













12-14th September 2022 Swansea, Wales

# **NEW IPM**

International Symposium and Networking Event

# Conference Programme































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### Exhibitor Layout – Taliesin Arts Centre



- 1) Coastal Alliance
- 2) S&P Global Insights
- 3) n/a
- 4) Agrifutur
- 5) Biobest
- 6) Russell IPM
- 7) iFormulate
- 8) Pelsis
- 9) Norsk Wax
- 10)Lallemand

- 11- 18) Poster Presentations and Burleigh Dodds Publishing
- 19) i2L Research
- 20) CERTIS
- 21) Zimmer and Peacock
- 22) Crop IQ
- 22) Razbio
- 23) BioHUB
- 24) Fargro

### **Conference Session Topics**

Session Number	Session Title	Chair
1	IPM - Challenges and Solutions	Professor Jon West (Rothamsted Research)
2	IPM – New Products and Strategies	<b>Dr Farooq Shah</b> (Swansea University, RAZBIO)
3	Botanicals, Semiochemicals, Pest Monitoring, Orchard and Field Crop IPM	<b>Dr Owen Jones</b> (Lisk & Jones Consultants Ltd)
4	Microbial BCAs	<b>Dr David Hunter</b> (Consultant to ADB)
5	Remote Sensing and UAVs	Professor Peter North (Swansea University)
6	Computational Science Applications to Pest Management	<b>Dr Will Allen</b> (Swansea University)
7	Registration and Future of Macrobials	<b>Dr Caroline Reid</b> (IBMA)
8	Multifunctional Microbes- Endophytes, Growth/Resilience Stimulants	<b>Dr Steve Edgington</b> (CABI UK)
9	Formulations	<b>Dr Jim Bullock</b> (iFormualte)
10	Decision Making and Long-term Planning for successful IPM	<b>Dr Khalid Mahmood</b> (Rothamsted Research)
11	Concluding Session	Dr Steve Arthurs (BioBee)

### Sunday 11<sup>th</sup> September

16.00	19.00	Registration Open, Taliesin Arts Centre
18.00	21.00	Welcome Reception, Taliesin Arts Centre, sponsored by

# Monday 12<sup>th</sup> September

8.45	9.00	Welcome and housekeeping (Lecture Theatre)	g – Taliesin Arts Centre
9.00		Session 1: "IPM Challenges and Some Chair: Professor Jon West (Rothands)	
9.00	9.25	Dr Owen Jones (Lisk & Jones Ltd) IPM overview: Challenges and Solut	ions.
9.25	09.50	<b>Dr David Hunter</b> (ADB Consultant) <b>intervention and reduced chemical</b>	-
09.50	10.15	Mark Whittaker (APIS) Regulatory science – a misnomer?	
10.15	10.35	Jennifer Lewis (IBMA Global) Challenges and opportunities for IPI offer?	M – what does the European Green Deal
10.35	11.00	Refreshments ar	nd Networking Break
11.00		Session 2: Lecture Theatre "IPM new products and strategies" Chair: Dr Farooq Shah (Swansea University, RAZBIO) Different strategies need to be designed for different pest species. However, some principles can be extended across crop type/sectors.	"Botanicals, Semiochemicals, Pest monitoring, orchard and field crop IPM" Chair: Dr Owen Jones (Lisk & Jones Consultants Ltd) Substantial progress has been made in the development of pheromones and other behaviour-modifying chemicals. This session focuses on use of semiochemicals in pest monitoring and control programmes.
11.00	11.20	Arben Myrta (Certis Belchim, Netherlands) Bionematicides in European Union; opportunities and challenges.	Nayem Hassan (Russell IPM, UK) Advances in semiochemicals; sustainable monitoring and control strategies for economically important insects.
11.20	11.40	Matthew Back (Harper Adams University, UK) Selection of cover crops for the suppression of plant parasitic nematodes and fungal pathogens.	Adriana Escudero (IRTA, Spain) Area-wide management of codling moth and oriental fruit moth in fruit crops in Catalonia, NE Spain.
11.40	12.00	Carlo Malavolta (Regione Emilia- Romagna, Italy)	<b>Pierre-Antoine Bourdon</b> (Swansea-Certis, UK)

		Emilia-Romagna Region experience in application of IPM and integrated production.	Fumigation of wireworms and corn rootworm using 3-octanone and 1-octen-3-ol and its isomers.
12.00	12.20	Kate Pollard (Cabi Europe, UK) The biological control of Himalayan balsam in the UK.	Ben Clunie (Swansea University, UK) Bioactivity of essential oils against wireworms and their potential as bioprotectants in potato crops.
12.20	12.40	Sam Cook (Rothamsted Research, UK) Developing a new IPM strategy for cabbage stem flea beetle in oilseed rape.	Neil Ward (Biobest, UK) Ecosystem of monitoring tools.

12.40	14.00	Lunch and Networking	Break – Taliesin Arts Centre
14.00		Session 4: Lecture Theatre "Microbial BCAs" Chair: Dr David Hunter (ADB) Many strains of microbes have or are being commercialised as plant protection products, biostimulants or biofertilizers. Some are used alone or as part of IPM strategies. Many strains continue to be discovered, several proving to be more efficacious than current products. However, are there companies interested in exploiting these newly discovered strains?	Session 5: The Mall  "Remote sensing & UAVs"  Chair: Professor Peter North  (Swansea University)  Remote sensing and UAVs play an increasing important role in pest monitoring and control. Together with semiochemicals they provide early warning systems that allow growers to take informed and timely action.
14.00	14.20	Hermann Strasser (University of Innsbruck, Austria) Biological control of soil-dwelling pests with endophytic entomopathogenic fungi – progress and perspective.	Rocío Hernández-Clemente (University of Córdoba, Spain) Remote sensing detection of Phytophthora using airborne hyperspectral and thermal imagery: lessons learned from the European outbreaks.
14.20	14.40	Meelad Yousef (University of Córdoba, Spain)  Metarhizium brunneum is a cornerstone in the IPM of tephritid fruit flies: a case study of olive fruit fly.	Sara Sharifzadeh (Swansea University), UK). Remote Sensing Data and Time-Series Analysis Strategies: Potential Opportunities and Challenges
14.40	15.00	Peter Lüth (Toothpick Company Ltd, Kenya) Seed treatment to control Striga hermonthica.	Luis Muir (Aberystwyth University, UK) Evaluation of UAV imagery and metabolite analysis of growing potato

crops to monitor the effectiveness of late blight bioprotectants.

15.00	15.20	Norman Carreck (Carreck Consultancy Ltd, UK) Honeybees: an effective vector to deliver beneficial microbes to control pests and a target for IPM for varroa control.	Gary Llewellyn (2excel, UK) Monitoring invasive weeds and plant pathogens.
15.20	15.40	Gloria Romero (University of Asunción, Paraguay) Combined use of biological controlling agents and insecticide for the control of Ysau (Atta sexden rubropilosa).	Steve Arthurs (Biobee, USA) Applying beneficial insects and mites by drone for large scale application in field crops: experiences from the USA.
15.40	16.00	Shafqat Saeed (University of Agriculture, Pakistan)  IPM of cotton: a ray of hope in Pakistan.	Jon West (Rothamsted Research, UK) Remote sensing and diagnostic assay methods to enhance crop protection.
16.00	16.15	Eduardo Tapia Rodriguez (Institute of Agricultural Research, Chile) Use of Microbials for the IPM of Lobesia botrana in Chile.	Martin Peacock (Zimmer and Peacock, UK) Biosensors for Precision Farming and Horticulture.
16.15	16.30	Maria Zottele (University of Innsbruck, Austria) New approach to control white grubs on steep slopes and in special crops: Melocont <sup>TM</sup> and Granmet <sup>TM</sup> liquid application with the MMexit.	

16.30

Refreshments (Posters and stands) Taliesin Arts Centre

Thank you to



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## Tuesday 13<sup>th</sup> September

8.45	9.00	Welcome and housekeeping (Lecture Theatre)	– Taliesin Arts Centre
9.00		Session 6: Lecture Theatre "Computational Science Applications to Pest Management" Chair: Dr Will Allen (Swansea University) Computer science is playing an increasing role in pest management programmes; trap design, screening of semiochemicals, pest identification etc. It will play an even larger role in the future, especially when managing large areas or overseas farms.	"Registration and future of macrobials" Chair: Dr Caroline Reid (IBMA) The registration of macrobial products is a necessary part of the route to market. However, the industry needs to work together to ensure that the process is pertinent and consistent.
9.00	9.20	Clare Sampson (Russel IPM, UK) Truepest <sup>TM</sup> , a SMART monitoring tool for counting and identifying spotted wing drosophila, <i>Drosophila</i> suzukii, and whitefly, <i>Trialeurodes</i> vaporariorum on sticky traps.	Martin Wohlfarter (Koppert, Netherlands) The danger of regulating macrobials out of IPM: new policies risk increasing registration approval timeframes and threaten achieving pesticide-use reduction goals.
9.20	9.40	Alex Dearden (Swansea University, UK) Using visual modelling to improve pest management products: a Western flower thrips case study.	Jana Collatz (Agroscope, Switzerland) Regulation of macro-organisms for biological control in Switzerland.
9.40	10.00	Farooq Shah (Razbio Limited, UK) Computational and Genomic analysis for semiochemicals screening – Western Flower Thrips lure development as a case study.	Aino-Maijo Alanko (Finnish Food Authority) Ten years of regulation of macro- organisms used in biological control and pollination in Finland.
10.00	0 10.20	Vassili Kouvelis (NKUA, Greece) Risk assessment of fungal BCAs and their secondary metabolites using genomics.	Caroline Reid – Update on harmonisation of IBCA regulations within Europe.
10.20		Joel Loveridge (Swansea University, UK) A drug design approach to IPM?	
10.30	0 11.00	Refreshments ar	nd Networking Break

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11.00		Session 8: Lecture Theatre  "Multifunctional Microbes- Endophytes, growth/resilience stimulants"  Chair: Dr Steve Edgington  (CABI UK)	Session 9: The Mall "Formulation" Chair: Dr Jim Bullock (iFormulate)
11.00	11.20	Frédéric Francis (University of Liege, Belgium) Role of microbes in multitrophic interactions: from fundamental approaches to biopesticide conception.	Alan Bullion (S&P Global Commodity Insights, UK) The Market for Biocontrol Agents and Growth Opportunities through IPM.
11.20	11.40	Meelad Youssef (University of Córdoba, Spain) Multitrophic interactions mediated by Meterhizium brunneem to control Spodoptera.	David Calvert (iFormulate, UK) Formulation and its Potential for Improving IPM practices.
11.40	12.00	Martyn Wood (Swansea University, UK) <i>Metarhizium brunneum</i> as a bio stimulant of commercially important angiosperms and gymnosperms.	Anna Higley (CRODA, UK) Optimising bioprotection products through innovative formulation design.
12.00	12.20	Shumaila Rasool (Institute of Ecology, Netherlands) Unravelling plant-fungus alliances, a step towards sustainable pest control.	Rob Elias (Bangor University) Approaches to help decarbonise food production: bioplastic formulations for crop protection and the development of bioactive compounds.
12.20	12.40	Ibtissem Fekih (University of Liège, Belgium) Assessment of entomopathogenic fungi in a multitrophic network context to promote sustainable alternatives to neonicotinoids.	Linda Muskat (University of Bielefeld, Germany)  Development of attract and kill formulations for biological psyllid pest control.
12.40	13.00	Ivan Dubovsky (University of Novosibirsk, Russia) Growth-promoting effect of entomopathogenic fungi and bacteria on potatoes.	Session round-up: Jim Bullock

13.00	14.10	LUNCH and Networking break
14.10		Session 10: Lecture Theatre
		"Decision Making and long-term planning for successful IPM"
		Chair: Dr Khalid Mahmood (Rothamsted Research)

14.10	14.30	Steve Edgington (CABI, UK) Supporting biopesticide decision making amongst female coffee farmers in Colombia.	
14.30	14.50	Anthony Suragge (Fargro, UK) Post-registration barriers to success with plant protection products.	
14.50	15.10	Silva Sulg (University of Life Sciences, Estonia) Spatiotemporal distance between oilseed rape fields reduces Ceutorhymnchus obstrictus pressure while providing biocontrol.	
15.10		Session 11: Lecture Theatre  "Future advances and opportunities for the biopesticides sector and greater inter-disciplinary research to accelerate development of innovative products and strategies for use in IPM"  Chair: Steve Arthurs (BioBee)	
15.10	15.30	<b>Dr Willem Ravensberg</b> (Regulatory & Governmental Affairs Advisor, Koppert, NL) <b>Understanding, safeguarding and trusting microorganisms as the backbone of healthy crops.</b>	
15.30	16.00	Andrea Williams and David Lang (Marks & Clerk) Protecting innovations in agritech space with intellectual property.	
16.00	16.10	New-IPM: Closing Remarks Professor Tariq Butt (Swansea University) and Dr Ian Baxter (IBMA UK)	
16.10		Refreshments / Posters and stands	
18.30	23.00	BANQUET at the Great Hall – Bay Campus	
19.00	23.00	Sponsored by  Russell IPM i2L Research	

Conference dinner and speeches (serving at 19.30)







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#### WEDNESDAY 14 SEPTEMBER 2022 | MERCHER 14 MEDI

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Prifysgol Abertawe Swansea

#### **AGENDA**

- 09:30 Registration | Cofrestru
- 10:00 Welcome, Jess Hughes, Swansea University Croeso, Jess Hughes, Prifysgol Abertawe
- 10:10 Regional Support for Research and Innovation, Simon Ripton, Welsh Government Cymorth Rhanbarthol ar gyfer Ymchwil ac Arloesi, Simon Ripton, Llywodraeth Cymru
- 10:30 UK Support for Research and Innovation engagement and collaboration: David Cunnah, Innovate UK & Nannette Bartram, Innovate UK Edge Cymorth y DU ar gyfer ymgysylltu a chydweithio ag Ymchwil ac Arloesi: David Cunnah, Innovate UK & Nannette Bartum, Innovate UK Edge
- 11:00 Introduction to Horizon Europe: Helen Sweeny, Horizon Europe Cyflwyniad i Horizon Europe, Helen Sweeny, Horizon Europe
- 11:20 Horizon Europe in detail: Yvonne Vermonden, Nehem, Horizon Europe Horizon Europe yn fanwl, Yvonne Vermonden, Nehem, Horizon Europe
- 11:50 Break & Networking: Taliesin Exhibition Space Seibiant a Rhwydweithio, Gofod Arddangos Taliesin
- 12:20 Horizon Europe continued: Helen Sweeny, Horizon Europe Parhaodd Horizon Europe, Helen Sweeny, Horizon Europe
- 13:00 Funding to Support Bid Development: Gareth Llewellyn, Welsh Government Cyllid i Gefnogi Datblygu Cynigion, Gareth Llewellyn, Llywodraeth Cymru
- 13:10 Lunch/ Networking Cinio/ Rhwydweithio
- 14:10 Development of the Project Idea: Yvonne Vermonden, Nehem, Horizon Europe Datblygu Syniad y Prosiect, Yvonne Vermonden, Nehem, Horizon Europe
- 14:50 Next Steps Camau Nesaf
- 15:00 Closing remarks: Professor Tariq Butt, Swansea University Sylwadau i glo, Prif Athro Tariq Butt, Prifysgol Abertawe

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