



INTEGRATED PROTECTION IN VITICULTURE

Joint IOBC-WPRS Meeting of the Working Group:
Integrated Protection in Viticulture

5-8 November 2019, Vila Real – Portugal

Program

Tuesday, 5 November 2019

19h00 Cocktail and Dinner Reception - *Murças, S.A. Wine*

Wednesday, 6 November 2019 – Vila Real Theater

08:00 09:00 Registration

09:00 09:50 Opening session

Welcome to participants - *José Manso |ADVID Chairman of the Board*

Nuno Augusto | Regia-Douro Park President and Vila Real City Councilor

Phytosanitary Framework of Portuguese Viticulture - *Ana Paula Carvalho |DGAV Deputy Director General*

Characterization of Portuguese Viticulture - *Bernardo Gouvêa |IVV President*

09:50 10:10 IOBC-WPRS Presentation

Carlo Duso (convenor), *Mauro Jermini* (liason officer)

Christoph Hoffmann, Michael Maixner, Agnès Calonnec, René Fuchs, Tirtza Zahavi (SB convenors)

10:10 11:10 Session 1: Advances in knowledge and new solutions against diseases: Flavescence dorée

Chairs: Mauro Jermini and Ana Maria Nazaré Pereira

10:10 10:40 Keynote lecture - ARE GRAPEVINE PLANTS RECOVERED FROM FLAVESCENCE DORÉE SUSCEPTIBLE TO NEW INFECTIONS OF THIS PHYTOPLASMA? *D. Bosco, Università degli Studi di Torino, Italy*

10:40 11:00 SAME DISEASE, DIFFERENT RESPONSE: THE CASE OF FLAVESCENCE DORÉE PHYTOPLASMA AND DIVERSE GRAPEVINE CULTIVARS. *M. Ripamonti, University of Turin, Italy*

11:00 11:20 INVESTIGATIONS ON THE ABILITY OF PHLOGOTETIX CYCLOPS TO TRANSMIT FLAVESCENCE DORÉE PHYTOPLASMA TO VITIS VINIFERA L.. *G. Strauss, Austrian Agency for Health and Food Safety (AGES), Austria*

11:20 – 11:40 Coffee break





Chairs: Mauro Jermini and Ana Maria Nazaré Pereira

11:40 13:10 Session 1: Advances in knowledge and new solutions against diseases: mildews

11:40 12:10 **Keynote lecture: A 2-YEAR MULTIVARIATE ANALYSIS OF MULTIPATHOGENS DAMAGE (DOWNY MILDEW AND POWDERY MILDEW) RELATED TO SOIL RESISTIVITY, GRAPEVINE VIGOR AND YIELD LOSS.** *M. Fermaud, Institut national de la recherche agronomique, France*

12:10 12:30 **IMPROVEMENT OF COPPER EFFICACY AGAINST PLASMOPARA VITICOLA IN ORGANIC VITICULTURE BY ADDING ADJUVANTS.** *O. Baus, Hochschule Geisenheim University, Germany*

12:30 12:50 **EVALUATION OF INTER AND INTRACULTIVAR VARIABILITY IN THE DOWNY MILDEW RESISTANCE IN VITIS VINIFERA L.** *A. Diaz-Fernandez, Estación de Viticultura e Enología de Galicia, Spain*

12:50 13:10 **RESISTANCE OF ERYSIPIHE NECATOR TO FUNGICIDES AND THE USE OF BIO-FUNGICIDES AND MACRO PLUS MICRO-NUTRIENTS IN GRAPE POWDERY MILDEW MANAGEMENT.** *L. Gur, Shamir Research Institute, Israel*

13.10 14:30 Lunch – *Poças Júnior - Vinhos S.A. Wine*

14:30 17:00 Session 1: Advances in knowledge and new solutions against diseases: trunk diseases

Chairs: Tirtza Zahavi and Cecília Rego

14:30 15:00 **Keynote lecture: RECENT ADVANCES ON THE MANAGEMENT OF GRAPEVINE TRUNK DISEASES.** *D. Gramaje, Instituto de Ciencias de la Vid y del Vino (ICVV), Spain*

15:00 15:20 **BACILLUS SUBTILIS PTA-271 COUNTERACTS BOTRYOSPHERA DIEBACK IN GRAPEVINE, TRIGGERING IMMUNE RESPONSES AND DETOXIFICATION OF FUNGAL PHYTOTOXINS.** *F. Fontaine, Université Reims Champagne-Ardenne, France*

15:20 15:40 **FIELD EVALUATION OF BIOCONTROL AGENTS AGAINST BLACK-FOOT AND PETRI DISEASES.** *D. Gramaje, Instituto de Ciencias de la Vid y del Vino (ICVV), Spain*

15:40 16:00 **PROTECTION OF GRAPEVINE ROOTSTOCK MOTHER VINE PRUNING WOUNDS AGAINST PHAEOMONIELLA CHLAMYDOSPORA ASSOCIATED WITH PETRI DISEASE AND ESCA.** *F. Halleen, University of Stellenbosch, South Africa*

16:00 16:20 **SPORE TRAPPING OF ESCA DISEASE PATHOGENS IN ISRAELI VINEYARDS.** *V. Naor, Shamir Research Institute, Israel*

16:20 16:40 **SUSCEPTIBILITY OF FOUR PORTUGUESE GRAPEVINE CULTIVARS TO LASIODIPLODIA SPP.: PRELIMINARY RESULTS.** *P. Reis, Instituto Superior de Agronomia, Portugal*

16:40 17:00 **RESPONSE OF FOUR PORTUGUESE GRAPEVINE CULTIVARS TO INFECTION BY PHAEOMONIELLA CHLAMYDOSPORA.** *J. Sofia, Direcção Regional de Agricultura e Pescas do Centro, Portugal*



17:00 17:45 Poster Flash Talks

EXPLORATION OF GRAPE SKIN PENETRATION FORCE AND OTHER PHYSICAL AND CHEMICAL PROPERTIES OF GRAPES.

P. Kehrlí, Agroscope, Switzerland

INFLUENCE OF GRAPEVINE CULTIVAR ON DIFFERENT GENERATIONS OF LOBESIA BOTRANA (LEPIDOPTERA: TORTRICIDAE) . *A. Nave, Association for the Development of Viticulture in the Douro Region, Portugal*

ON THE OCCURRENCE OF DROSOPHILA SUZUKII (MATSUMURA, 1931) IN THE VINEYARD ECOSYSTEM FROM DOURO DEMARCATED REGION. *C. Carlos, Association for the Development of Viticulture in the Douro Region, Portugal*

BROWN MARMORATED STINK BUG HALYOMORPHA HALYS (STÅL) EFFECTS ON THE QUALITY OF PROSECCO WINE. *A. Pozzebon, University of Padova, Italy*

EFFECT OF HOT-WATER TREATMENT AND TRICHODERMA ATROVIRIDE SC1 ON FUNGAL TRUNK DISEASE PATHOGEN INFECTIONS IN GRAPEVINE NURSERIES. *D. Gramaje, Instituto de Ciencias de la Vid y del Vino (ICVV), Spain*

XYLEM AND PHLOEM MODIFICATIONS IN GRAPEVINE (VITIS VINIFERA) INDUCED BY FLAVESCENCE DORÉE. *M. Jermini, Agroscope, Switzerland*

MATE LOCATION IN PSEUDOCOCCUS CALCEOLARIAE, A PRIMARY PEST OF GRAPE IN NEW ZEALAND. *R. Ricciardi, University of Pisa, Italy*

CAN WE GET A PESTICIDE REDUCTION BY INTEGRATING DEFENCE INDUCERS IN GRAPEVINE PROTECTION? *G. Carella, Università degli Studi di Firenze, Italy*

PARASITIDS OF LOBESIA BOTRANA IN DOURO DEMARCATED REGION VINEYARDS AND PROSPECTS FOR ENHANCING CONSERVATION BIOLOGICAL CONTROL. *C. Carlos, Association for the Development of Viticulture in the Douro Region; Centre for the Research and Technology of Agro-Environmental and Biological Sciences, Portugal*

17:45 18:30 Cocktail and Poster Viewing Session 1- *Poças Júnior - Vinhos S.A. Wine*

Thursday, 7 November 2019 – Vila Real Theater

09:00 10:50 Session 2: New strategies in arthropod pest control

Chairs: Christoph Hoffmann and Laura Torres

09:00 09:30 **Keynote lecture: FUNCTIONAL BIODIVERSITY IN DOURO VINEYARDS (NORTHEAST OF PORTUGAL).** *C. Carlos, Association for the Development of Viticulture in the Douro Region; Centre for the Research and Technology of Agro-Environmental and Biological Sciences, Portugal*

09:30 09:50 **CRYPTOBLABES GNIDIELLA: A FEARED PRIMARY PEST OF GRAPEVINE IN THE MEDITERRANEAN AREA.** *R. Ricciardi, University of Pisa, Italy*

09:50 10:10 **ERASMONEURA VULNERATA (HEMIPTERA CICADELIDAE) IS CHANGING ITS PEST STATUS IN EUROPE.** *C. Duso, University of Padova, Italy*





10:10 10:30 **CHARACTERIZING SYMPATRIC LEAFHOPPER SPECIES OF THE “GREEN LEAFHOPPER” COMPLEX (TYPHLOCYBINAЕ) BY NICHE CHOICES.** *R. Sharon, MIGAL – Galilee Research Institute, Northern R&D , Israel*

10:30 10:50 **THE GRAPE PHYLLOXERA IN TUSCANY: AN OLD OR A NEW PROBLEM?** *A. Belcari, University of Florence, Italy*

10:50 11:20 Coffee break

11:20 13:00 Session 2: New strategies in arthropod pest control

Chairs: Carlo Duso and António Mexia

11:20 11:50 **Keynote lecture: TESTING THE USE OF MATING DISRUPTION IN THE MANAGEMENT OF VINE MEALYBUG POPULATIONS IN ALENTEJO VINEYARDS.** *J.C. Franco, Universidade de Lisboa - ISA, Portugal*

11:50 12:10 **ALTERNATIVE HOST PLANTS AS POTENTIAL TRAP CROPS AGAINST DROSOPHILA SUZUKII IN VINEYARDS.** *A. Fragnière, Agroscope, Switzerland*

12:10 12:30 **POPULATION ABUNDANCE AND IMPACT OF BROWN MARMORATED STINK BUG HALYOORPHA HALYS (ST&L) ON GRAPEVINE IN NORTHEASTERN ITALY.** *D. Scaccini, University of Padova, Italy*

12:30 12:50 **IMPACT OF PROCESSED HALYOMORPHA HALYS ON THE TASTE OF PROCESSED GRAPES.** *P. Kehrli, Agroscope, Switzerland*

13:00 - 14:15 Lunch – *Quinta de Ventozelo Wine*

14:15 15:45 Session 3: IPM implementation and tools for sustainable viticulture

Chairs: Tirtza Zahavi and José Carlos Franco

14:15 14:45 **Keynote lecture: ENTOMOPATHOGENIC FUNGI, SOLITARY BEES AND SPIDERS IN VINEYARDS: HOW TO PROMOTE THEIR DIVERSITY AND ABUNDANCE FOR A SUSTAINABLE VITICULTURE.** *A. Reineke, Geisenheim University, Germany*

14:45 15:05 **SIDE EFFECTS OF PLANT PROTECTION PRODUCTS ON SCALE INSECTS AND ITS NATURAL ENEMIES.** *C. Hoffmann, JKI- Institute for Plant Protection in Fruit Crops and Viticulture , Germany*

15:05 15:25 **BIOOTWIN L: NEW BIODEGRADABLE DISPENSERS FOR THE CONTROL OF LOBESIA BOTRANA (LEPIDOPTERA, TORTRICIDAE).** *A. Lucchi, University of Pisa, Italy*

15:25 15:45 **DROSOPHILA SUZUKII AND D. MELANOGASTER AND THEIR IMPACT ON SOUR ROT DISEASE DEVELOPMENT IN VITICULTURE.** *C. Hoffmann, JKI- Institute for Plant Protection in Fruit Crops and Viticulture , Germany*



15:45 17:15 Session 3: IPM implementation and tools for sustainable viticulture

Chairs: Mauro Jermini and António Mexia

15:45 16:15 Keynote lecture: USE OF ENVIRONMENTAL NICHES TO UNDERSTAND INTERACTIONS AMONG BOTRYTIS CINEREA, BIOCONTROL AGENTS, AND THE ENVIRONMENT. *V. Rossi, Università Cattolica del Sacro Cuore, Italy*

16:15 16:35 N - MINIMAL VS. INTENSIVE PRUNING: DOES THE TRAINING SYSTEM INFLUENCE OCCURRENCE OF FUNGAL GRAPEVINE DISEASES? *C. Kraus, Julius Kühn-Institute, Germany*

16:35 16:55 THE INTERACTION BETWEEN LIGHT EXPOSURE, GRAPE BERRIES AND POWDERY MILDEW *T. Zahavi, Ministry of Agriculture and Rural Development, Israel*

16:55 17:15 PROTECTION IN VITICULTURE: INNOVATION NEEDS AND PERCEPTION OF THE SOCIETY. *E. Angelini, CREA Viticulture and Enology, Italy*

17:15 18:00 Poster Flash Talks session 2 and 3 (New strategies in arthropod pest control and IPM implementation and tools for sustainable viticulture)

IMPACT OF LEAF REMOVAL ON CLUSTER DISEASE PRESSURE FOR COLD-HARDY HYBRID CULTIVARS UNDER CLIMATIC CONDITIONS OF EASTERN CANADA. *C. Provost, Centre de recherche agroalimentaire de Mirabel, Canada*

EXPLOIT BIODIVERSITY IN VITICULTURAL SYSTEMS TO REDUCE PEST DAMAGE AND PESTICIDE USE, AND INCREASE ECOSYSTEMS SERVICES PROVISION: THE BIOVINE PROJECT. *S. Legler, Horta Srl, Italy*

THE EXPERIENCE OF APPLICATION OF A WEB-BASED DECISION SUPPORT SYSTEM IN THE IBERIAN PENINSULA FOR THE SUSTAINABLE MANAGEMENT OF VINEYARDS. *V. Rossi, Università Cattolica del Sacro Cuore, Italy*

REDUCED PESTICIDE APPLICATION PROMOTES NATURAL PEST CONTROL IN VINEYARDS. *J. Reiff, JKI Siebeldingen, Germany*

AUDISENS (AUTOMATED DISEASE SENSING) – IMPROVING THE EARLY-DIAGNOSIS OF GRAPEVINE DOWNY MILDEW TO REDUCE THE APPLICATION OF PLANT PROTECTION PRODUCTS. *E. Kalvelage, Julius Kühn-Institute, Germany*

OPTIMISATION OF THE METHOD TO ASSESS DROSOPHILA SUZUKII INFESTATION ON GRAPES. *P. Kehrl, Agroscope, Switzerland*

EFFECT EVALUATION ON TERRESTRIAL SPECIES OF COMMERCIAL FORMULATIONS CONTAINING LAMBDA-CYHALOTHRIN: A COMPARISON OF NANOPESTICIDE AND ITS CONVENTIONAL. *A. Cachada, CIMAR-UP, Portugal*

ENHANCING IPM IMPLEMENTATION PERSPECTIVES IN MONTENEGRO AND ITALY BY MEANS OF A DYNAMIC MECHANISTIC MODEL FOR PHOMOPSIS VITICOLA INFECTIONS: VITISUST. *N. Latinovic, University of Montenegro, Montenegro*

AN IDENTIFICATION WEBSITE TO ARTHROPODS ASSOCIATED WITH DOURO REGION VINEYARD AGROECOSYSTEM. *S. Reis, CoLAB Vines&Wines - National Collaborative Laboratory for the Portuguese Wine Sector; ADVID- Association for the Development of Viticulture in the Douro Region, Portugal*

STUDY ON THE USE OF FOOD TRAPS TO EVALUATE THE EFFICACY OF MATING DISRUPTION AGAINST LOBESIA BOTRANA IN DOURO DEMARCATED REGION. *A. Nave, Association for the Development of Viticulture in the Douro Region, Portugal*





THE BEHAVIOUR OF GRAPEVINE GROWERS IN THE DECISION-MAKING OF USING PESTICIDES FROM PALMELA REGION.

M. Cachão, AVIPE, Portugal

18:00 18:45 Cocktail and Poster Viewing Session 2 and 3 - *Quinta de Ventozelo Wine*

20:00 Gala Dinner – *Symington Family Estates Wine*

Friday, 8 November 2019 - Quinta da Pacheca

09:00 10:50 Session 3 (IPM implementation and tools for sustainable viticulture) and Session 4 (Sustainable management of soil and weeds)

Chairs: Tirtza Zahavi and Laura Torres

09:00 09:30 Keynote lecture: **THE EFFECT OF DIFFERENT MANAGEMENT PRACTICES ON SOIL QUALITY: A CONTRIBUTION TO EVALUATE THE SUSTAINABILITY OF DOURO VINEYARDS SOILS.** *A. Cachada, CIMAR-UP, Portugal*

09:30 09:50 **BIO-POTENTIAL OF COMPOSTED AGRO-FOOD WASTES AS NATURAL FUNGICIDES AGAINST BOTRYTIS AND FUSARIUM WILT DISEASES.** *C. Santos, CoLAB Vines&Wines - National Collaborative Laboratory for the Portuguese Wine Sector; ADVID- Association for the Development of Viticulture in the Douro Region, Portugal*

09:50 10:10 **IMPACT OF WATER SUPPLY, BERRY HEALTH AND INSECTS IN THE DEVELOPMENT OF SOUR ROT IN VINEYARDS.** *S. Hevin, Agroscope, Switzerland*

10:10 10:30 **MODELLING GRAPEVINE PHENOLOGY FOR CV. TOURIGA FRANCA AND TOURIGA NACIONAL IN THE DOURO REGION.** *S. Reis, CITAB; CoLAB Vines&Wines - National Collaborative Laboratory for the Portuguese Wine Sector; ADVID- Association for the Development of Viticulture in the Douro Region, Portugal*

10:30 10:50 **INNOVATIVE AND INTERACTIVE TOOL FOR IMPROVING SOIL ECOSYSTEM SERVICES IN VITICULTURE.** *S. Legler, Horta Srl, Italy*

10:50 11:10 **LEVELS OF GLYPHOSATE IN VINEYARD SOILS AND POTENTIAL ADVERSE EFFECTS TO THE ENVIRONMENT.** *A. Cachada, CIMAR-UP, Portugal*

11:10 11:40 Coffee break

11:40 12:40 PRESENTATION AND DISCUSSION OF IPM GUIDELINES IN VITICULTURE - *C. Malavolta (IOBC)*

12:40 13:00 Closing remarks

Carlo Duso, Christoph Hoffman, Michael Maixner, Agnès Calonnec, René Fuchs, Tirtza Zahavi





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IN VITICULTURE**

13:00 - 14:30 Lunch – *Quinta da Pacheca Wine*

14:30 18:30 Technical Excursion

SPONSORS

