

A summary of independent efficacy data for [Virkon S](#) against plant pathogens is shown below. Trial reports are available on request.

[Click](#) for more information on Virkon S's efficacy against animal and human viruses, bacteria and fungi.

Organism	Disease	Crop	Independent Report	Country	Effective Dilution
<i>Alternaria solani</i>	Early Blight	tomato	<a href="#">H13</a>	Canada	1:200
<i>Botrytis cinerea</i>	Grey Mould	several	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:200
<i>Botrytis cinerea</i>	Grey Mould	several	<a href="#">H5</a>	New Zealand	1:100
<i>Clavibacter michiganensis michiganensis</i>	Bacterial Canker	tomato	<a href="#">H2</a> , <a href="#">H15</a>	Belgium	1:800
<i>Clavibacter michiganensis michiganensis</i>	Bacterial Canker	tomato	<a href="#">H13</a>	Canada	1:500
<i>Clavibacter michiganensis michiganensis</i>	Bacterial Canker	tomato	<a href="#">H15</a>	Belgium	1:800
<i>Clavibacter michiganensis michiganensis</i>	Bacterial Canker	tomato, pepper	<a href="#">H4</a>	New Zealand	1:250
<i>Clavibacter michiganensis sepedonicus</i>	Bacterial Canker	potato	<a href="#">H10</a>	Finland	1:100
<i>Collectotrichum coccodes</i>	Black Dot Root Rot	tomato	<a href="#">H13</a>	Canada	1:200
<i>Colleotrichum acutatum</i>			<a href="#">H5</a>	New Zealand	1:100
<i>Didymella bryoniae</i>	Gummy Stem Blight	cucumber	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:200
<i>Didymella bryoniae</i>	Black Stem Rot	cucumber	<a href="#">H8</a>	Finland	1:50
<i>Epicoccum nigrum</i> spores	Grass Fungus	grass	<a href="#">H6</a>	New Zealand	1:200
<i>Erwinia amylovora</i>	Fireblight	apple	<a href="#">H4</a>	New Zealand	1:250
<i>Erwinia carotovora atroseptica</i>	Bacterial Stem Rot	tomato	<a href="#">H10</a>	Finland	1:100
<i>Fusarium moniliforme</i>	Fusarium Leafspot		73	USA	1:50
<i>Fusarium oxysporum lycopersici</i>	Fusarium Wilt	tomato	<a href="#">H13</a>	Canada	1:200
<i>Fusarium oxysporum radicis-lycopersici</i>	Fusarium Crown & Root Rot	tomato	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:200
<i>Fusarium solani</i>	Pepper Fruit and	pepper	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:500

	Stem Rot				
Fusarium solani	Pepper Fruit and Stem Rot	pepper	<a href="#">H7</a>	Japan	1:400
Fusarium solani	Pepper Fruit and Stem Rot	pepper	<a href="#">H5</a>	New Zealand	1:100
Geotrichum cutaneum			<a href="#">H7</a>	Japan	1:25
Penicillium italicum	Root rot	citrus	<a href="#">H9</a>	Finland	1:100
Penicillium italicum		citrus	<a href="#">H5</a>	New Zealand	1:100
Penicillium oxalicum	Penicillium Stem Rot	cucumber	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:100
Pepper Mild Mottle Virus	<i>fresh dried leaves and roots</i>	pepper	<a href="#">H1</a>	Holland	1:20
Pepper Mild Mottle Virus	<i>glass</i>	pepper	<a href="#">H1</a>	Holland	1:50
Pepper Mild Mottle Virus	<i>concrete</i>	pepper	<a href="#">H1</a>	Holland	1:20
Pepper Mild Mottle Virus	<i>knives</i>	pepper	<a href="#">H1</a>	Holland	1:50
Phomopsis sclerotinoides	Black Root Rot	cucumber	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:200
Phomopsis sclerotinoides	Black Root Rot	cucumber	<a href="#">H8</a>	Finland	1:50
Phytophthora cactorum		apples	<a href="#">H5</a>	New Zealand	1:100
Pithomyces chartarum		grass	<a href="#">H6</a>	New Zealand	1:100
Pithomyces chartarum spores		grass	<a href="#">H6</a>	New Zealand	1:400
Pseudomonas syringae	Bacterial Speck	pepper	<a href="#">H13</a>	Canada	1:500
Pseudomonas syringae syringiae	Bacterial Blast	plums, cherries	<a href="#">H4</a>	New Zealand	1:250
Pseudomonas solanacearum	Brown rot	apples	<a href="#">H15</a>	Belgium	1:800
Pseudomonas solanacearum	Bacterial wilt	potatoes	<a href="#">H15</a>	Belgium	1:800
Pseudomonas viridiflava	Bud Rot	kiwi fruit	<a href="#">H4</a>	New Zealand	1:250
Pyrenochaeta lycopersici	Corky Root Rot	tomato	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:200
Pythium aphanidermatum	Pythium Damping-off	several	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:500
Pythium sp	Pythium Damping-off	several	<a href="#">H8</a>	Finland	1:50
Rhizoctonia solani	Rhizoctonia damping off	several	<a href="#">H13</a>	Canada	1:200
Sclerotinia sclerotiorum	White Mould	several	<a href="#">H13</a> , <a href="#">H12</a>	Canada	1:200

Thielaviopsis basicola	Root Rot	tomato	<a href="#">H14</a>	Canada	1:500
Verticillium dahliae	Verticilium Wilt	tomato	<a href="#">H13</a>	Canada	1:500
Verticillium dahliae	Verticilium Wilt		<a href="#">H8</a>	Finland	1:50
Xanthomonas campestris	Bacterial Spot	cabbage	<a href="#">H13</a>	Canada	1:500
Xanthomonas campestris	Bacterial Spot	cabbage	<a href="#">H11</a>	Canada	1:100

To determine the minimum effective dilution of Virkon against a range of common greenhouse bacterial and fungal pathogens the following independent work was performed by Agriculture Canada in Harrow, Ontario. The results indicate that for most practical purposes a dilution rate of 1:200 (0.5%) of [Virkon S](#) is effective.

	<i>Virkon S dilution</i>	1:400	1:200	1:100
		Fungus growth	% of check	
Botrytis cinerea	Botrytis Grey Mould	15.7	0.5	0
Didymella bryoniae	Gummy Stem Blight	2.5	0	0
Fusarium oxysporum radices-lycopersicae	Fusarium Crown and Root Rot	20.4	0	0
Fusarium spp	Fusarium Stem Rot (peppers)	10	0	0
Penicillium oxalicum	Penicillium Stem Rot	29.6	2.7	0
Phomopsis sclerotinoides	Cucumber black root rot	1.3	0	0
Pyrenochaeta lycopersici	Tomato corky root rot	24.4	0	0
Pythium aphanidermatum	Pythium root rot	0	0	0
Sclerotinia sclerotiorum	White mould	30.5	0	0

	Virkon S dilution	1:400	1:200	1:100
Alternaria solani	Early Blight	++	-	-
Botrytis cinerea	Gray Mould	0.002	-	-
Clavibacter michiganensis f.sp michiganensis	Bacterial Canker	-	-	-

Colletotrichum coccodes	Black Dot Root Rot	++	-	-
Didymella bryoniae	Gummy Stem Blight	0	-	-
F. oxysporum f.sp radice-lycopersici	Fusarium Crown & Root Rot	++	-	-
F. oxysporum f.sp. lycopersici	Fusarium Wilt	++	-	-
Fusarium solani	Pepper Fruit & Stem Rot	+	-	-
Penicillium oxalicum	Penicillium Stem Rot	++	+	-
Phomopsis sclerotoides	Black Root Rot	0	-	-
Pseudomonas syringae	Bacterial Speck	-	-	-
Pyrenochaeta lycopersici	Corky Root Rot	++	-	-
Rhizoctonia solani	Pythium Damping off	++	-	-
Sclerotinia sclerotoides	White mould	++	-	-
Verticillium dahliae	Verticillium Wilt	-	-	-
Xanthomonas campestris	Bacterial Spot	-	-	-

+++ growth comparable to check plate

++ growth beyond inoculum, but less than check

+ growth confined to inoculum

- no growth