

TABLE OF CONTENTS

EPIDEMIOLOGY OF '*CANDIDATUS PHYTOPLASMA SOLANI*'

- 1 **The role of *Vitex agnus-castus* and associated *Hyalesthes obsoletus* in the epidemiology of *Bois noir* in Mediterranean vineyards**
ANDREA KOSOVAC, SANJA RADONJIĆ, SNJEŽANA HRNČIĆ, OLIVER KRSTIĆ, IVO TOŠEVSKI AND JELENA JOVIĆ
- 4 **Status of *Bois Noir* phytoplasma in Turkey**
FILIZ ERTUNC, DIDEM CANIK OREL, SERIFE BAYRAM AND GOKHAN SOYLEMEZOGLU
- 9 **Elucidation of '*Candidatus Phytoplasma solani*' epidemiology through trac(k)ing transmission pathways using field, experimental and molecular data.**
ANDREA KOSOVAC, OLIVER KRSTIĆ, MILJANA JAKOVLJEVIĆ, TATJANA CVRKOVIĆ, MILANA MITROVIĆ, IVO TOŠEVSKI AND JELENA JOVIĆ
- 12 **Analysis of *Bois noir* epidemiology in Austrian vineyards by molecular characterization of '*Candidatus Phytoplasma solani*' strains**
MONIKA RIEDLE-BAUER, GÜNTER BRADER AND ROBERT HACK
- 17 **Epidemiology of '*Candidatus Phytoplasma solani*' associated with potato stolbur disease in Serbia**
MILANA MITROVIĆ , MILJANA JAKOVLJEVIĆ , JELENA JOVIĆ , OLIVER KRSTIĆ , ANDREA KOSOVAC, VALERIA TRIVELLONE, IVO TOŠEVSKI AND TATJANA CVRKOVIĆ
- 19 **First Report of '*Candidatus phytoplasma solani*' in Sunflower in Bulgaria**
ZHELYU AVRAMOV, JELENA STEPANOVIĆ, DORA PANAJOTOVA, MARIANA LAGINOVA AND BOJAN DUDUK

VECTORS OF '*CANDIDATUS PHYTOPLASMA SOLANI*'

- 22 **Prevalence of Stolbur phytoplasma in leafhoppers and planthoppers collected in vineyard, corn and potato fields and their surroundings in Switzerland**
VALERIA TRIVELLONE, MAURO JERMINI, JELENA JOVIĆ, TATJANA CVRKOVIĆ, MILJANA JAKOVLJEVIĆ, ANDREA KOSOVAC, OLIVER KRSTIĆ, IVO TOŠEVSKI AND MILANA MITROVIĆ
- 24 **Is *Hyalesthes obsoletus* a species complex undergoing cryptic speciation? More evidence of host-associated genetic differentiation in Southeast Europe**
ANDREA KOSOVAC, JES JOHANNESSEN, OLIVER KRSTIĆ, MILANA MITROVIĆ, TATJANA CVRKOVIĆ, IVO TOŠEVSKI AND JELENA JOVIĆ
- 26 **Potential role of *Reptalus panzeri* as a vector of *Bois noir* in Germany**
FRIEDERIKE LANG, MARIA KÖLBER, RITA ELEK, YVONNE KAPPEL, DUNJA KRÖHNER,, JES JOHANNESSEN AND MICHAEL MAIXNER
- 28 **Preliminary results on putative vectors of '*Candidatus Phytoplasma solani*' in *Bois noir*-affected vineyards in Franciacorta (Lombardy Region, North Italy)**
FRANCESCO SANNA, FABIO QUAGLINO, SILVIA FILISSETTI, PAOLA CASATI, MONICA FACCINCANI, PIERO ATTILIO BIANCO AND NICOLA MORI

32 **Towards a *de novo* genome assembly of *Hyalesthes obsoletus* (Cixiidae) of the stinging nettle host-race**

JES JOHANNESSEN, MICHAEL MAIXNER, HANNO SCHMIDT

35 **Microbiomes of the “*Candidatus Phytoplasma solani*” vectors *Hyalesthes obsoletus* Signoret isolated from different host plants**

JULIEN CHUCHE, JEAN-LUC DANET, SÉBASTIEN THEIL, XAVIER FOISSAC, DENIS THIÉRY AND NATHALIE ARRICAU-BOUVERY

DETECTION AND CHARACTERIZATION OF ‘*CANDIDATUS PHYTOPLASMA SOLANI*’

40 **Heterologous expression and antigenicity of STAMP Antigenic Membrane Proteins from different ‘*Candidatus Phytoplasma solani*’ genetic clusters**

IBOLYA EMBER, DELPHINE DESQUE, JEAN-LUC DANET, MARIE-PIERRE DUBRANA, SYBILLE DURET, LAURE BEVEN, LÁSZLÓ PALKOVICS, GYÖRGY DÉNES BISZTRAY AND XAVIER FOISSAC

46 ***Stamp* gene as the highly discriminative marker for assessment of BN variability in Croatia**

JELENA PLAVEC, ŽELJKO BUDINŠČAK, IVANA KRIZANAC, DIJANA ŠKORIĆ, MARTINA ŠERUGA MUSIĆ

50 **New ‘*Candidatus Phytoplasma solani*’ strains associated with Bois noir disease in *Vitis vinifera* L. cultivars in Georgia**

FABIO QUAGLINO, DAVID MAGHRADZE, PAOLA CASATI, NONA CHKHAIDZE, OSVALDO FAILLA AND PIERO ATTILIO BIANCO

55 **Multigene characterization of ‘*Candidatus phytoplasma solani*’ strains infecting pepper, celery and maize in Bosnia and Herzegovina**

DUŠKA DELIĆ, NICOLETTA CONTALDO, BILJANA LOLIĆ, ĐORĐE MORAVČEVIĆ, DRAGO MILOŠEVIĆ AND ASSUNTA BERTACCINI

60 **Multilocus sequence analysis as a powerful tool to monitor molecular epidemiology of ‘*Candidatus Phytoplasma solani*’ at vineyard scale**

SERGIO MUROLO AND GIANFRANCO ROMANAZZI

63 **Characterization of ‘*Candidatus phytoplasma solani*’ strains from grapevines, *Hyalesthes obsoletus*, reference strains in periwinkle and in colonies of strain STOL**

NICOLETTA CONTALDO, YURI ZAMBON, SAMANTHA PALTRINIERI, NICOLA MORI, J. MITROVIC, BOJAN DUDUK AND ASSUNTA BERTACCINI

70 **Detection of Bois noir phytoplasma by a quick-to-use isothermal amplification assay: Preliminary results**

ANDREA GENTILI, LUCA FERRETTI, LORENZO VIZZACCARO, GIUSEPPE DURANTE, CAMILO GIANINAZZI, STEFANO LOPRIORE, CAROLINE CHATILLON and GRAZIELLA PASQUIN

PLANT PATHOGEN INTERACTIONS AND CONTROL STRATEGIES

- 74 **Metabolome of grapevine leaf vein-enriched tissue infected with '*Candidatus Phytoplasma solani*'**
NINA PREZELJ, LENA FRAGNER, WOLFRAM WECKWERTH AND MARINA DERMASTIA
- 79 **Impact of Bois noir disease on grapevine performance and wine quality of *Vitis vinifera* L. cv. 'Chardonnay' in Hungary**
IBOLYA EMBER, PÉTER BODOR, ZSOLT ZSÓFI, XÉNIA PÁLFI, SZABOLCS VILLANGÓ, ZITA PÁLFI, MÁRTA LADÁNYI, GYÖRGY PÁSTI, ANDRÁS SZEKERES, OTTÓ BENCSIK, TAMÁS DEÁK, BORBÁLA BÁLO, LÁSZLÓ PALKOVICS, XAVIER FOISSAC, JACOBUS JOHANNES HUNTER AND GYÖRGY DÉNES BISZTRAY
- 84 **Strain dependent symptoms and expression of stolbur phytoplasma genes in the experimental host *Catharanthus roseus***
GÜNTER BRADER, AMAL ARYAN, ELISABETH WISCHNITZKI AND MONIKA RIEDLE-BAUER
- 89 **Evaluation of Effective Microorganisms® efficacy on '*Candidatus Phytoplasma solani*' -infected and healthy periwinkle plants**
SIMON PIERCE, FABIO QUAGLINO, MATTEO MONTAGNA, ALBERTO SPADA, PAOLA CASATI AND MARCELLO IRITI