

**Sunday, April 23, 2023**

Number in  
Session

17:00-19:00

**Arrival, Registration**

19:30-22:00

**Welcome Reception with Evening Buffet**

**Monday, April 24, 2023, Morning**

08:00

**Opening**

**Prof. Dr. Holger B. Deising**

**Abstract ID**

**Session 1a: New Fungicides**

**Chair: Dr. Gerd Stammler**

08:30	8	von Tiedemann, A.	<b>Keynote 1:</b> Will we still need, have and use fungicides in twenty years?	1
09:00	9	Thines, E.	<b>Keynote 2:</b> Natural products as lead structures for agrochemicals: is there anything to be discovered?	2
09:30	22	Hufnagl, A.	AdavelTM active (florylpicoxamid), a new broad spectrum picolinamide fungicide	3
09:50	5	Olaya, G.	Sensitivity of more than 35 Pythium species to the new fungicide Picarbutrazox	4
10:10	80	Steinberg G.	Azoles mode of action- it is different from what we thought	5

10:30

**Coffee**

**Abstract ID**

**Session 1b: New Fungicides - New Tools for Disease Control**

**Chair: Dr. Helge Sierotzki**

10:50	<b>Keynote</b>	Talbot, N.	<b>Keynote 3:</b> NN	1
11:20	84	Boutton, C.	EVOCA, the first biofungicide developed by Biotalys' AGROBODY Foundry™ platform.	2
11:40	24	Conrath, U.	Priming plants for enhanced defense	3
12:00	48	Beckers, G.	Novel priming-inducing near-natural compounds: from the lab to the field	4
12:20	21	López Laguna, A.	The potential of the RNAi strategy in the control of Botrytis cinerea in horticultural crops	5

12:45

**Lunch**

**Monday, April 24, 2023, Afternoon**

**Abstract ID**

**Session 2a: Molecular mechanisms of fungicide resistance**

**Chair: Prof. Dr. Holger B. Deising**

13:45	<b>Keynote</b>	Liu, X.	<b>Keynote 4:</b> Activity and Resistance-Related Point Mutation in Target Protein ORP1 of the OSBPI fungicides in Phytophthora spp.	1
14:15	17a	Matsuzaki, Y.	DETECTION OF SDHC –I87F IN CEREAL LEAF RUSTS	2
14:35	19	Hoffmeister, M.	A rare event of QoI resistance in Pyrenophora teres could be caused by an interspecific partial cytochrome b gene transfer by Pyrenophora tritici-repentis	3
14:55	63	Turo, C.	Fungicide resistance evolution driven by transposable elements in Pyrenophora teres f. teres	4

**15:15**

**Coffee**

**Session 2b: Molecular mechanisms of fungicide resistance**

**Chair: PD Dr. Erich-Christian Oerke**

15:35	59	Lopez-Ruiz, F.	Interspecific hybridisation, intragenic recombination and clonal expansion as a new fungicide resistance evolutionary mechanism in plant pathogenic fungi	1
15:55	52	Bolton, M.	CbCyp51 mediated DMI resistance is modulated by codon bias	2
16:15	65a	Sofianos, G.	Unravelling the frequencies and molecular mechanisms of Multiple and Multidrug Resistance in Botrytis cinerea	3
16:35	116	Barber, A.	Antifungal Resistance in the One Health Context: Lessons from Aspergillus fumigatus	4

17:00-18:30

**Poster Demonstration**

for details see below

**Tuesday, April 25, 2023, Morning**

**Abstract ID**

**Session 3: Fungicide resistance: Mechanisms and diagnosis**

**Chair: Dr. Bart Fraaije**

08:00	37	Kleemann, J.	Portable Genotyping Analysis Platform (PGAP) – a novel approach to monitor fungicide resistance mutations from anywhere using Oxford Nanopore Sequencing	1
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08:20	25a	Cherrad, S.	New insights from long read sequencing to explore variants of <i>Plasmopara viticola</i> involved in resistance to complex III inhibitors, zoxamide and oxathiapiprolin in field populations.	2
08:40	27	Hilz, E.	Fluopicolide Mode of Action Elucidation	3
09:00	31	Huf, A.	Occurrence and distribution of CYP51 haplotypes of <i>Zymoseptoria tritici</i> in recent years in Europe	4
09:20	38	Stilgenbauer, S.	New insights into the evolution of DMI sensitivity of <i>Phakopsora pachyrhizi</i>	5
09:40			Coffee	
	<b>Abstract ID</b>		<b>Session 4: Fungicide resistance: Mechanisms, diagnosis, predictions</b> <b>Chair: Dr. Gerd Stammler</b>	
10:00	10	Scalliet, G.	<b>Keynote 5:</b> Predicting resistance	1
10:30	44	Patry-Leclaire, S.	Large scale screen of potential MDR isolates in contemporary Z.t. populations reveals genotypic and phenotypic diversity suggesting multiple molecular mechanisms involved in MDR field strains	2
10:50	45	Zulak, K.	Exploiting long read sequencing to detect fungicide resistance mutations in <i>Pyrenophora teres</i> species	3
11:10	47	Puccetti, G.	The complex genetic landscape of fungicide resistance evolution in <i>Zymoseptoria tritici</i>	4
11:30	54	Derpmann, J.	SDHI cross-resistance pattern of <i>Erysiphe necator</i> field genotypes and consequences for Grape Powdery Mildew control	5
11:50	88	Hsiang, T.	Naturally occurring propiconazole-tolerant fungal isolates in the phyllosphere of <i>Agrostis stolonifera</i>	6
12:10	50	Wyatt, N.	Temporal Population Dynamics of <i>Cercospora beticola</i> Fungicide Resistance	7
12:30		Carstensen, C.	Important Information on Publication of Symposium Reader, partly in Journal of Plant Diseases and Protection	
12:45			Lunch	
14:00-22:00			Bus leaves at hotel for <b>Excursion to Weimar</b>	

**Wednesday, April 26, 2023, Morning**

Abstract ID			<b>Session 5: Resistance monitoring</b>	
			<b>Chair: Dr. Andreas Mehl</b>	
08:00	41	Borghi, L.	Fungicide sensitivity profiling of European oomycete populations	1
08:20	49	Cornetti, L.	The evolutionary history of Zymoseptoria tritici sensitivity to DMI and SDHI fungicides	2
08:40	55	Nanni, I.M.	Monitoring and tracking changes in sensitivity to zoxamide fungicide in Plasmopara viticola in Italy	3
09:00	73	Hodgson, L.	Regionalized spatial distribution and spatial dependency of demethylase inhibitor fungicide resistance	4
09:20	76	Schnabel, G.	Sensitivity of Monilinia fructicola isolates from southeastern peach orchards to propiconazole and thi	5
09:40	82	Gelain, J.	Outbreak of post-harvest sour rot on peach associated with point mutation in CYP51B gene	6
10:00	7a	Stammler, G.	Current update on the fungicide sensitivity of Erysiphe necator (grape powdery mildew) in Europe	7

10:20

Coffee

Abstract ID			<b>Session 6a: Fungicide resistance risk assessment and management</b>	
			<b>Chair: Prof. Dr. Holger B. Deising</b>	
10:40	12	Jørgensen, L.N.	<b>Keynote 6:</b> Practical disease management in cereals – a historic view, including hurdles with fungicides resistance and a future with more specific IPM	1
11:10	43	Toffolatti, S.	The management of grapevine downy mildew from antiresistance strategies to innovative approaches for fungicide resistance monitoring	2
11:30	39	Khan, M.	Doing what is right is more economical than doing what is easy for managing C. beticola in sugar beet	3
11:50	53	Miles, T.	A FRAMEwork for managing fungicide resistance in grapes	4
12:20	62	Paveley, N.	Choice of resistance management tactics: how flexible should we be?	5
12:40	101	Adaskaveg, J.	New fungicides for managing Phytophthora diseases of tree crops include foliar and soil applications	6

13:00

Lunch

**Wednesday, April 26, 2023, Afternoon**

Abstract ID			<b>Session 6b: Fungicide resistance risk assessment and management</b>	
			<b>Chair: Dr. Helge Sierotzki</b>	
14:00	14	Burnett, F.	<b>Keynote 7:</b> Achieving more with less: The Challenge of getting greater impact from our anti-resistance strategies	1
14:30	81	Kildea	Managing ramularia leaf spot of barley in Ireland post chlorothalonil	2
14:50	42a	Walker, A.S.	Limiting Resistance by Alternating or Mixing Fungicides? Resistance Status Trumps both Management Strategies	3
15:10	42b	Walker, A.S.	Antagonistic Pleiotropic Effects Reduce Adaptation in a Major Wheat Pathogen	4
15:30	24	Siepe, I.	Just one at a time: Fungal population experiments with Zymoseptoria tritici and metyltetraprole demonstrate the incompatibility of different cytochrome B mutations	5
15:50	<b>Coffee</b>			

Abstract ID			<b>Session 6c: Fungicide resistance risk assessment and management</b>	
			<b>Chair: Dr. Andreas Mehl</b>	
16:10	23	Ishii, H.	Sequence analysis of pathogen dihydroorotate dehydrogenase (DHODH), the target enzyme of the novel fungicides ipflufenquin and quinofumelin	1
16:30	56	Neugebauer, K.	Assessing fungicide resistance and management of late season cluster rots in Michigan wine grapes	2
16:50	58	Mair, W.	Succinate dehydrogenase inhibitor fungicide resistance emerges in Australian populations of Pyrenophora teres f. teres and P. teres f. maculata	3
17:10	74	Torriani, S.	How to manage soybean diseases and resistance evolution in Brazil	4
17:30	68	Kaur, H.	Management of botrytis blight in ornamental flowers with calcium propionate	5

**Thursday, April 27, 2023, Morning**

Abstract ID			<b>Session 7: Fungicide resistance modelling</b>	
			<b>Chair: Dr. Bart Fraaije</b>	
08:00	64	Cosseboom, S.	CRISPR-enabled investigation of fitness costs associated with $\beta$ -tubulin E198A in Colletotrichum siamense	1
08:20	70	Hawkins, N.	Assessing the predictability of resistance evolution through in vitro selection	2

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08:40	61	Streit, S.	FarmerSpace – a trial field for digital crop protection in sugar beet production	3
09:00	40 a/b	Laborde, M.	The potential influence of increasing air temperature on fungicide efficacy level	4
09:20	28	Matyjaszczyk, E.	The EPPO Database on Resistance Cases	5
09:40	36	Corkley, I.	Modelling Resistance Management Benefits of Diversity within a Fungicidal Mode of Action with Incomplete Cross-resistance: The Azoles Example	6
10:00			Coffee	7
	<b>Abstract ID</b>		<b>Session 8: Bio-rational fungicides / biocontrol</b>	
			<b>Chair: PD Dr. Erich-Christian Oerke</b>	
10:20	91	Pfordt, A.	Trichoderma afroharzianum – A new pathogen in maize	1
10:40	2	Deising, H.B./ Devasahayam, B.R.	Are microbial biological control agents (MBCAs) consumers' friends or foes?	2
11:00	69	Schmitt, A.	Ways forward in copper reduction - strategies developed in RELACS	3
11:20	67	Beesley, A.	Tailoring coumarin biosynthesis for an improved crop protection	4
11:40	66	Weber Böhlen, J.	Engineering isoscopoletin biosynthesis for crop protection.	5
12:00			<b>Closing</b>	
12:15			<b>END of SYMPOSIUM</b>	

**Posterdemonstration, Monday, April 24, 2023, 17:00-18:30, Details s. below**

<b>Poster demonstration, Monday, April 24, 2023, 17:00-18:30</b>			<b>Poster Number</b>
<b>Abstract ID</b>			
7b	Stammler, G.	Evolution of SDH and DMI adaptation in <i>Ramularia collo-cygni</i> in the last seasons in Europe	1
32	Wachowska, U.	An evaluation of the efficacy of triazole fungicides in controlling durum wheat diseases caused by <i>Fusarium</i> fungi in Poland	2
57	McDonald, M.R.	Insensitivity of <i>Stemphylium vesicarium</i> to azoxystrobin, fluopyram and fluxapyroxad fungicides in Ontario, Canada	3
60a	Karaoglanidis, G.	Resistance of <i>Aspergillus</i> section <i>Nigri</i> species originating from conventional and organic vineyards to the respiration inhibitors pyraclostrobin (QoIs) and fluxapyroxad (SDHIs)	4
60b	Karaoglanidis, G.	A novel ARMS-PCR for the detection of <i>Bcpos5</i> mutations conferring resistance to anilinopyrimidine fungicides in <i>Botrytis cinerea</i> and use of CRISPR/Cas9 editing for characterization of the resistant mutants	5
75b	De Mio, L.	Sensitivity of <i>Colletotrichum</i> Isolates from Apple Bitter Rot to Methyl-Thiophanate, Mancozeb and Trifloxystrobin	6
89	Chen, F.	Resistance of <i>Phytophthora colocasiae</i> to dimethomorph in Fujian, China	7
93	Jieru, F.	Resistance of <i>Blumeria graminis</i> f. sp. <i>tritici</i> to azole fungicides in China	8
96	Bader, O.	Phylogenetic placement and effects of <i>cyp51A</i> polymorphisms on azole susceptibility in <i>Aspergillus fumigatus</i>	9
51	ROUX, F.	Multi-year study of the impact of repeated fenpyrazamine applications on resistant populations of <i>Botrytis cinerea</i>	10
25b	CHERRAD, S.	The C239S substitution in $\beta$ -tubulin of vineyard isolated <i>Plasmopara viticola</i> strains confers resistance to zoxamide.	11
29	Wong, A.	A high throughput fungicide tolerance assay for grape powdery mildew, <i>Erysiphe necator</i>	12
87	Bi, Y.	Characterization of mefentrifluconazole resistance in <i>Colletotrichum fructicola</i> from strawberry in China	13
90	Wu, L.	The plasma membrane H <sup>+</sup> -ATPase FgPMA1 regulates the development, pathogenicity, and phenamacril sensitivity of <i>Fusarium graminearum</i> by interacting with FgMyo-5 and FgBmh2.	14
94	Mu, W.	Resistance Mechanism of <i>Ralstonia solanacearum</i> to Fluazinam	15
17b	Matsuzaki, Y.	Impact of Metyltetraprole treatment on the frequency of <i>Cytb</i> F129L	16

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75a	De Mio, L.	Selection of Phakopsora pachyrhizi resistant isolates by commercial fungicide applications in the field	17
3	Fraaije, B.	The pros and cons of different diagnostic platforms for detection of single nucleotide polymorphisms associated with fungicide insensitivity	18
65b	Sofianos, G.	Use of Bacillus amyloliquefaciens QST713 and Clonostachys rosea IK726 as biocontrol agents in controlling multidrug resistant strains of Botrytis cinerea	19
20	Fernandez Ortuño, D.	Gene Mining for Conserved, Non-Annotated Proteins of Podosphaera xanthii Identifies Novel Target Candidates for Controlling Powdery Mildews by Spray-Induced Gene Silencing	20
33	Iwahashi, F.	Metabolome profiling of QoI-treated Zymoseptoria tritici	21
35	Oliver, R.	The 2023 update to the unified nomenclature of target site mutations associated with resistance to fungicides and a web-tool to assist label designations.	22
71	Rodemann, B.	Investigations on protective and curative control of Pyrenophora teres in barley with fungicidal substances	23
77	Ageeva, I./ Vlasova, T.	Changes in the composition of exometabolites of the phytopathogen Verticillium dahliae under the action of Benlate fungicide	24