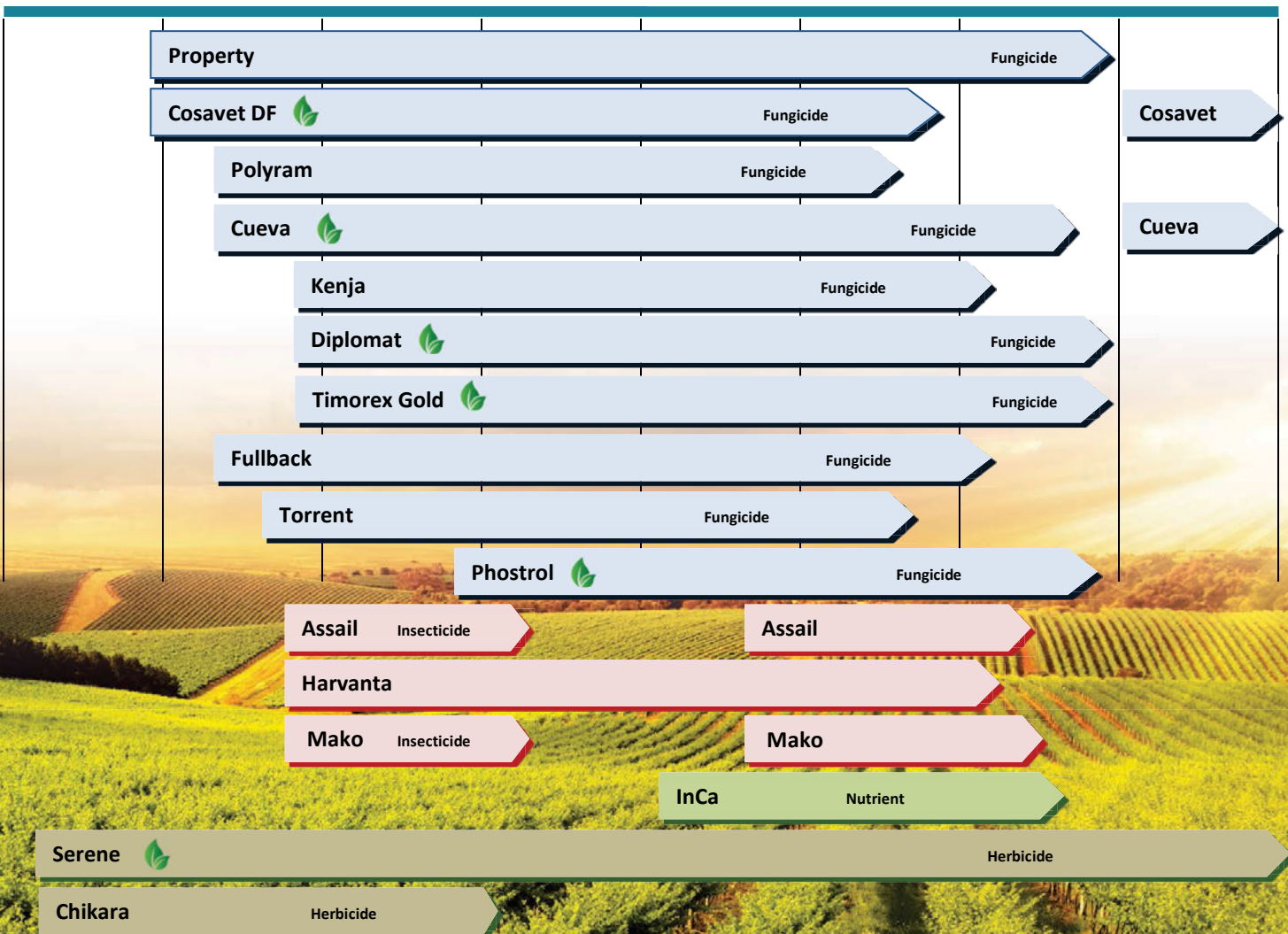
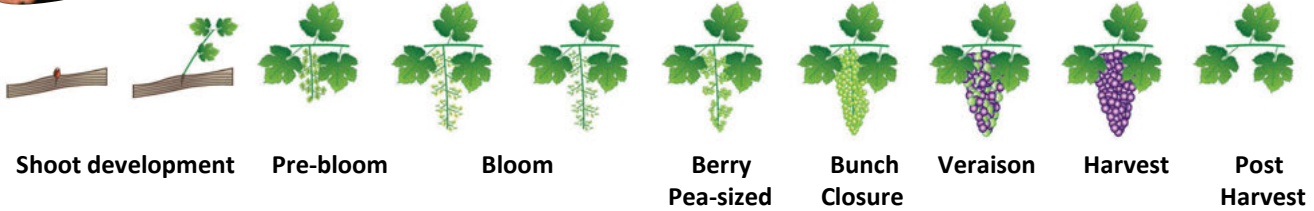



GRAPE PROTECTION GUIDE



Disease Solutions for Grapes

Pest Common Name	Pest Scientific Name	Product	Active Ingredient	Pesticide Group	PHI (Days)	REI	Rain fast	Rate
Black rot	<i>Guignardia bidwellii</i>	Polyram DF	Metiram	M2	45	12 hr.	n/a	2.00 kg / ha
Botrytis bunch rot	<i>Botrytis cinerea</i>	Diplomat 	Polyoxin D Zinc Salt	19	0	4 hr.		463 – 926 m. / ha
		Kenja	Isofetamid	7	14	12 hr.	2 hr.	1.46 – 1.61 L / ha
Downy mildew	<i>Plasmopara viticola</i>	Phostrol 	Mono and dibasic sodium, potassium & ammonium	33	0	4 hr.		2.9 - 5.8 L / ha
		Timorex Gold 	Tea tree extract	46	2	4 hr.		3 L / ha in 600 – 1500 L water
		Cueva 	Copper Octanoate	M1	1	4 hr.		0.5 – 2% solution in 470 – 940 L / ha
		Polyram DF	Metiram	M2	45	12 hr.	n/a	2 kg / ha
		Torrent	Cyazofamid	21	30	12 hr.		150 – 200 ml / ha in at least 400 L water
Powdery mildew	<i>Uncinula necator</i>	Cosavet DF 	Sulphur	M	21	24 hr.	n/a	12.60 kg / ha
		Timorex Gold 	Tea tree extract	46	2	4 hr.		1 - 2 L / ha in 600 – 1500 L water
		Cueva 	Copper Octanoate	M1	1	4 hr.		0.5 – 2% solution in 470 – 940 L / ha
		Diplomat 	Polyoxin D Zinc Salt	19	0	4 hr.		259 – 926 m. / ha
		Fullback	Flutriafol	3	14	See label	2 hr.	585 – 731 ml / ha
		Property	Pyriofenone	50	0	See Label		300 – 366 ml / ha


Insect Solutions for Grapes

Pest Common Name	Pest Scientific Name	Product	Active Ingredient	Pesticide Group	PHI (Days)	REI	Rate
Spotted wing drosophila	<i>Drosophila suzukii (Matsumura)</i>	Harvanta	Cyclapryn	28	7	12 hr.	1.2 – 1.6 L / ha
Omnivorous leafroller (suppression)	<i>Platynota stultana</i>						
Western flower thrips (suppression)	<i>Frankliniella occidentalis</i>						
Grape berry moth	<i>Paralobesia viteana</i>	Assail 70 WP	Acetamiprid	4	5 (hand harvest) 3 (machine harvest)	See label	80 grams / ha
Grape phylloxera	<i>Dactylosphaera vitifoliae</i>						
Japanese beetle	<i>Popillia japonica</i>						
Leafhoppers	Various						
Multicolored asian lady beetle	<i>Harmonia axyridis</i>	Mako	Cypermethrin	3	2 to 7	See label	150 ml / ha
Yellow jackets	<i>Vespula; Dolichovespula</i>	Mako	Cypermethrin	3	2 to 7	See label	150 ml / ha
Grape erineum mite	<i>Colomerus vitis</i>	Cosavet DF 	Sulphur	M	21	24 hr.	3.40 kg / ha

Nutrition + Specialty Solutions for Grapes

Product Use	Product	Active Ingredient	Rate
Nutrition	InCa	Calcium	1 - 1.5 L / ha

Herbicide Solutions for Grapes

Product Use	Product	Active Ingredient	Recommendations	REI	PHI	Rate
Weed control	Serene 	Acetic Acid	For use in established vineyards. Avoid direct or indirect spray contact with crop foliage	0 days	0 days	Full Strength – 5 L / 70 m ² or 717 L / ha 1:2.25 Dilution – 1.5 L / 69 m ² in 3.4 L water or 220 L / ha in 500 L water 1:3 Dilution – 1.25 L / 69 m ² in 3.75 L water or 180 L / ha in 234 L water
Weed control	Chikara	Flazasulfuron	For best results apply early spring in vineyards established at least 3 years.	12 hr.	75 days	150 -200 grams / hectare in 150 – 450 Litres of water

Always refer to the product labels for complete details and directions for use.

 Reduced toxicity to minimize ecological impact