

Insecticide rotations

Alternatives for rotation with Procide® and Crown®

The following table gives some common alternatives to Procide and Crown, their resistance group and the pests each is registered to treat in ornamentals.

Active	Procide Bifenthrin	Crown Acetamiprid	Dimethoate	Petroleum oil	Maldison	Bacillus thuringiensis	Imidacloprid
Poison schedule	S6	S6	S6	S5	S6	-	S5
Resistance group	3A	4A	1B	-	1B	11C	4A
Chemical group	pyrethroids	chloronicotinyls	organophosphates	-	organophosphates	B.t. kurstaki	chloronicotinyls
Two spotted mites	X		X	X	X		
Aphids	X	X	X	X	X		X
Caterpillars and loopers	X		X			X	
Corn earworm	X		X				
Native budworm	X		X			X	
Helicoverpa spp.	X		X			X	
Light brown apple moth	X		X			X	
Geranium plume moth	X		X				
Whitefly	X	X	X	X			
Mealy bug	X	X	X	X			X
Plague thrips	X	X	X	X	X		
Cutworm	X						
Fungus gnat		X					
Shore fly		X					
Azalea lace bug		X	X		X		X
Greenhouse thrips		X	X	X	X		X
Psyllids		X					X
Scale insects		X		X	X		X
Leafhoppers (Jassids)		X	X		X		
*Quarantine usage (to WA)	X						

To prevent resistance build up when using insecticides, it is a good idea to rotate the use of products with different resistance groups. Each resistance group comprises insecticides that have a particular mode of action.

The mode of action of each active ingredient is listed as a letter and/or number on the product label. The mode of action symbol looks like this:

GROUP	3A	INSECTICIDE
-------	----	-------------

This table is an indication only, please read the product label carefully for a complete list of diseases each product is registered to control.