

Getting Biologicals Right

ASVO Viti Seminar, Mildura 2026

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The Bud Group

Getting Biologicals Right

Type

Timing

Technique





Serifel Biofungicide

ACTIVE CONSTITUENT: 110 g/kg ($>5.5 \times 10^{10}$ CFU/g) *Bacillus amyloliquifaciens* strain MBI600

GROUP **44** FUNGICIDE



GROUP **BM 02** FUNGICIDE

For the control of *Botrytis cinerea* in grapes and strawberries

BM: Biologicals with Multiple Modes of Action



GROUP BM01

BM 01: plant extract

phenols,
sesquiterpenes,
triterpenoids,
coumarins

polypeptide
(lectin)

terpene
hydrocarbons,
terpene
alcohols, and
terpene
phenols

GROUP BM02

BM 02: microbial

(strains of living microbes or extract, metabolites)

Fungal
Clonostachys
spp.

Fungal
Coniothyrium
spp.

Bacterial
Bacillus spp.

Bacterial
Erwinia spp.
(peptide)

Fungal
Hanseniaspora
spp.

Fungal
Talaromyces
spp.

Bacterial
Gluconobacter
spp.

Bacterial
Pseudomonas
spp.

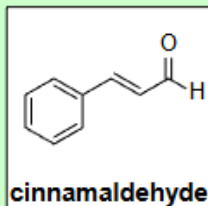
Fungal
Trichoderma
spp.

Fungal
Saccharomyces
spp.

Bacterial
Streptomyces
spp.

Protozoal
Willaertia spp.

GROUP BM03



BM 03 : purified metabolites from plant or microbial sources or synthetic versions of these metabolites

Common names are described in FRAC code list

Active constituent	Activity group	Some registered products	Export harvest interval
BOTRYTIS BUNCH ROT - Review resistance management strategy on page 16			
eugenol, geraniol, thimol	BM01	Novellus	Use no later than 14 days before harvest.
BLAD	BM01	ProBlad, ProBlad Verde	Use no later than 7 days before harvest.
<i>Aureobasidium pullulans</i>	BM02	Botector	May be used until harvest.
<i>Bacillus amyloliquefaciens</i>	BM02	Serenade Opti, Serifel	

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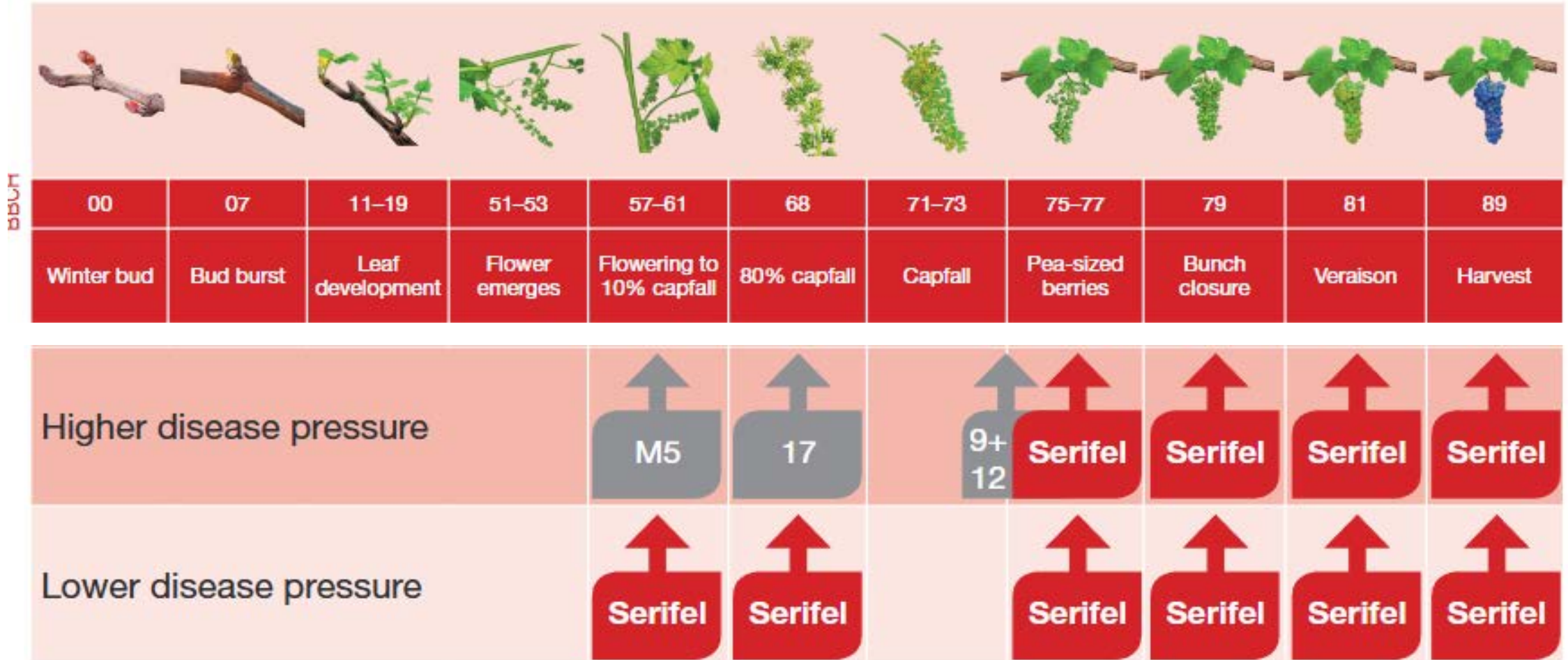
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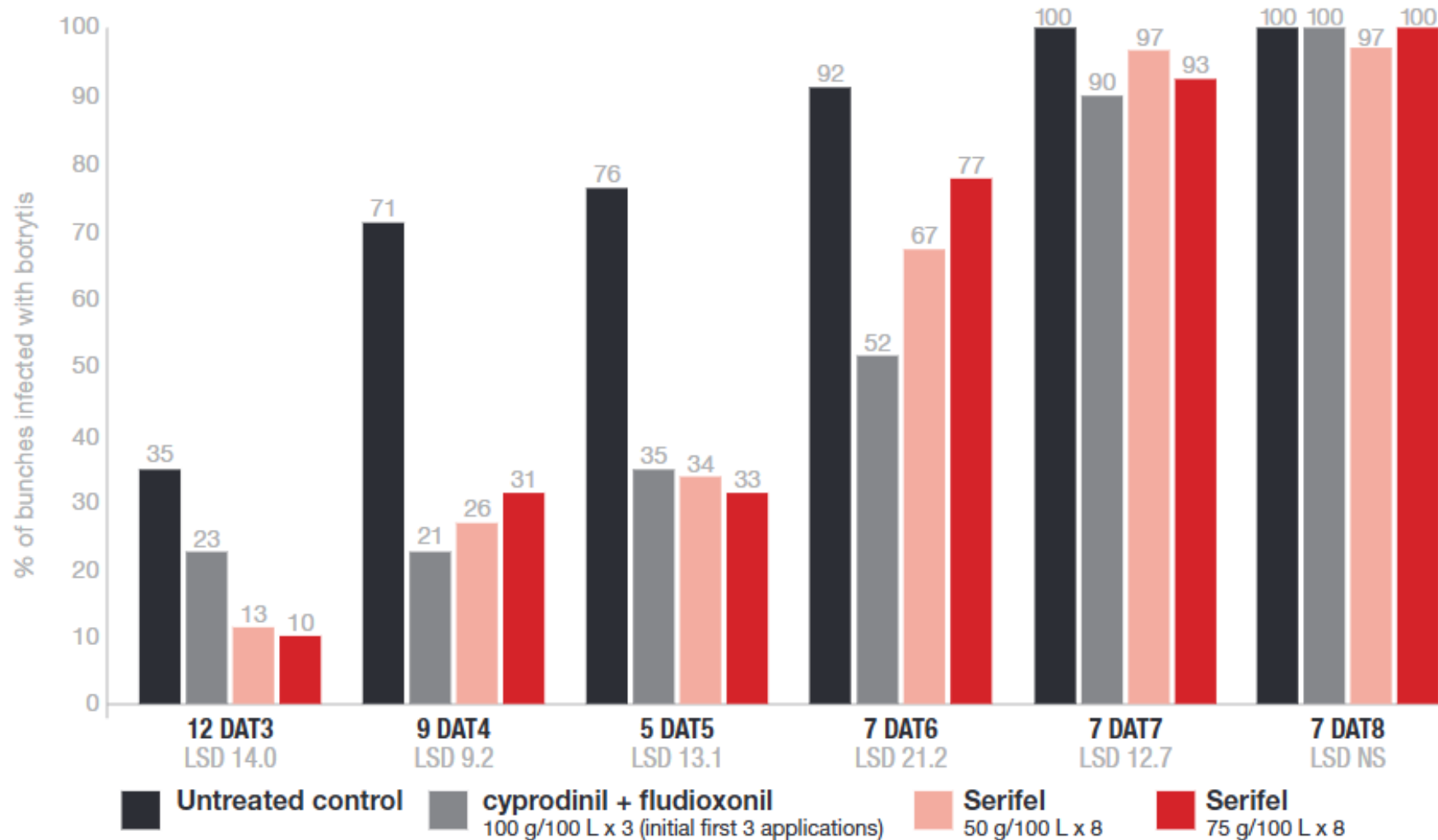


Timing



SERIFEL IN GRAPES – TRIAL DATA

High disease pressure in chardonnay grapes



DAT = days after treatment LSD - least significant difference NS = not significant

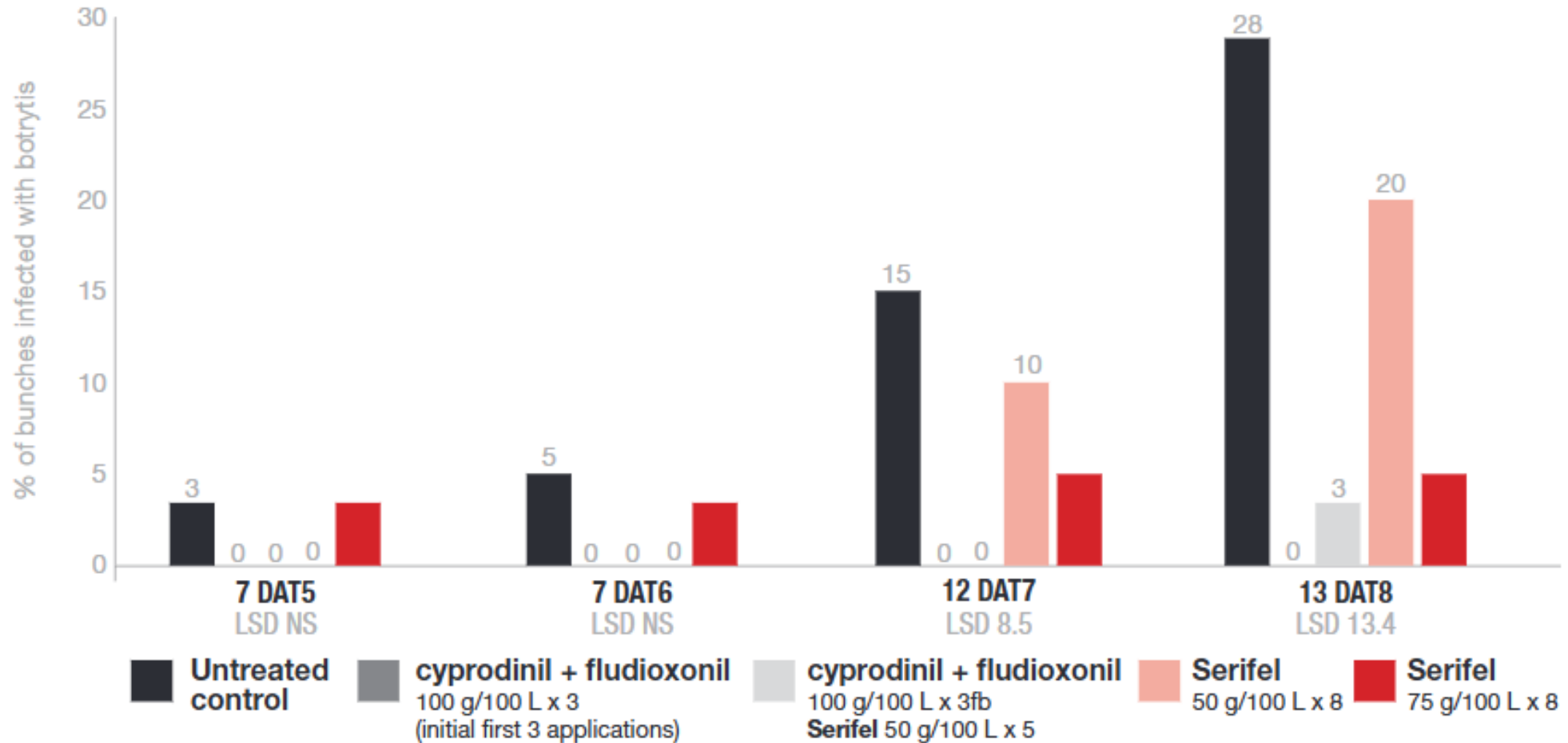
Eurofins Agrisearch Blewitt Spring SA 2013–2014.
Chardonnay grapes sprayed at 1000 L/ha water volume.
8 applications from BBCH 61 (10% capfall)

Serifel Biological Fungicide Technical guide

<https://crop-solutions.basf.com.au/products/serifel>

SERIFEL IN GRAPES – TRIAL DATA

Lower disease pressure in chardonnay grapes



DAT = days after treatment LSD - least significant difference NS = not significant

Eurofins Agrisearch Blewitt Spring SA 2013–2014
Chardonnay grapes sprayed at 1000 L/ha water volume
8 applications from BBCH 61 (10% capfall)

Serifel Biological Fungicide Technical guide

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	Botector <i>Aureobasidium pullulans</i> <div style="background-color: #ADD8E6; border-radius: 10px; padding: 5px; display: inline-block;">BM02</div>	Serifel <i>Bacillus amyloliquefaciens MBI600</i> <div style="background-color: #ADD8E6; border-radius: 10px; padding: 5px; display: inline-block;">BM02</div>	Serenade Opti <i>Bacillus amyloliquefaciens QST 713</i> <div style="background-color: #ADD8E6; border-radius: 10px; padding: 5px; display: inline-block;">BM02</div>	Novellus <i>Eugenol + geraniol + thymol</i> <div style="background-color: #90EE90; border-radius: 10px; padding: 5px; display: inline-block;">BM01</div>	ProBlad Verde <i>BLAD protein, Lupinus albus</i> <div style="background-color: #90EE90; border-radius: 10px; padding: 5px; display: inline-block;">BM01</div>
Type	Living coloniser. Competitive exclusion.	Dormant spore. Germinates on leaf, then lipopeptides.	Pre-formed lipopeptides + spore. Barrier spray.	Plant extract fungicide. Disrupts cell walls, membranes, organelles.	Contact, preventive fungicide. Multi-site.
Temperature	< 25 °C optimum	> 15 °C 25-45 °C ideal	-	-	-
Humidity	> 70 % RH enhances	> 90 % leaf-surface water	-	-	-
Rainfall	24 hr rainfast	~3 hr rainfast	-	No application if rain forecast next 24 hr	2-4 hr drying. Reapply if significant rain in next 12 hr.
Tank pH	-	5.4 - 6.8	5.0 - 6.0	-	> 6

Get it right with these
four key questions:

1. Canopy – fruit access?
2. Weather before?
3. Weather after?
4. Time until harvest?

