## **Garden Pesticides**

NB When using Pesticides: ALWAYS READ & COMPLY WITH THE LABEL CONDITIONS AND INSTRUCTIONS FOR USE.

USE PESTICIDES SAFELY.

To protect pollinator insects do not spray plants in flower.

Continuing changes in the pesticide regulations, have led to the withdrawal of many garden pesticides. Some have been withdrawn for safety reasons but many more for commercial reasons. The garden market is often too small to justify the expensive approval process.

Prevention, cultural and natural controls are therefore becoming more important now that fewer pesticides are available and we are giving more consideration to not harming the environment, other organisms as well as ourselves. Choosing good quality plants, resistant varieties, maintaining good hygiene and helping the plant to strengthen its natural defences by optimising watering and feeding regimes are also key.

Encouraging natural enemies and introducing Biological controls are also becoming increasingly important. The RHS lists suppliers of biological controls for the gardener on its website: <a href="https://www.rhs.org.uk/advice/pdfs/biological-control-suppliers">https://www.rhs.org.uk/advice/pdfs/biological-control-suppliers</a>. It is important to remember that biological controls are living organisms so greater care (as instructed on the label) is required in their handling, storage and application to get the best results.

Pesticides still have their place but should only be used as a last resort if no other less harmful way to control the problem can be found. The following active ingredients are still approved for garden use as of 17 February 2021. To check if a product is currently approved go to <a href="https://secure.pesticides.gov.uk/garden/prodsearch.asp">https://secure.pesticides.gov.uk/garden/prodsearch.asp</a>

If you would like any further information on pesticides or alternative control measures please contact the States Analytical Laboratory on 227612 or see our factsheet "Common Garden Pests and Diseases in Guernsey & Their Control"

## **Fungicides:**

Chemical Name	*FRAC (+ IRAC) Group	Example of Trade Name (Other products may be available)	Mode of Action	Crops	Diseases controlled (CHECK PRODUCT LABEL)
Copper oxychloride	M01	Bayer Fruit & Vegetable Disease Control. Valtonex.	Contact & preventative	Table Grapes & Wine Grapes only	Downy mildew.
Myclobutanil & Cypermethrin (Insecticide)	3 (+3)	Bayer Multirose 2. Resolva Rose 3 in1. Westland Rose Rescue. Doff Rose Shield Bug & Fungus Killer. RoseClear Ultra Gun 2.	Systemic, protective, & curative.	Ornamental Garden Plants	Powdery mildew, blackspot, rust, scab, Pestalotiopsis.
Sulphur	M02	Mildew Clear for Edibles. FungusClear Ultra 2.	Protective	Broccoli/calabrese, carrot, celeriac, chicory root, combining pea, cucumber, gooseberry, horseradish, jerusalem artichoke, ornamental garden plants, parsley root, parsnip, radish, red beet, salsify, swede, table grapes (outdoor), turnip, vining pea, wine grapes (outdoor)	Powdery Mildew
Sulphur & fatty Acids	M02 (+ F4)	RoseClear 3 in 1 Action.	Protective / contact	Ornamental garden plants	Powdery mildew and pest control (fatty acids useful against aphid, whitefly, thrips, red spider mites, mealy bugs, leafhoppers and scale insect.)
Tebuconazole	3	Bayer Fungus Fighter Concentrate.	Systemic, protective, curative & eradicant	Ornamental Garden Plants & Houseplants (Phytotoxic to some Fuchsia varieties)	Broad spectrum including Leaf Spots, Rust, Powdery mildew, Blackspot, Box Blight.

Tebuconazole	3 (+3)	Multirose Concentrate	Systemic,	Ornamental Garden Plants	Broad spectrum including Leaf Spots,
&		2.	protective,	(Phytotoxic to some Fuchsia	Rust, Powdery mildew, Blackspot, Box
Deltamethrin			curative &	varieties)	Blight.
(insecticide)			eradicant		
Tebuconazole	3 & 11	Bayer Fungus Fighter	Systemic,	Ornamental Garden Plants,	Very Broad spectrum including Leaf
+		Plus.	protective,	(Phytotoxic to some Fuchsia	spots, Rust, Powdery mildew,
Trifloxystrobin			curative &	varieties), houseplants, protected	Blackspot, Box Blight, Pestalotiopsis.
		SBM Fungus Control &	eradicant	courgette, summer squash, &	
		Protect.		cucumber	
Trifloxystrobin	11	SBM Lawn Disease	Protectant,	Lawns	Fusarium Patch, Red
		Control	translaminar &		Thread
			some curative.		
Triticonazole	3	Fungus Clear Ultra	Systemic	Ornamental Garden Plants	Blackspot, Powdery mildew, rust, leaf
				(Phytotoxic to some Fuchsia	spot, Conifer Blight, Pestalotiopsis.
		Fungus Clear Ultra		varieties)	
		Gun			
Triticonazole +	3 (+4A)	Roseclear Ultra.	Systemic	Ornamental Garden Plants (outdoor)	General pest & disease Control
Acetamiprid		Roseclear Ultra Gun		(Phytotoxic to some Fuchsia	
(insecticide)				varieties)	
Urea/Foliar	Physical	SB Plant Invigorator.	Physical	Ornamental Garden Plants + Edibles	Powdery Mildew
Lattice/	action	Resolva Natural Power			
surfactants		Bug & Mildew.			
		RHS Bug & Mildew			
		Control			

### \*Reducing Pesticide Resistance

Numbers in the Group column indicate the fungicide group for each product. Where possible select products from different groups to reduce the risk of the fungus developing resistance. Due to the reduced number of fungicide products there are only 3 major groups available to gardeners. A fungus resistant to one group will be resistant to other fungicides in the same group. For example, a powdery mildew resistant to a fungicide based on myclobutanil will also be resistant to fungicides based on triticonazole.

# **Insecticides/Molluscicides:**

Chemical Name	*IRAC (+ FRAC) Group	Example of Trade Name (Other products may be available)	Mode of Action	Crops	Pests Controlled (CHECK PRODUCT LABEL)
Acetamiprid	4A	#Bug Clear Ultra Vine Weevil Killer (Drench). Bug Clear Ultra (Spray). RoseClear Ultra	Systemic, translaminar, contact, stomach poison (Neo- nicotinoid)	Ornamental Garden Plants & Houseplants  Fruit & Vegetables (see BugClear Ultra)	#As a drench for vine weevil grubs - only to be used on containerised ornamental plants.  Sprays control aphids, whitefly, scale insects, mealybugs and thrips and can also be used to reduce numbers of red spider mite, lily beetle and some caterpillars.  Bug Clear Ultra has approval for ornamental garden plants as well as certain fruit & Vegetables - apple (outdoor), aubergine (protected), cherry (outdoor), lettuce (outdoor), lettuce (protected), pear (outdoor), pepper (protected), plum (outdoor), potato (outdoor), tomato (protected) – ALWAYS CHECK THE LABEL.
Acetamiprid + Triticonazole	4A (+3)	Roseclear Ultra. Roseclear Ultra Gun.	Systemic	Ornamental Garden Plants (outdoor) (Phytotoxic to some Fuchsia varieties)	General Pest & disease control
Cypermethrin	3	Vitax Py Bug Killer. Doff Greenfly & Blackfly Killer.	Contact & stomach poison. Some residual activity	Some Brassicas, Potatoes & Ornamental Garden Plants. (Check the Label)	Broad spectrum general insecticide including flies, bugs, beetles, aphids and caterpillars.
Cypermethrin + Myclobutanil (Fungicide)	3 (+3)	Bayer Multirose 2. RoseClear Ultra Gun 2. Resolva Rose 3 in 1.	Contact & stomach poison. Some residual activity	Roses & Ornamental Garden Plants	Broad spectrum general insecticide including flies, bugs, beetles, aphids and caterpillars.

Deltamethrin	3	Bayer Provado Ultimate Bug Killer. Baby Bio Houseplant Bug Killer. Provanto Ultimate Fruit & Vegetable Bug Killer	Fast acting contact & stomach poison. Some residual activity	Ornamental Garden Plants, Fruit, Vegetables & herbs <b>as per label.</b>	General pest control including aphids, whitefly, caterpillars, codling moth, plum moth, tortrix moths, raspberry beetle, flea beetles, weevils, sawfly larvae, leaf sucker, apple and pear suckers, leafhoppers, capsid bugs, scale insects, thrips and mealybugs
Deltamethrin + Tebuconazole (Fungicide)	3 (+3)	Multirose Concentrate 2	Fast acting contact & stomach poison. Some residual activity	Ornamental Garden Plants	General pest control including aphids, whitefly, caterpillars, codling moth, plum moth, tortrix moths, raspberry beetle, flea beetles, weevils, sawfly larvae, leaf sucker, apple and pear suckers, leafhoppers, capsid bugs, scale insects, thrips and mealybugs
Fatty acids C7- C20 + Sulphur	F4 (+M02)	RoseClear 3 In 1 Action	Physical	Ornamental Garden Plants	Useful against aphid, whitefly, thrips, red spider mites, mealy bugs, leafhoppers and scale insect. Sulphur gives some protection against powdery mildew.
Ferric phosphate	N/A	Growing Success Slug Killer. Doff Super Slug Killer. B&Q Advanced Slug Killer. Blue Diamond Advanced Slug & Snail Killer.	Feeding disruption once ingested.	Edibles (around) & Non edibles (around) as per label	Slugs & snails
Flupyradifurone	4D	Provanto Smart Bug Killer	Systemic & contact	Outdoor apple, ornamental garden plants & Indoor/ protected aubergine, courgette, summer squash, cucumber house plant, ornamental garden plants, pepper and chilli, tomato.	Aphids, Hoppers, Whiteflies, Psyllids and some beetles.

Lamba- Cyhalothrin	3	Westland Resolva Bug Killer. Westland Plant Rescue Fruit & Vegetable Bug Killer.	Contact & stomach poison. Some residual & repellent activity	Wide range of Edibles & Ornamental Garden Plants as per label	General pest control including aphids, capsid bug, thrips, whitefly, beetles, caterpillars, pea moth, pea and bean weevil, sawflies, leaf curling midges, carrot fly adults and some other pests
Rapeseed Oil / Fish oils	N/A	Bug Clear Fruit & Veg. Fytomax PX. Vitax Plant Guard.	Physical	All Edibles & Non Edibles	General pest control – Aphid, Scale, Mealy Bug, Red Spider Mite, whitefly, thrips  Take Care when using on sensitive plants such as Fuchsia & Begonia, Cyclamen, Poinsettia, African Violet, Kalanchoe, Ferns, Ivy and open blooms where scorch is possible.
Pyrethrins	3	Greenpy Garden.	Contact, Non-persistent.	Ornamental Garden Plants	General pest control including aphid, whitefly, small caterpillars, sawfly larvae, asparagus beetle, thrips, leafhoppers, capsids. Also some activity against mites and other beetles.
Pyrethrins & Rapeseed Oil	3	Botanico Bugclear Spray. BugClear Ecomax. BugFree Bug and Larvae Killer.	Contact, Physical, non- persistent	Ornamental Garden Plants and some fruit & Vegetables (Pear, Apple, Kohlrabi) as per label	General pest control including aphid, whitefly, small caterpillars, sawfly larvae, asparagus beetle, thrips, leafhoppers, capsids. Also some activity against mites and other beetles.
Urea/Foliar Lattice / surfactants/ fatty acids	N/A	SB Plant Invigorator. Westland Resolva Natural Power Bug & Mildew	Physical action & nutrient boost for the plant.	All Edibles & Non Edibles	Aphids, whitefly, mealybug, scale, red spider mite, woolly aphid, Bay Sucker, Psyllids. Mildew

## \*Reducing pesticide resistance

Numbers in the Group column indicate the chemical group for each product. Select products from different chemical groups to reduce the risk of pest resistance. A pest resistant to one group will be resistant to all members of the group. For example, an aphid resistant to products based on Cypermethrin will also be resistant to products based on Deltamethrin.

Products without group numbers are less likely to induce pest resistance.

#### **Useful links**

SBM Life Science Ltd <a href="https://www.protect-garden.co.uk/product-search-19">https://www.protect-garden.co.uk/product-search-19</a>

Doff Portland Ltd <a href="https://www.doff.co.uk/">https://www.doff.co.uk/</a>

Evergreen Garden Care (UK) Ltd <a href="https://www.lovethegarden.com/uk-en">https://www.lovethegarden.com/uk-en</a>

Westland Horticulture Limited: <a href="https://www.gardenhealth.com/advice/pests-and-diseases">https://www.gardenhealth.com/advice/pests-and-diseases</a>

Vitax Ltd <a href="https://www.vitax.co.uk/">https://www.vitax.co.uk/</a>

RHS Website pages: <a href="https://www.rhs.org.uk/advice/profile?PID=506">https://www.rhs.org.uk/advice/profile?PID=506</a>

https://www.rhs.org.uk/advice/profile?pid=817

Common Sense Gardening <a href="https://garden-care.org.uk/">https://garden-care.org.uk/</a>

Agriculture & Horticulture <a href="https://gov.gg/article/152996/Agriculture--Horticulture#selectednavltem152742">https://gov.gg/article/152996/Agriculture--Horticulture#selectednavltem152742</a>

If you have any further questions please contact:-

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