib
Heptenophos	I	550 EC		600	N*-M	M			M		N	M	T	T	T	T	+		+	Ib
Heptenophos	I	550 EC		960	T	T			M					T			+		+	Ib
Hexaflumuron (IGR)	I	100g/l SC	0.06		N-M				M								+		-	U
Imidacloprid	I	200 SL		70	N*	T			T	T	M	T		N	T	T	+	(-)	(-)	II
Indoxacarb	I	30 WG			N				M		N	M	N		M	N	-	-	+	(III)
Insecticidal soap (K-salts)	I	515g/lSC	2.0		N-T	N		N	N		N	N	N		N		-		-	(U)
Lambda-cyhalothrin	I	50 EC		450	T*	T			T		N	T	T	T	T		-		+	II
Lindane	I	90 WP	0.1			N					N				T		+		+	II
Lufenuron	I	50 EC		50	N*	N			N	M	T	T			M	M	-		-	(III)

Methamidophos	I	600 g/L		900	T	T		T	N		T	M	T			T	+	+	+	Ib	
Methidathion	I	180 g/L	0.075		T*	T		T		T						T	+	+	+	Ib	
Methomyl	I	150 g/L	0.1		T*	T		T		T						T	+	+	+	Ib	
Methoxyfenozid (IGR)	I	240g/l	0.04		N			N		N					N		-		-	(U)	
Mevinphos	I	100 g/L	0.58		T*	T		T	N		M	T			T	T	+		+	Ia	
Oxamyl	I	245 g/L	0.15		T	T		T		M	N	N			T		+	+		Ib	
Parathion-ethyl	I	200g EC	0.1		T			T		T	T				T		+	+	+	Ia	
Permethrin	I	250 g/L	0.02		T*	T		T		T					T		-	-	+	II	
Phosalone	I	500 Flow		600	N - M	M		M		N	N			T	T	M	-	-	+	II	
Phosmet	I	50 WP		1500	T*	T				N*	M	N			T					II	
Phosphamidon	I	20 EC	0.25		T	T		T	T	T	T	N			T	T	+		+	Ia	
Pirimicarb	I	50SG	0.04		N			N		N	N				M	M	-	-	-	II	
Propoxur	I	203,7 g/L	0.15			T		T		T					T		+	+	+	II	
Pymetrozine	I	25 WP		30		N		N	N	N	N		N	N	T		-		-	(U)	
Pyrethrine	I	25g/l EC	0.1		N			M		M					T		-		+	II	
Pirimiphos-methyl	I	500 g/L	0.2			T				T					T		+		+	Ib	
Pyriproxifen	I	10 EC		50	M*	N			N	N	M			T	M					U	
Quassia	I	490g/l EC	0.2	12	N					N	N						-		-	(U)	
Rape seed oil	I			10	N*	M		N	N	N	N		N	M	T		-			(U)	
Rotenone	I	12.5g/ EC	0.5		M			M		M					M		-		+	II	
Sex Pheromones	I				Highly selective method of control without influence on beneficial arthropods																
Spinosad	I	480 SC		96	N*	N				N	N	N				M		+		-	U
Spirodiclofen	I	249g/lI	0.04		N-M			M		N	M				N	N	+		-	(III)	
Tebufenozide (IGR)	I	240 Flow		144	N*	N		N	N	N	N		N	N	N		-			(U)	
Teflubenzuron (IGR)	I	150g/l SC			N			N		N	T				N	N	-		-	U	
Tetradifon	I	80 g/L	0.2	96	N*	N				N	M	N			T		-			U	
Thiacloprid	I	480 SC			N		M				T	N	M	T			-		+	II	
Thiocyclam	I	50 WP	0.03		M*	N		N	N	N*-M	N-M	T			T		+			II	
Triazamate	I	140 EC		70	N	M		N	N	N-T	N-M			T	T	N	-	-	+	II	
Triazophos	I	424 g/L	0.24		T	T		T	T		T	T	T		T	T	+		+	Ib	
Trichlorphon	I	80 WP	0.1		T	T				M					T		-			II	
Triflumuron (IGR)	I	25 WP	0.05							T*							-			U	
Vamidotion	I	400 g/L	0.125	300	T*	T		T		T	T	N			T	M	+		-	Ib	
Verticillium lecanii (Pathogen)	I			4000	N*	N				N					N					-	
1-Naphthylacetamide	PGR	50 WP	0.02		N			N	N		N	N	N		N		-		-	U	
1-Naphthylacetic acid	PGR	1 WP	0.15	9	N	N				N	N	N			T		-		-	U	
Carbaryl	PGR	85 EC	0.125	638	M*	N				T	T	T			T		+	+	+	II	
Chlormequat	PGR	70 SL	0.7	2940	N	N				N	N	N	N		T		-	-	-	III	