Science For A Better Life

International blackcurrant conference 2016

Bayer solutions for blackcurrant in the United Kingdom

Dorin Pop, Ashford, Kent, 14-16 June 2016

Agenda

- Current Bayer solutions
- Future Bayer solutions
- *Phomopsis*
- *Dropsophila suzukii*

Current Bayer solutions

Fungicides

- TELDOR® (MAPP 11229)
- SERENADE® ASO (EAMU-20130706 and EAMU-20150306)

Insecticides

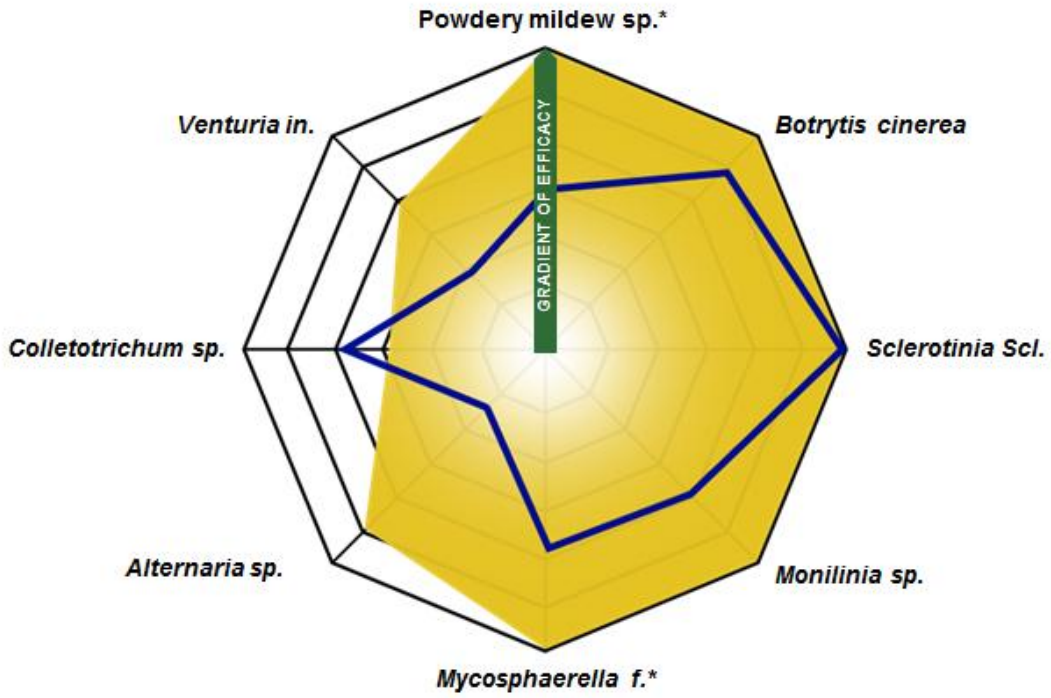
- caLypso® (EAMU-20142133)
- MOVENTO® 2 SYS 150OD formulation (EAMU-20121401 – note 365 day PHI)
- envidor® (EAMU-20161000)

Herbicides

- ARTIST® (EAMU-20152968)

Future Bayer solutions (fungicides)

- Fluopyram + trifloxystrobin 500SC
- Disease control requested: Botrytis, Powdery mildew, Blackcurrant leaf spot



Fluopyram level of disease control from 100 g* to 250 g ai/ha

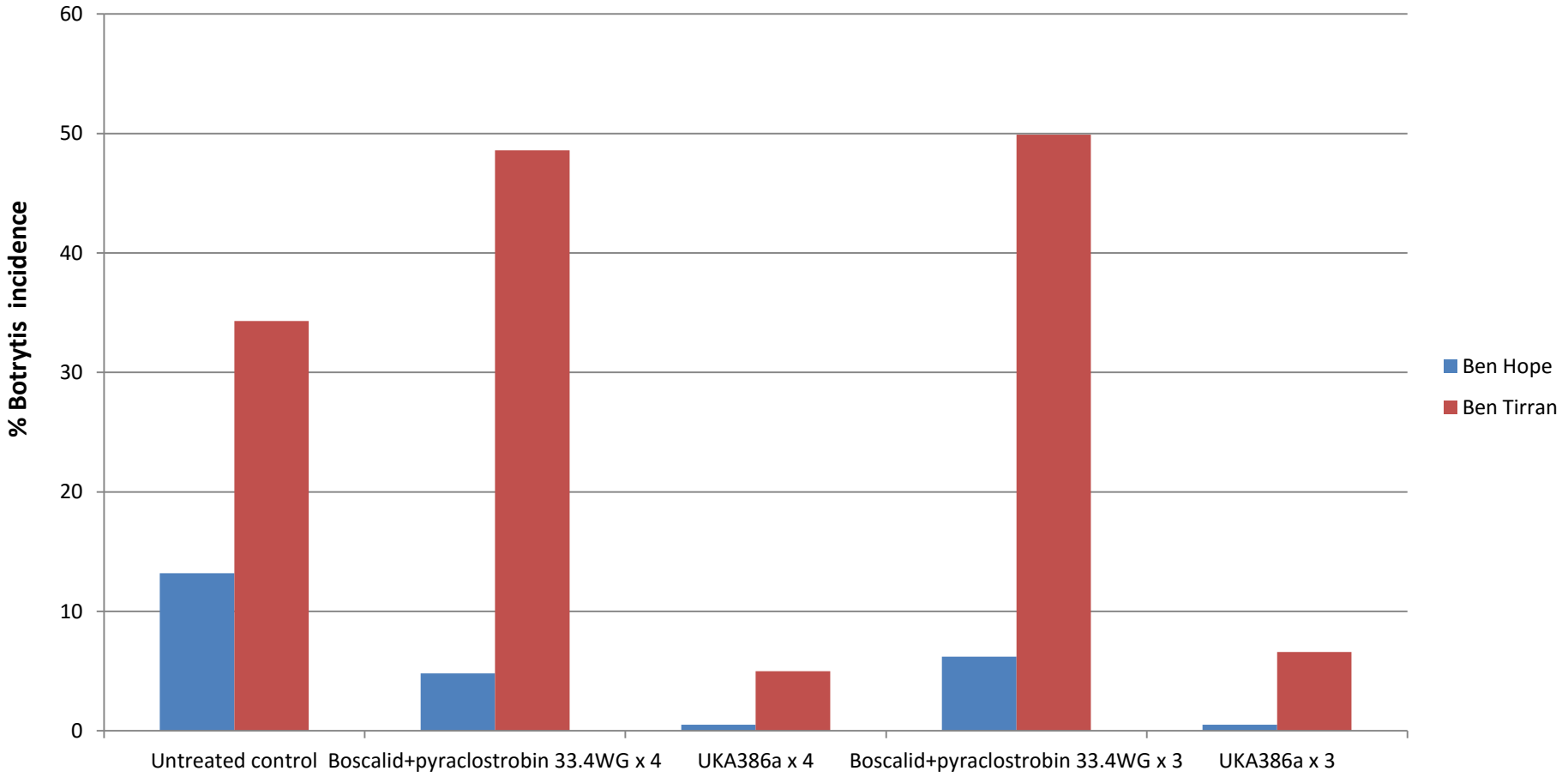
Boscalid level of disease control from 150 g to 600 g ai/ha

Scale 0 - 6
(6 = darker
= excellent efficacy)

Source: Data taken from a range of trials

*This fungicide is not currently authorised; authorisation is being sought from CRD. Use plant protection products safely. Always read the label and product information before use.

Botrytis efficacy results with fluopyram + trifloxystrobin 500SC (UKA386a) in HL01105 (Developing biocontrol methods and their integration in sustainable pest and disease management in blackcurrant production-Link project 2012 report)



water volume=500L/ha
3 or 4 sprays at 7-10 day intervals from 1st open flower

Trial conducted by East Malling (Dr.Angela Berrie)

*This fungicide is not currently authorised; authorisation is being sought from CRD. Use plant protection products safely. Always read the label and product information before use.

RESTRICTED

Future Bayer solutions (insecticides)

- Spirotetramat 100SC
- Pest control requested: aphids, scale, gall mite and spider mite

- Unique two-way systemicity reaches new growth that hasn't been directly sprayed
- Active substance spirotetramat kills hidden and hard-to-target pests
- Safe to beneficials – an excellent IPM choice
- Suitable for a wide range of fruit crops

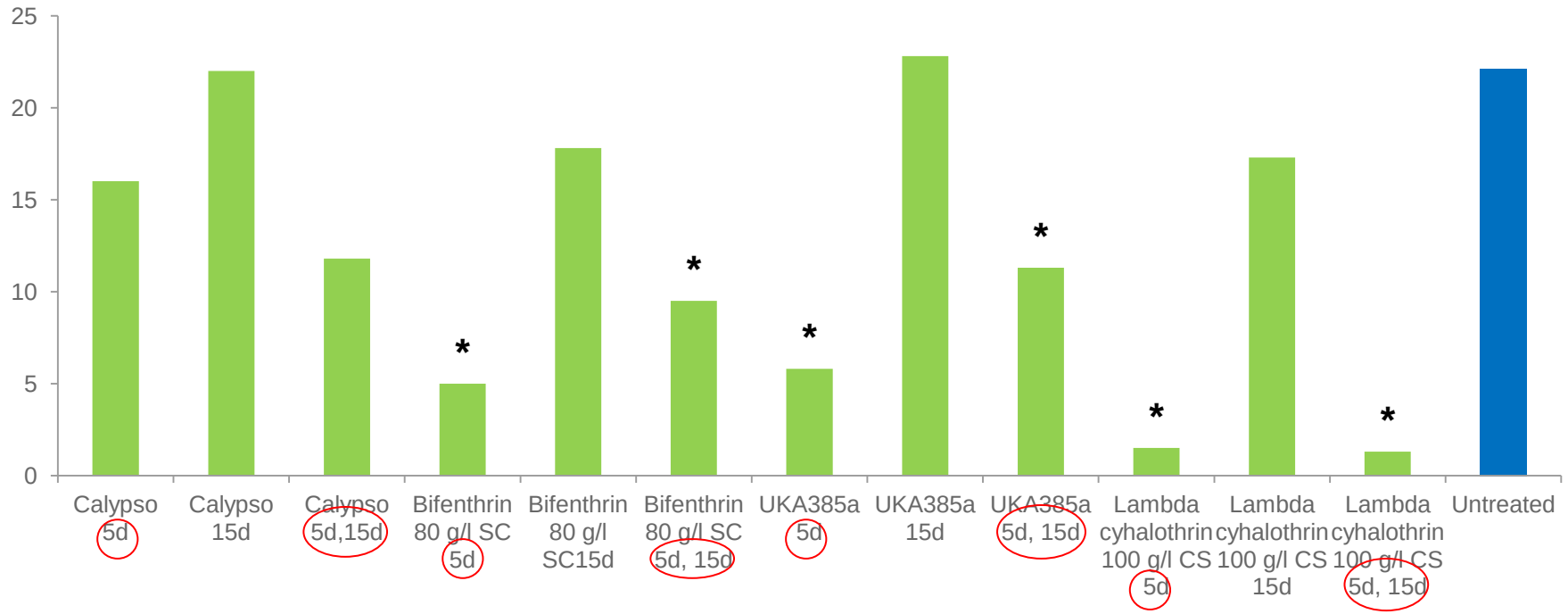
*This insecticide is not currently authorised; authorisation is being sought from CRD. Use plant protection products safely. Always read the label and product information before use.

Leaf midge(*Dasineura tetensi*) efficacy results with spirotetramat 100SC (UKA385a) part of Link Project **HL01105** (Developing biocontrol methods and their integration in sustainable pest and disease management in blackcurrant production-2011 report)

Assessment done 8 days after the 1st spray

Trial conducted by East Malling (prof. Jerry Cross)

number of leaves damaged 5th May

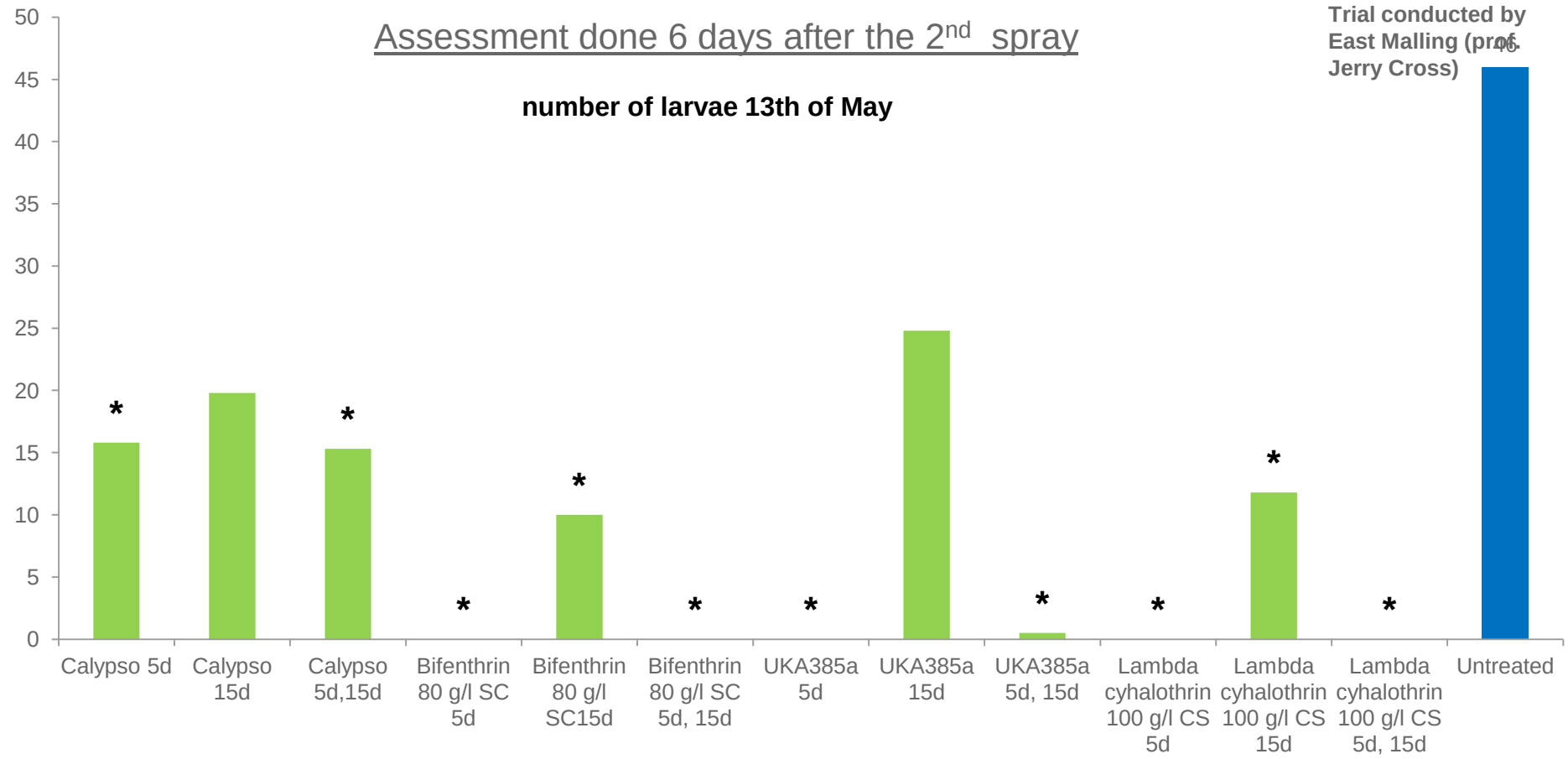


Bars that are significantly (P ≤ 0.05) less than the untreated control in a simple one way ANOVA are marked with an asterisk

*This insecticide is not currently authorised; authorisation is being sought from CRD.
Use plant protection products safely. Always read the label and product information before use.

RESTRICTED

Leaf midge(*Dasineura tetensi*) efficacy results with spirotetramat 100SC (UKA385a) part of Link Project **HL01105** (Developing biocontrol methods and their integration in sustainable pest and disease management in blackcurrant production-2011 report)



Bars that are significantly (P ≤ 0.05) less than the untreated control in a simple one way ANOVA are marked with an asterisk

*This insecticide is not currently authorised; authorisation is being sought from CRD. Use plant protection products safely. Always read the label and product information before use.

RESTRICTED

Timing of spirotetramat 100 SC(UK385a) application for the control of blackcurrant gall mite (*Cecidophyopsis ribis*) 2012 HDC (SF 12-230)

Mean numbers of galls recorded at each assessment *= significantly different from the control.

Treatment				Mean no. galls/plot (n=30)		Mean no. galls/plot/plant Plant(n=30)		Rate of gall no. increase
Trt	Product	Date	Growth stage	28-May	15-Nov	28-May	15-Nov	
1	UKA385a	1 Jun	Early green fruit	119.6	304.0	4.49	11.69	*2.56
2	UKA385a	3 Jul	Late green fruit	134.6	317.2	5.06	11.92	*1.92
3	UKA385a	10 Aug	Pre-harvest	71.8	558.4	2.66	21.15	6.49
4	UKA385a	5 Sep	Post-harvest	119.8	623.2	4.50	24.34	5.31
5	UKA385a	10 Oct	Post-harvest	97.8	670.6	3.47	24.13	7.54
6	Untreated			115.4	749.0	4.01	26.19	7.39

Total numbers of mites per gall in 7 categories recorded in November from 10 galls per plot 50 galls per treatment.

			Numbers of mites within a gall						
Trt	Product	Date	0	1-3	4-10	11-30	31-100	101-300	301-1000
1	UKA385a	1 Jun	0	0	0	0	0	0	50
2	UKA385a	3 Jul	3	0	0	0	0	0	47
3	UKA385a	10 Aug	0	0	0	2	13	13	23*
4	UKA385a	5 Sep	0	0	0	0	0	0	50
5	UKA385a	10 Oct	0	0	0	0	0	0	50
6	Untreated		0	0	0	0	0	0	50

Blackcurrant: *Phomopsis* control

UK work: FERA, ADAS (with GSK) 2010-2014

SERENADE ASO

✚ **SF012 (GSK223)** FERA 2010-11

"Branch dieback in blackcurrant: identification and control of potential pathogens, including the fungus Phomopsis"

- Later reports refer to this work showing **significant control** of *Phomopsis* ***in-vitro*** from Serenade

✚ **SF102 (GSK226)** ADAS 2012-13

"Blackcurrants: Control of Phomopsis dead arm in flailed down plantations"

- No Serenade included in testing ?

✚ **SF142** FERA 2013-14

"Phomopsis dieback of blackcurrants - methodology development and control "

- **Confirmed** SF012 *in-vitro* results: Serenade at as low as 0.001ml/L agar inhibited *Phomopsis* development (= 1ml in 1000L)

✚ **Commercial applications in 2014**

- Difficult to measure effect

Dropsophila suzukii- **attract and kill**

Science For A Better Life

Thank you!

Contact details: dorin.pop@bayer.com