

SUMMARY: The efficacy of fungicides to inhibit the growth of mycelium of cranberry fruit-rot pathogens, at minimum and maximum recommended label rates in 500 L or maximum rate in 200 L, in comparison to the growth of the pathogens in the absence of fungicides; the results were presented in a colour coded scale, from highly effective to not effective. The efficacy of fungicides to inhibit the germination of spores of cranberry fruit-rot pathogens, at minimum and maximum recommended label rates in 200L water, was presented in a colour coded scale, from inhibition to no

FRAC Group	Fungicide	Fruit Rot Pathogens																								
		Inhibition of Mycelial Growth										Inhibition of Spore Germination														
		<i>Allantophomopsis lycopodina</i>	<i>Botrytis cinerea</i>	<i>Coleophoma empetri</i>	<i>Colletotrichum acutatum</i>	<i>Colletotrichum gloeosporioides</i>	<i>Fusicoccum putrefaciens</i>	<i>Glomerella cingulata</i>	<i>Phomopsis vaccinii</i>	<i>Phyllosticta elongata</i>	<i>Physalospora vaccinii</i>	<i>Allantophomopsis lycopodina</i>	<i>Botrytis cinerea</i>	<i>Coleophoma empetri</i>	<i>Colletotrichum acutatum</i>	<i>Colletotrichum gloeosporioides</i>	<i>Fusicoccum putrefaciens</i>	<i>Glomerella cingulata</i>	<i>Phomopsis vaccinii</i>	<i>Phyllosticta elongata</i>	<i>Physalospora vaccinii</i>					
Gp. M	Bravo (chlorothalonil)																									
	Copper 53W (copper sulphate)																									
	Cueva (copper octanoate)																									
	Guardzman (copper oxychloride)																									
	Kocide (copper hydroxide)																									
	Maestro (captan)																									
Gp. 3	Fullback (flutriafol)																									
	Funginex (triforine)																									
	Indar (fenbuconazole)																									
	Inspire (difenoconazole)																									
	Proline (prothioconazole)																									
	Tilt / Topas (propiconazole)																									
Gp. 4	Fontelis (penthiopyrad)																									
Gp.7	A19649B / Adepidyn (pydiflumetofen)																									
	Aprovia (benzovindiflupyr)																									
	Kenja (isofetamid)																									
	Sercadis / Xemium (fluxapyroxad)																									
Gp. 9	Scala (pyrimethanil)																									
	Vangard (cyprodinil)																									
Gp. 11	Evito (fluoxastrobin)																									
	Flint (trifloxystrobin)																									
	Quadris (azoxystrobin)																									
Gp. 12	Medallion / Scholar (fludioxonil)																									
Gp. 17	Elevate (fenhexamid)																									
Gp. 19	OSO (Polyoxin D)																									
Gp. 33	Aliette (fosetyl-AI)																									
Biological	Regalia Maxx (<i>Reynoutria</i> sp. extract)																									
	Timorex Gold (Tea tree oil)																									

highly effective
moderately effective
less effective
not effective

inhibition at either rate
inhibition at maximum rate
no inhibition
data not available

inhibition.

CONCLUSIONS

Inhibition of mycelial growth (Table X):

- Fungicides **Copper 53W**, **Cueva** and **Kocide** of group M, **Fullback**, **Funginex**, **Inspire**, **Proline** and **Tilt** of group 3, **Aprovia** of group 7, and **Aliette** of group 33 were highly effective at inhibiting the mycelial growth of fruit-rot pathogens.
- Fungicides **Bravo**, **Guardzman** and **Maestro** of group M, **Indar** of group 3, **Scala** and **Vanguard** of group 9, and **Medallion (Scholar)** of group 12 were highly effective at inhibiting the mycelial growth of most cranberry fruit-rot pathogens, but were moderately to less effective at inhibiting the mycelial growth of one or a few cranberry fruit-rot pathogens, depending on the fungicide.
- Fungicides **Fontelis** of group 4, **A19649B (Adepidyn)** of group 7, **Elevate** of group 17, and **OSO (Polyoxin D)** of group 19 were highly effective at inhibiting the mycelial growth of a few cranberry fruit-rot pathogens, but moderately to less effective at inhibiting the mycelial growth of most cranberry fruit-rot pathogens.
- **Quadris** of group 11 was moderately to less effective at inhibiting the mycelial growth of all cranberry fruit rot pathogens.
- Fungicides **Kenja** and **Sercadis (Xemium)** of group 7, **Evito** and **Flint** of group 11, and the biological fungicides **Regalia Maxx** and **Timorex Gold** were less or not effective at inhibiting the mycelial growth of most cranberry fruit-rot pathogens, but moderately effective in inhibiting the mycelial growth of one or two cranberry fruit-rot pathogens.

Inhibition of spore germination (Table X):

- Fungicides **Copper 53W** of group M, **Funginex** and **Inspire** of group 3, and **Aprovia** of group 7 were effective at inhibiting the germination of spores of fruit rot pathogens at both minimum and maximum rates.
- Fungicides **Bravo**, **Cueva**, **Kocide** and **Maestro** of group M, **Fullback**, **Proline**, and **Tilt (Topas)** of group 3, and the biological fungicide **Timorex Gold** were effective at inhibiting the germination of spores of most cranberry fruit-rot pathogens, but were only effective at the maximum rate for one or a few fruit-rot pathogens.
- **Scala** and **Vanguard** of group 9 were effective at inhibiting the germination of spores of some cranberry fruit-rot pathogens, but not others.
- Fungicides **Guardzman** of group M, **Indar** of group 3, **Fontelis** of group 4, **A19649B (Adepidyn)**, **Kenja**, and **Sercadis (Xemium)** of group 7, **Evito**, **Flint**, and **Quadris** of group 11, **Medallion (Scholar)** of group 12, **Elevate** of group 17, **OSO (Polyoxin D)** of group 19, and the biological fungicide **Regalia Maxx** were not effective at inhibiting the germination of spores of most or all cranberry fruit-rot pathogens.