



BioAphidius (*Aphidius colemani*) Chemical List

Unlimited use in I.P.M	Harmless < 25% reduction	1
Consultation	Slightly harmful 25% - 60%	2
Consultation	Moderately harmful - 60% - 98%	3
Forbidden for use in I.P.M	Harmful - 98% - 100% reduction	4

TARGETED PEST: SPIDER MITES						
Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Abamectin 18% EC	Adult/Nymph	0.05	4	4	7	
Abamectin 18% EC	Adult/Nymph	0.1	4	4	14	
Acequinocyl 150g/l SC	Adult/Nymph	0.2 - 0.25	1			
Azadirachtin EC 30	Adult/Nymph	0.3	1			
Bifenazate 240g/l SC	Adult/Nymph	0.05 - 0.1	1			
Bifenazate 240g/l SC + Trepens of Chenopodium	Adult	0.08 + 0.5	1			
Clofentezine 50g/l SC	Adult/Nymph	0.04	1			
Cyflumetofen 215g/l SC	Adult/Nymph	0.1	1			
Emamectin Benzoate 19.2 EC	Adult/Nymph	0.04 - 0.05	4	3	3	
Etoxazole 110g/l SC	Adult/Nymph	0.025 - 0.03	1			
Fenbutatin oxide 550g/l SC	Adult/Nymph	0.1 - 0.2	1			
Fenpyroximate 5% SC	Adult/Nymph	0.15	4	4		
Hexythiazox	Adult/Nymph	0.04 - 0.05	1			
Mineral oil	Adult/Nymph	1%	1			

Neem oil 66% + Citronella E.C	Adult/Nymph	1	1		
Neem oil 97% OL	Adult/Nymph	1%	1		
Plant extract	Adult	0.5	4		
Plant oil	Adult/Nymph	3%	1		
Plant oil 82% + SLS	Adult	1%	2	1	
Plant oil	Adult/Nymph	1	2	1	
Propargite 570g/l EC	Adult/Nymph	0.1	3		3 - 5
Pyrimidifen 100g/l SC	Adult/Nymph	0.5	1		
Silicon	Adult/Nymph	0.15	4	1	
Spiroclufen 240g/l SC	Adult/Nymph	0.04	1		
Spiromesifen 240g/l SC	Adult/Nymph	0.06 - 0.1	1		
Tebufenpyrad 20% Wp	Adult/Nymph	0.1	4		14
Tetradifon 80g/l EC	Adult/Nymph	0.1 - 0.2	1		
Vegetable oil + plant oil	Adult/Nymph	0.6	1		

TARGETED PEST: THRIPS

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Acrinathrin 75g/l EW	Adult	0.06 - 0.08	4		28 - 42	
Bifenthrin 100g/l Ec	Adult	0.075	4		28	
Carbosulfan 480g/l	Adult	0.25	4		14	
Chlorfenapyr 240g/l SC	Adult	0.05 - 0.06	4	2	21	
Chlorfenapyr 240g/l SC (Hunter)	Adult	0.05 - 0.06	4	2	7	
Emamectin Benzoate 19.2g/l	Adult	0.05- 0.06	4	4	7	
Emamectin Benzoate 19.2g/l	Pupa	0.05- 0.07	1			
Emamectin benzoate + Lufenuron 40%	Adult	0.01	4	2		
Etofenprox 300g/l	Adult	0.2	4		7	
Fipronil	Adult	0.1	4		28	
Formetanate 50% SP	Adult	0.1	4		28	

Lufenuron 50g/l Ec	Adult	0.04 - 0.05	1			
Methiocarb 500g/l Sc	Adult	0.1	4		28	
Pyridalyl 500g/l Ec	Adult	0.02 - 0.025	1			
Spinetoram 120g/l SC	Adult	0.04	4		21	
Spinosad 120- 480g/l SC	Adult	0.04 - 0.08	4		21	
Spinetoram 240g/l SC	Adult	0.02	4		21	
Spinosad RB 20	Adult	0.1	1			

TARGETED PEST: WHITE FLY

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Acetamiprid 200g/l SL	Adult	0.04 - 0.06	4	4	21	
Azadirachtin 45g/l EC	Adult	0.1	1			
Azinphos Methyl 200g/l	Adult	0.2	4		14	
Buprofezin 250g/l SC	Adult	0.1 - 0.15	1			
Chlorantraniliprole + Thiamethoxam	Adult	0.015	Dr - 1			
Cyantraniliprole 100g/l	Adult	0.15	1			
Cyantraniliprole 200g/l	Adult	0.1	Dr - 1			
Detergent	Adult	1%	3	2		
Diafenthiuron 500g/l SL	Adult	0.25	4		14	
Dinotefuran	Adult	0.1	1			
Fenpropathrin 100g/l EC	Adult	0.2	4		42 - 56	
Flupyradifurone 200 S/L	Mummy	0.08	1			
Imidacloprid	Adult	0.05	Hvs - 4		14	
Imidacloprid	Adult	0.05	Dr - 1			
Mineral oil	Adult	1%	1			
Neem oil (India)	Adult	1%	2		1	
Pirimifos Methyl	Adult	0.1	4		14	
Plant oil 82% + SLS	Pupa	1%	4		3	
Pyrethrins + Azadirachtin	Adult	1	4		3	

Pyriproxyfen 100g/l EC	Adult	0.1	1			
Silicon	Adult	0.15	4	1		
Silicon	Pupa	0.15	1			
Spirotetramat 100g/l SC	Adult	0.5 - 0.1	3	3		
Spiromesifen 240g/l SC	Adult	0.06 - 0.1	1			
Synthetic terpenes of Chenopodium	Adult	0.5	1			
Thiocyclam hydrogen oxalate	Adult	0.07 - 0.1	4	4	3	

TARGETED PEST: APHIDS						
Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Beauveria bossiana S.A	Adult	0.1	1			
Carbosulfan 480g/l EC	Adult/Mummy	0.25	4		28	
Chlorpyrifus 479g/l EC	Adult	0.25	4		7	
Chlorpyrifus	Mummy	0.25	4		7	
Clothianidin 50%	Adult	0.05	4			
Dichlovos EC	Adult	0.1	4		3	
Dichlovos	Mummy	0.1	4		3	
Dimethoate 400g/l EC	Adult/Mummy	0.1	4	Dr - 1		
Dinotefuran 20% SG	Adult	0.1	4	4	21	
Endosulfan 350g/l EC	Adult	0.25 - 0.35	4		14	
Fatty acid 30% + Potassium salt 50%	Adult/nymph	1	2	1		
Fatty acid potassium salt 17%	Adult	1	3	2	1	
Fatty acid potassium salt 17%	Pupa	1	1			
Fatty acid potassium salt 47%	Adult	0.5	2	1		
Fatty acid potassium salt 47%	pupa	0.5	1			
Flonicamid 50% SG	Adult	0.015 - 0.02	1			
Flupyradifurone 200 S/L	Mummy	0.08	1			
Halfenprox CS 50	Adult	0.15	3	2	1 - 3	

Imidacloprid 350g/l SC	Adult	0.05	Hvs - 4		14	
Imidacloprid	Adult	0.05	Dr - 1			
Malathion 25% WP	Adult	0.05 - 0.1	4		14	
Methidathion 420g/l EC	Adult/Mummy	0.25	4		28	
Methamidophos 600g/l SL	Adult/Mummy	0.25	4		28	
Methomil 90%	Adult/Mummy	0.1	4		21	
Neem oil	Adult	1%	1			
Oxydemeton - methyl	Adult/Mummy	0.1	4		25	
Pirimicarb 50% GR	Adult	0.05	3	1		
Pirimicarb 50% GR	Mummy	0.05	1			
Pymetrozine 50% WG	Adult	0.03 - 0.04	2	1		
Sophora japonica EC 1%	Adult	0.5	4	2		
Sulfoxaflor (Isoclast)	Adult	0.03	4			
Sulfoxaflor (Isoclast)	Adult/nymph	0.03	4	4	10	
Thiacloprid 480g/l SC	Adult	0.04	4	2	14	

TARGETED PEST: LEAFMINERS

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Abamectin	Adult	0.04 - 0.05	4		7	
Abamectin	Pupa	0.04 - 0.05	4		3	
Bifenthrin	Adult	0.05 - 0.1	4		28	
Cyromazine 75% Wp	Adult	0.025 - 0.5	1			
Oxamil 240 g/l SL	Adult	1 liter	1			
Spinetoram	Adult	0.04	4		21	
Spinosad	Adult	0.04 - 0.08	4		21	

TARGETED PEST: CATERPILLARS

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Acephate	Adult	0.1	4			4
B. Thuringensis	Adult	0.8 - 1	1			
B. Thuringensis	Adult	0.25 - 0.5	1			
Beta - cyfluthrin	Adult	0.1	4			
Chlorantraniliprole 200g/l Sc	Adult	0.02 - 0.03	1		28	
Chlorantraniliprole + Lambda cyhalothrin	Adult	0.01	4			
Chlorfluazuron 50g/l EC	Adult	0.1	1			
Cyantraniliprole 100g/l	Adult	0.15	2	1		
Cyfluthrin 50g/l	Adult	0.1 - 0.15	4		28	
Cypermethrin 100g/l Ec	Adult	0.05 - 0.1	4		28	
Deltamethrin 25g/l Ec	Adult	0.05 - 0.1	4		28	
Diazinon 25% Ec + WP	Adult	0.25 - 0.3	4	Dr - 1	7	
Esfenvalerate 50g/l	Adult	0.1 - 0.15	4		28	
Fenthion 500g/l	Adult	0.1	4		28	
Flubendiamide	Adult	0.02	1			
Flufenoxuron 100g/l SL	Adult	0.2	1			
Indoxacarb 150g/l Ec	Adult	0.03 - 0.04	4		14	
Indoxacarb 150g/l SC	Adult	0.03 - 0.05	4		14	
Lambda Cyhalothrin 50g/l Ec	Adult	0.1	4		28	
Lufenuron 50g/l Ec	Adult	0.04 - 0.05	1			
Methamidophos	Adult	0.25 - 0.3	4		28	
Metaflumizone 240 Sc	Adult	0.1	3	1	4	
Methomyl 90% Sp + SL	Adult	0.1 - 0.2	4		21	
Methoxyfenozide 240 g/l	Adult	0.05 - 0.1	1			
Nuceopolyhedrovirus	larva	0.04	1			
Novaluron 100g/l Ec	Adult	0.05 - 0.1	1			

Pyridalyl 500g/l Ec	Adult	0.2 - 0.25	1			
Pyridalyl 500g/l Ec	Adult	0.1	4	3		
Sodium Fluosilicate 15% Gr	Adult	0.5 - 1K ¹ g	1			
Tau - Fluvalinate 240g/l Ec	Adult	0.05	4		7	
Teflubenzuron 150g/l Sc	Adult	0.04 - 0.05	1			
Thiamethoxam + Chlorantraniliprole	Adult	0.03	Dr' - 1			
Triflumuron 25%	Adult	0.05 - 0.1	1			

TARGETED PEST: NEMATODES

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Abamectin 20g/l + Fe EDDHA	Adult/nymph	4 - 6 L/ H	1			
Cadusafos 200g/l	Adult	1	1			
Oxamil 100g/l	Adult	1	Dr - 1			

TARGET: PHYTOPHTHORA - D. MILDOW

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Chlorothalonil 500 + Mefenoam	Adult	0.25	1			
Chlorothalonil + Azoxystrobin	Adult	0.1 - 0.2	1			
Chlorothalonil 720g/l	Adult	0.2 - 0.35	1			
Chlorothalonil 720g/l	Adult	0.15 - 0.35	1			
Copper Oxychloride + Propineb	Adult	0.3	1			
Copper Sulphate + Mancozeb	Adult	0.25	1			
Copper Hydroxide 53.8%	Adult	0.05 - 0.2	1			
Copper Hydroxide 77%	Adult	0.3	1			
Cymoxanil	Adult	0.25	1			
Cymoxanil 60%	Adult	0.02 - 0.1	1			

Cymoxanil 45%	Adult	0.06 - 0.1	1		
Dimethomorph + Mancozeb	Adult	0.2	1		
Dimetomorph 9% + Mancozeb 60	Adult	0.2 - 0.3	1		
Dimethomorph + Pyraclostrobin	Adult	0.2 - 0.3	1		
Dimethomorph 500g/l	Adult	0.04 - 0.05	1		
Dimethomorph + Chlorothalonil	Adult	0.25	1		
Folpet	Adult	0.25	1		
Fosethyl Aluminium 80%	Adult	0.2	2		2
Fluopicolide 62+ Propamocarb	Adult	0.15	1		
Mancozeb 56% + Metalaxl 7.5%	Adult	0.3	1		
Mancozeb	Adult	0.25 - 0.35	1		
Mancozeb	Adult	0.25	1		
Mancozeb 75 - 80%	Adult	0.25	1		
Mancozeb+Benalaxyl	Adult	0.3	1		
Mancozeb 57.2% + Cymoxanil 14	Adult	0.35	1		
Mancozeb 64% + Matalaxyl- M68	Adult	0.3	1		
Mancozeb 50% + Fenamidone 10	Adult	0.15	1		
Mancozeb 62% + Famoxadone	Adult	0.15	1		
Mandipropamid 5% + Mancozeb	Adult	0.2 - 0.25	1		
Mandipropamid 250g/l	Adult	0.05	1		
Maneb	Adult	0.25	1		
Maneb 75%	Adult	0.25	1		
Manev	Adult	0.25	1		
Maneb 480 g/l	Adult	0.25	1		
Metalaxyl-M 480g/l	Adult	0.04 - 0.08	1		
Metalaxyl-m 2.5% + Copper	Adult	0.4	1		
Metiram 70%	Adult	0.25	1		
Potassium Phosphite 500	Adult	0.35	1		
Propamocarb + Fenamidone 75	Adult	0.2	1		
Propamocarb HCL 722g/l	Adult	0.2 - 0.3	1		

Propineb 70%	Adult	0.25	1			
Propineb 70%	Adult	0.25 - 0.3	1			
Propineb 61% + Iprovalicarb 5.5%	Adult	0.25 - 0.35	1			
Zoxamide 8.3% + Mancozeb	Adult	0.15 - 0.2	1			

TARGET: POWDERY MILDEW

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Azoxystrobin 250g/l Sc	Adult	0.05	1			
Bacillus subtilis	Adult	0.5 - 1.0	1			
Benomil	Adult	0.05	1			
Boscalid	Adult/nymph	0.08	1			
Bromuconazole	Adult	0.04 - 0.05	1			
Bupirimate	Adult	0.1	1			
Carbendazim 50%	Adult	0.04 - 0.08	1			
Chlorothalonil + Azoxystrobin	Adult	0.15 - 0.2	1			
Copper sulphate + Potassium hydrogen carbonate	Adult	1%	1			
Cyflufenamid 50g	Adult	0.02	1			
Cyproconazole + Azoxystrobin	Adult	0.025 - 0.04	1			
Cyproconazole 100g	Adult	0.04 - 0.05	1			
Difenoconazole	Adult	0.015 - 0.02	1			
Extract of Reynoutria Sachalinesis	Mummy	0.5	1			
Fenarimol	Adult	0.02	1			
Fenbuconazole	Adult	0.04	1			
Fenbuconazole + Dinocap	Adult	0.04	1			
Fluopiram	Adult	0.05 - 0.08	1			
Fluopiram + Tebuconazole	Adult	0.03	1			
Flutriafol 125g	Adult	0.1	1			

Flusilazole 400g	Adult	0.005	1		
Iminoctadine Tris	Adult	0.05	1		
Kresoxim -methyl SC	Adult/nymph	0.015	1		
Kresoxim-methyl 100 + Boscalid 200g	Adult	0.03 - 0.05	1		
Kresoxim -methyl 50%	Adult	0.02	1		
Kumulus df	Adult	0.4 - 0.7	1		
Metominostrobin	Adult	0.03	1		
Mineral oil 97.2%	Adult	1%	1		
Myclobutanil	Adult	0.04 - 0.05	1		
Myclobutanil + Dinocap	Adult	0.03	1		
Neem oil	Adult	1%	1		
Penconazole	Adult	0.025 - 0.05	1		
Penconazole	Adult	0.025 - 0.05	1		
Polyxin B 10%	Adult	0.1	1		
Potassium bicarbonate	Adult	0.1	1		
Polyoxin B	Adult	0.1	1		
Polyoxin AI 50%	Adult	0.025	1		
Proquinazid 200g	Adult	0.02 - 0.03	1		
Pyraclostrobin + boscalid	Adult	0.04 - 0.075	1		
Pyraclostrobin + boscalid	Adult	0.05 - 0.075	1		
Quinoxifen 250g/l Sc	Adult	0.02	1		
Spiroxamine	Adult	0.05	1		
Sulfur 80%	Adult	0.5 - 1.0	1		
Sulfur 80%	Adult	0.75 - 1	4	3	1
Sulfur 80%	Pupa	0.2 - 0.4	1		
Sulfur 80%	Adult	0.2 - 0.5	3	2	1
Sulfur 825g	Adult	0.8	4	2	1
Tea tree oil (M.Alternifolia)	Adult	0.4	1		
Tebuconazole + Trifloxyst	Adult	0.025	1		
Tetraconazole 100g	Adult	0.04 - 0.1	1		
Tetraconazole + Sulfur	Adult	0.3 - 0.5	1		
Triadimenol 250g	Adult	0.01 - 0.04	1		

Triadimefon 25%	Adult	0.02 - 0.03	1			
Triadimenol 250g	Adult	0.01 - 0.05	1			
Trifloxystrobin 500g	Adult	0.01 - 0.02	1			
Triforine	Adult	0.05 - 0.08	1			

TARGET: BOTRYTIS CINEREA

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Bacillus subtilis	Adult	1kg	1			
Carbendazim + Diethofencarb	Adult	0.05 - 0.1	1			
Chlorothalonil	Adult	0.035 - 0.5	1			
Cyprodinil + fludioxonil	Adult	0.06	1			
Fenhexamid	Adult	0.15	1			
Folpet + Prochloraz Zinc	Adult	0.3	1			
Iprodione	Adult	0.01	1			
Polyoxim b 10%	Adult	0.1 - 0.2	1			
Pyrimethanil	Adult	0.25	1			
Pyrimethanil	Adult	0.25	1			
Mepanipyrim	Adult	0.1	1			

TARGET: FOLIAGE DISEASE

Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Carbendazim 50%	Adult	0.04 - 0.08	1			
Chlorothalonil + Azoxystrobin	Adult	0.15 - 0.2	1			
Chlorothalonil WG	Adult	0.15 - 0.2	1			
Chlorothalonil	Adult	0.2 - 0.35	1			
Copper Hydroxide 77%	Adult	0.3 - 0.5	1			

Copper Hydroxide 77%	Adult	0.3	1			
Copper Sulphate 40%	Adult	0.25	1			
Cyproconazole 100g	Adult	0.04 - 0.05	1			
Difenoconazole 250gr	Adult	0.05 - 0.075	1			
Difenoconazole 250gr	Adult	0.05 - 0.1	1			
Diniconazole m 12.5%	Adult	0.04	1			
Dithianon 500g	Adult	0.1	1			
Flusilazle 400g/l	Adult	0.003 - 0.005	1			
Mancozeb 80%	Adult	0.25 - 0.35	1			
Mancozeb 62.5 + Femoxadone	Adult	0.1 - 0.15	1			
Metconazole 90g/l	Adult	0.04 - 0.06	1			
Potassium Phosphite + Copper Oxychloride	Adult	0.4	1			
Prochloraz Manganese 50%	Adult	0.2	1			
Prochloraz 450g/l	Adult	0.2 - 0.3	1			
Propineb 70%	Adult	0.25	1			
Pyraclostrobin 12.8 + Boscalid 25	Adult	0.04 - 0.075	1			
Sulphur + Copper -Spray	Adult	0.08	2			
Tebuconazole	Adult	0.05 - 0.1	1			
Tebuconazole 250g	Adult	0.075 - 0.1	1			
Tebuconazole 250g (Toledo)	Adult	0.075 - 0.2	1			

TARGET: ROOT DISEASE						
Active Ingredient	Beneficial Life Cycle Stage	Dosage (%)	Direct Spray	Indirect Spray	Residual Effects/Day	Sublethal Effect
Copper Sulphate + Potasphosphite	Adult	1%	1			
Fluazinam	Adult	0.05	1			
Fludioxonil	Adult	0.04 - 0.05	1			
Fludioxonil 100g/l	Adult	0.2	1			
Hymexazol	Adult	0.1	1			

Pencycuron 250g/l	Adult	0.5	1			
Pentachloronitrobenzene - Pc	Adult	1%	1			
Prochloraz Manganese 50%	Adult	0.1 - 0.2	1			
Propamocarb Hcl	Adult	0.15	1			
Tolclofos Methyl 50%	Adult	0.1 - 0.2	1			

Disclaimer

1. As part of its many years of operation, BioBee Sde Eliyahu Ltd. (the “**Company**”) has examined and continues to examine the effect of pesticides marketed in Israel (both conventional and organic) on the Company’s natural enemy arthropod products and/or bumblebee pollinators (the “**Beneficials**”). As a result, the Company holds information that includes lists of dozens of types of pesticides, by their active ingredients and their potential effect on various Beneficials, assuming no other pesticides were combined with the specific tested pesticides and no change was made to the composition of the ingredients, including the formulation concerning the pesticides listed on the date and in the territory that such pesticides were tested (the “**Information**”).
2. For the avoidance of any doubt, it is hereby clarified that the Information provided to the grower is purely an informative tool, aiming to assist the grower in combining the Beneficials with pesticides. It does not constitute a consultation or a warranty regarding the use of pesticides, their effect on the Beneficials and/or the pests.
3. In addition, it is hereby clarified that although the Company operates to update and strives to ensure that its lists are up to date, **it is possible that the composition of the ingredients, including the formulation of a particular pesticide, has been changed and/or updated without the Company’s knowledge. Furthermore, there might be changes in the composition of the ingredients of a particular pesticide, including its formulation, in different territories.** Therefore, it is further emphasized, that the grower shall be exclusively responsible and liable for any use of pesticides. This includes but not limited to, ensuring adherence to the manufacturer’s instructions as indicated on the pesticide labels (dosage, volume, etc.), ensuring that the person using the pesticides is qualified and has undergone adequate training, verifying that the pesticide is authorized for the local market and/or for export, verifying the period of time allowed to use a pesticide in the field before harvesting (harvest interval) and the period of time allowed before re-entry to the field after using the pesticide (re-entry period), etc.

4. The Company shall not bear any responsibility or liability whatsoever, for any use of the pesticide by the grower, and shall not be liable in any event for any damage of any kind, whether direct, indirect, consequential or incidental resulting from the grower's use of the pesticides, whether the pesticide was indicated in the Company's lists or not. The use of the Information is the sole responsibility of the grower. The Company does not recommend specific pesticide for use and explicitly states that the Information provided should not be considered as conclusive or binding in any manner.