

SESSION 1 (from P1 to P87)

Symbiotic signaling

- P1 ALLOING GENEVIÈVE** REDOX-SENSITIVE FLUORESCENT BIOSENSORS DETECT INTRACELLULAR REDOX VARIATIONS IN SINORHIZOBIUM MELILOTI UNDER FREE-LIVING AND SYMBIOTIC LIFESTYLES
- P2 BETTI MARCO** SYSTEMIC SIGNALLING IN LEGUME-RHIZOBIA SYMBIOSIS
- P3 CAO YANGRONG** A FUNCTIONAL SWITCH OF AN E3 LIGASE BETWEEN K48- AND K63-LINKED UBIQUITINATION REFINES RECEPTOR LEVELS IN LEGUME NODULATION
- P4 CHAKRABARTI DIPANJAN** DUAL-LOCK REGULATION OF SYMBIOSIS RECEPTOR KINASE (SYMRK) DIRECTS RHIZOBIAL INVASION AND COLONIZATION DURING ROOT NODULE SYMBIOSIS.
- P5 CHEN JIAHUAN** THE B-TYPE RESPONSE REGULATOR GMRR11D MEDIATES SYSTEMIC INHIBITION OF SYMBIOTIC NODULATION
- P6 CHIURAZZI MAURIZIO** PRELIMINARY CHARACTERIZATION OF THE *L. JAPONICUS* TETRASPANIN FAMILY
- P7 DE SOUSA BRUNA FERNANDA SILVA** THE EFFECTORS OF THE T6SS IN RHIZOBIUM ETLI MIM1 BENEFIT BACTERIAL COMPETITION
- P8 DEL CERRO PABLO** UNDERSTANDING THE MOLECULAR BASIS OF SINORHIZOBIUM FREDII HH103-SOYBEAN COMPATIBILITY CONFERRED BY BACTERIAL SECRETED PROTEINS
- P9 DOLLIVER JESSIE** MECHANISMS OF BACTERIAL PRIMARY ATTACHMENT TO PLANT ROOTS UNDER DIFFERING PH CONDITIONS
- P10 FERGUSON SHAUN** FROM RHIZOSPHERE TO ROOT NODULE: UNRAVELLING THE GENETIC PATHWAYS THAT DIFFERENTIATE INTER- AND INTRACELLULAR INFECTION OF LEGUMES BY RHIZOBIA
- P11 FOUIGNER-OKLAND TORA** GENETIC AND FUNCTIONAL DIVERSITY OF LOTUS MALECTIN-LIKE DOMAIN LEUCINE-RICH REPEAT RECEPTOR KINASES IN ROOT ENDOSYMBIOSIS
- P12 FOURNIER JOËLLE** MTANNEXIN1 IS REQUIRED FOR THE DEVELOPMENT OF FULLY FUNCTIONAL NODULES
- P13 FUENTES ROMERO FRANCISCO** UNRAVELLING THE NON-CODING TRANSCRIPTOME OF SINORHIZOBIUM FREDII HH103
- P14 GARCÍA DÍAZ INMACULADA** ARE GLUTAREDOXINS INVOLVED IN NODULATION?
- P15 GRUNDY ESTELLE** LEGUMES REGULATE SYMBIOSIS WITH RHIZOBIA VIA THEIR INNATE IMMUNE SYSTEM
- P16 GUILLORY AMBRE** SINORHIZOBIUM MELILOTI NUTRITIONAL STATUS CHANGES DURING EARLY ROOT HAIR INFECTION
- P17 HANSEN SIMON BOJE HANSEN** A JUXTAMEMBRANE PROTEIN-PROTEIN INTERACTION MOTIF IN THE LOTUS JAPONICUS NFR5 INTRACELLULAR DOMAIN IS ESSENTIAL FOR ROOT NODULE SYMBIOSIS
- P18 JACOTT CATHERINE** HOW LOTUS JAPONICUS BLOCKS NODULATION WITH 'NOD FACTOR-COMPATIBLE' RHIZOBIA SINORHIZOBIUM FREDII HH103

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- P19** **KATSAOUNI AFRODITI** CAPTURING THE UBIQUITINATION AND PROTEIN INTERACTION LANDSCAPE OF THE CENTRAL REGULATOR OF NODULATION TOO MUCH LOVE IN SOYBEAN
- P20** **KAWAHARADA YASUYUKI KAWAHARADA** INVESTIGATING THE FUNCTION OF NOPC EFFECTOR DURING SYMBIOTIC NODULATION IN LOTUS SPP.
- P21** **LARSEN MARIA MEISNER** ESTABLISHING NOVEL IMAGING APPROACHES TO STUDY SIGNALLING BETWEEN LOTUS JAPONICUS AND INTERACTING ROOT MICROBES AT A CELLULAR LEVEL
- P22** **LIU YUHAN** ROOT MERISTEM GROWTH FACTOR PEPTIDES AND THEIR EFFECTS ON ROOT DEVELOPMENT AND NODULATION IN SOYBEAN
- P23** **LIU HAIYUE** CONSTITUTIVE ACTIVATION OF A NUCLEAR-LOCALIZED CALCIUM CHANNEL COMPLEX IN MEDICAGO TRUNCATULA
- P24** **LIU JIEYU** NOD FACTOR SIGNALING CONTROLLED GENES IN MEDICAGO TRUNCATULA NODULES
- P25** **LUU THI-BICH** ANALYSIS OF THE LYK GENE CLUSTER IN TWO MEDICAGO GENOTYPES
- P26** **MOU YILIN** MILDEW LOCUS O (MLO) PROTEINS ARE REQUIRED FOR RHIZOBIAL INFECTION IN MEDICAGO TRUNCATULA
- P27** **NAZARET FANNY** ROXR, A REDOX-SENSING REGULATOR OF SINORHIZOBIUM MELILOTI, IS CRUCIAL FOR SYMBIOTIC INFECTION OF MEDICAGO TRUNCATULA ROOTS.
- P28** **PIROMYOU PONGDET** THE PUTATIVE TYPE III EFFECTOR SKP48 OF BRADYRHIZOBIUM SP. DOA9 IS INVOLVED IN LEGUME NODULATION
- P29** **QUELAS JUAN IGNACIO** THE STRINGENT RESPONSE TRIGGERS THE EXPRESSION OF THE TYPE III SECRETION SYSTEM IN BRADYRHIZOBIUM DIAZOEFFICIENS
- P30** **RUBIA GALIANO MARÍA ISABEL** MTCEL2, A NEW CELLULASE INVOLVED IN THE ESTABLISHMENT OF THE MEDICAGO TRUNCATULA-SINORHIZOBIUM MELILOTI SYMBIOSIS
- P31** **SAHU PREETI** DECIPHERING THE TRANSCRIPTIONAL REGULATION BY THE CCAMK/CYCLOPS COMPLEX DURING ROOT ENDOSYMBIOSES
- P32** **SPEZZATI MARIA** SEQUENCE ADAPTATION OF SYMBIOSIS RECEPTOR-LIKE KINASE (SYMRK) ENABLING NITROGEN-FIXING ROOT NODULE DEVELOPMENT
- P33** **STAGG GEORGINA** HOST RANGE GENETIC DETERMINANTS IN MESORHIZOBIUM CICERI
- P34** **SUN JONGHO** NUTRIENT REGULATION OF LIPOCHITOOLIGOSACCHARIDE RECOGNITION IN PLANTS VIA NSP1 AND NSP2
- P35** **TEDESCHI FRANCESCA** INVESTIGATING LOTUS JAPONICUS ROOT RESPONSE TO THE SEMI-COMPATIBLE RHIZOBIA SINORHIZOBIUM FREDII HH103 THROUGH SINGLE CELL RNA-SEQUENCING
- P36** **WANG JUNJIE** OVEREXPRESSION OF SYMBIOTIC NF-YS SUPPRESSES NODULATION
- P37** **YAMAZAKI AKIHIRO** A NOVEL INTERACTOR OF SYMBIOTIC RECEPTORS AFFECTS NODULATION AND IMMUNITY

Regulatory Processes

- P38 BATZENSCHLAGER MORGANE** *COMPETENCE FOR TRANSCELLULAR INFECTION IN THE ROOT CORTEX INVOLVES A POST-REPLICATIVE, CELL-CYCLE EXIT DECISION IN MEDICAGO TRUNCATULA.*
- P39 BONCOMPAGNI ERIC** *IDENTIFICATION OF CIS-ACTING ELEMENTS INVOLVED IN THE TRANSCRIPTIONAL REGULATION OF THE CYSTEINE PROTEASE GENE MTCP6 IN NODULE SENESCENCE OF MEDICAGO TRUNCATULA*
- P40 GIRARD LOURDES** *CHARACTERIZATION OF THE OMPR-TYPE REGULATORS REQUIRED FOR APPROPRIATE BACTERIAL GROWTH IN R. ETLI.*
- P41 GOMEZ FERNANDEZ GERMAN ORLANDO** *ETHYLENE BIOSYNTHESIS IN LEGUMES: A SIMPLE PATHWAY WITH MANY ACTORS*
- P42 GUEDES GARCÍA SABINA K.** *IMPACT OF RNASE III IN REGULATION BY SRNAS IN SINORHIZOBIUM MELILOTI*
- P43 GUILLIERME EMMA** *A BALANCED INTERACTION: IDENTIFICATION OF NODULE AUTOREGULATION RECEPTOR KINASE TARGETS*
- P44 LAFFONT CAROLE** *IDENTIFICATION OF SYSTEMIC EFFECTORS INVOLVED IN THE NITROGEN DEFICIT REGULATION OF NODULATION IN MEDICAGO TRUNCATULA*
- P45 LAGARES JR. ANTONIO** *THE ALPHA-PROTEOBACTERIAL TRANS-ENCODED SMALL RNA MMGR: PROTEOMIC PROFILING REVEALS ROLE BEYOND POLY-HYDROXYBUTYRATE REGULATION IN SINORHIZOBIUM MELILOTI*
- P46 LÓPEZ-BAENA FRANCISCO JAVIER** *COMPLEX REGULATORY NETWORKS GOVERN THE SYNTHESIS OF MOLECULAR SYMBIOTIC SIGNALS IN SINORHIZOBIUM FREDII HH103*
- P47 LUGO SARAH MELISSA** *ANALYSIS OF THE DIFFERENTIAL ASSOCIATION BETWEEN ARGONAUTE PROTEINS AND SMALL RNAS IN THE REGULATION OF LEGUME-RHIZOBIA SYMBIOSIS.*
- P48 MAURER ANN-KATHRIN** *CARBON CATABOLITE REPRESSION AND CARBON UTILIZATION REGULATION IN RHIZOBIA*
- P49 MESA SOCORRO** *ROLE OF THE BRADYRHIZOBIUM DIAZOEFFICIENS CL-PAP1S1 PROTEOLYTIC SYSTEM IN THE ABIOTIC STRESSES RESPONSE AND IN SYMBIOSIS*
- P50 MOHAMMEDI ROZA** *ROLE OF THE CCKA-CHPT-DIVL COMPLEX IN THE PHOSPHORYLATION OF THE MASTER REGULATOR CTRA DURING THE CELL CYCLE AND NITROGEN-FIXING SYMBIOSIS IN SINORHIZOBIUM MELILOTI*
- P51 MONJE RUEDA MARÍA DOLORES** *ROLE OF FLAVONOIDS AND ISOFLAVONOIDS IN STRESS RESPONSE AND NODULATION IN THE MODEL LEGUME LOTUS JAPONICUS*
- P52 MUS FLORENCE** *GENETIC DETERMINANTS OF AMMONIUM EXCRETION IN NIFL MUTANTS OF AZOTOBACTER VINELANDII*
- P53 NAVARRO GÓMEZ PILAR** *SINORHIZOBIUM FREDII HH103 SURFACE MOTILITY IS INDUCED BY FLAVONOIDS AND THE NODD1 AND TTSI BACTERIAL REGULATORY PROTEINS*
- P54 NEBEL NILS** *INVESTIGATING RHIZOBIA INDUCED MEMBRANE INVAGINATIONS IN AN IN VITRO MODEL SYSTEM*
- P55 QUELAS JUAN IGNACIO** *PLEIOTROPIC EFFECTS OF PHAR REGULATOR IN BRADYRHIZOBIUM DIAZOEFFICIENS METABOLISM*

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- P56** **SEXAUER MORITZ** A SHOOT DERIVED MIRNA ORCHESTRATES N-DEPENDENT ROOT ORGAN FORMATION
- P57** **SOTO MARIA J.** DECIPHERING THE REGULATORY MECHANISMS THAT CONTROL SURFACE MOTILITY IN SINORHIZOBIUM MELILOTI: THE ROLE OF DNAJ
- P58** **SOUZA EMANUEL** A MULTILAYERED NETWORK INTEGRATING NITROGEN, CARBON, AND ENERGY METABOLISM IN AZOSPIRILLUM BRASILENSE
- P59** **STORTI MATTIA** IMPLEMENTATION OF GENETICALLY-ENCODED FLUORESCENT PROBES TO STUDY THE COORDINATION OF CARBON/NITROGEN METABOLISMS IN NOSTOC SP PCC7120
- P60** **STRUK SYLWIA** PROTEOMICS-BASED APPROACH TO IDENTIFY NOVEL PLAYERS INVOLVED IN AUTOREGULATION OF NODULATION IN MEDICAGO TRUNCATULA
- P61** **SU CHAO** CELL WALL MODIFICATIONS AT THE SYMBIOTIC INTERFACE
- P62** **TJAHJONO OLIVIA** REGULATION OF CENTRAL CARBON METABOLISM AND CARBON STORAGE BY THE PTSNTR IN RHIZOBIUM LEGUMINOSARUM
- P63** **TSURUMAKI TATSUHIRO** VISUALIZING HETEROGENEOUS EXPRESSION PATTERN OF NITROGEN FIXATION BY THE REPORTER SYSTEM IN UNICELLULAR DIAZOTROPHIC CYANOBACTERIUM CROCOSPHAERA SUBTROPICA ATCC 51142
- P64** **VINARDELL JOSE-MARIA** NON-IONIC OSMOTIC STRESS INDUCES THE BIOSYNTHESIS OF NODULATION FACTORS AND AFFECTS OTHER SYMBIOTIC TRAITS IN SINORHIZOBIUM FREDII HH103
- P65** **ZHANG GUOFENG** CHARACTERIZATION OF SUBTILASE GENES AS NOVEL REGULATORS IN THE LEGUME-RHIZOBIAL SYMBIOSIS

Other Nitrogen-Fixing and Mycorrhizal Symbioses

- P66** **BARDI SEPEHR** INTERCELLULAR COMMUNICATION IN FREE-LIVING AND FACULTATIVE SYMBIOTIC N₂-FIXING HETEROCYSTOUS CYANOBACTERIA
- P67** **BINCI FILIPPO** INVESTIGATING THE ROLE OF MILDEW LOCUS O (MLO) AT THE INTERFACE OF ARBUSCULAR MYCORRHIZAL SYMBIOSIS IN LOTUS JAPONICUS
- P68** **CROSINO ANDREA** THE ROLE OF CLATHRIN-MEDIATED ENDOCYTOSIS DURING MYC-FACTORS PERCEPTION IN ARBUSCULAR MYCORRHIZAL INTERACTION
- P69** **ESTI MERTCAN** N₂-FIXING VIBRIO SP. PIGGYBACKING ON RECENTLY DISCOVERED N₂-FIXING SEAGRASS ROOT SYMBIONTS
- P70** **HASSEN AHMED** MICROBIOME OF THE SOYBEAN RHIZOSPHERE AND CULTIVAR-BRADYRHIZOBIUM STRAIN NODULATION COMPATIBILITY STUDY IN THE DEVELOPMENT OF EFFECTIVE NITROGEN FIXING INOCULANTS
- P71** **HEMERLY ADRIANA** SIGNALLING BETWEEN PLANTS AND ENDOPHYTIC DIAZOTROPHIC BACTERIA: A VIEW FROM THE PLANT SIDE
- P72** **HOBECKER KAREN HOBECKER** TISSUE-SPECIFIC TRAP-SEQ FROM ARBUSCULAR MYCORRHIZAL L. JAPONICUS ROOTS
- P73** **MASSENA REIS VERONICA** GROWTH RESPONSE AND BACTERIAL COLONIZATION OF TWO UROCHLOA CULTIVARS INOCULATED WITH AZOSPIRILLUM BALDANIORUM

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- P74 MASSENA REIS VERONICA** HEAT AND CHEMICAL THERAPY ARE USED TO REDUCE THE NATURAL DIAZOTROPHIC POPULATION IN SUGARCANE STEM CUTTING AS AN OPPORTUNITY TO INTRODUCE NEWLY SELECTED STRAINS
- P75 MASUDA SACHIKO** UNCOVERING PLANT MICROBIOMES USING LONG-READ METAGENOMIC SEQUENCING
- P76 MOHR WIEBKE** MARINE N₂-FIXING BACTERIUM IN SEAGRASS ROOTS ECHOES TERRESTRIAL PLANT SYMBIOSES
- P77 NIEVES-MORIÓN MERCEDES** CARBON UPTAKE MECHANISMS SUPPORTING THE N₂-FIXING DIATOM ENDOSYMBIONTS RICHELIA SPP.
- P78 OBAID NADIA BINTE** THE ROLE OF THE MYB17 GENE IN THE LIGNIFICATION OF CELL WALLS IN INFECTED NODULES OF CASUARINA GLAUCA
- P79 PRASIL ONDREJ** PHOTOPHYSIOLOGY OF SYMBIOSIS BETWEEN HAPTO-PHYTE HOST AND UCYN-A DIAZOTROPH
- P80 REZACOVA AND CZAKO VERONIKA AND ALENA** MYCORRHIZA IMPROVES SOYBEAN GROWTH EVEN IN NUTRIENT-RICH SOILS OF CENTRAL EUROPE, BUT INDEPENDENTLY OF BRADYRHIZOBIUM INOCULATION
- P81 SARASA-BUISAN CRISTINA** CRISPR-ASSOCIATED TRANSPOSONS (CAST) TO GENOME EDIT NOSTOC AZOLLAE AND OTHER N₂-FIXING CYANOBACTERIA
- P82 SOARES GIROTO AMANDA** DEVELOPMENT OF BIODEGRADABLE COATING FOR SOYBEAN SEEDS AND THEIR APPLICATION FOR BRADYRHIZOBIUM JAPONICUM IMMOBILIZATION
- P83 TAN SWEE SIAN** BURKHOLDERIA VIETNAMIENSIS STRAIN AAR-N445 AS A POTENTIAL NITROGEN-FIXING ENDOPHYTE FOR ELAEIS GUINEENSIS THROUGH CARBON SOURCE OPTIMISATION
- P84 TEAUMROONG NEUNG** BACILLUS VELEZENSIS S141: INSIGHTS DUAL ACTIONS: PLANT GROWTH-PROMOTION AND BIOCONTROL AGENT IN LEGUMES
- P85 VISHWANATHAN KISHORE** CHEMICAL COMMUNICATION DURING FEATHER-MOSS-CYANOBACTERIA SYMBIOSIS IN BOREAL FORESTS
- P86 WEIMER BART** BEYOND NIF GENES: DIAZOTROPH GENE EXPRESSION IN PLANTA DURING NITROGEN FIXATION IN MAIZE
- P87 WORTH MEGAN** INVESTIGATING COPPER TOLERANCE IN FRANKIA INEFFICAX EU11C THROUGH TARGETED MUTAGENESIS

SESSION 2 (from P88 to P173) *Biochemistry and Bioengineering*

- P88 ABEL NIKOLAJ** A SIMPLE AND EFFICIENT PROTOCOL FOR GENERATING TRANSGENIC HAIRY ROOTS USING AGROBACTERIUM RHIZOGENES
- P89 ALEXANDRE MORAES THIAGO** RAPID GENETIC SCREENING OF BARLEY ENGINEERED LINES SUGGEST A PUTATIVE AUXIN RESPONSIVE MEDICAGO PROMOTER OPERATING IN BARLEY
- P90 BUENO BATISTA MARCELO** ENGINEERING A SYNTHETIC SYMBIOSIS TO SOLVE THE NITROGEN CRISIS
- P91 CAMPBELL MATTHEW** ASSESSMENT OF NITROGEN FIXATION AND GENETIC MALLEABILITY OF TWO BARLEY ASSOCIATED DIAZOTROPHS
- P92 CHEN SANFENG** ASSEMBLY OF NITROGENASE BIOSYNTHETIC PATHWAY IN SACCHAROMYCES CEREVISIAE BY USING 2A PEPTIDES

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- P93 CHENG QI** *DESIGNING LIGHT-UTILISING NITROGENASE (LUN) BY COMPARATIVE AND STRUCTURAL BASIS OF LIGHT-DRIVEN PROTOCHLOROPHYLLIDE OXIDOREDUCTASE (LPOR)*
- P94 DOBRZYNSKA KATARZYNA** *ENGINEERING FUNCTIONAL NITROGENASE CO-FACTOR BIOSYNTHESIS PROTEIN NIFEN IN YEAST*
- P95 GYSEL KIRA** *LIGAND BINDING SPECIFICITIES AND RECEPTOR COMPLEX FORMATION IN LEGUME FRIEND-OR-FOE RECOGNITION*
- P96 ITO YUSUKE** *IMPROVEMENT OF THE NITROGENASE ACTIVITY IN E. COLI THAT EXPRESSES THE NITROGEN FIXATION-RELATED GENES FROM AZOTOBACTER VINELANDII*
- P97 KEARSLEY JASON** *TOWARDS THE MINIMAL N₂-FIXING SYMBIOTIC GENE SET OF THE PSYMB MEGAPLASMID IN THE HOST LEGUME SYMBIONT SINORHIZOBIUM MELILOTI*
- P98 MEILE LUKAS** *A HIGH-THROUGHPUT PLATFORM FOR NITROGENASE ENGINEERING IN PLANTS*
- P99 OKADA SHOKO** *IMPROVING THE SOLUBILITY, ABUNDANCE, AND ACTIVITY OF ENGINEERED NIFH AND ANFH IN PLANT MITOCHONDRIA*
- P100 ORESNIK IVAN** *SINORHIZOBIUM MELILOTI CONTAINS A FUNCTIONAL PYROPHOSPHATE DEPENDENT PHOSPHOFRUCTOKINASE THAT PLAYS A ROLE DURING SYMBIOTIC DEVELOPMENT*
- P101 PÉREZ-GONZÁLEZ ANA** *ANFO CONTROLS THE FIDELITY OF FE-ONLY NITROGENASE DURING THE MATURATION PROCESS*
- P102 PERIN GIORGIO** *MOLECULAR HOMEOSTASIS OF CARBON AND NITROGEN METABOLISMS IN NOSTOC SP. PCC 7120*
- P103 RAI SUSHANT** *THE ABILITY TO UTILIZE GLUCOSE AND FRUCTOSE IMPROVES ROOT COLONIZATION AND PLANT GROWTH PROMOTION BY AZOSPIRILLUM BRASILENSE SP7*
- P104 ROSA-NÚÑEZ ELENA** *GLUTAREDOXIN5 IS REQUIRED FOR AN OPTIMAL NITROGENASE ACTIVITY*
- P105 TITTABUTR PANLADA** *EXPLORING THE ROLE OF TWO RPON IN BRADYRHIZOBIUM SP. DOA9 IN SYMBIOSIS AND FREE-LIVING GROWTH USING SYNCHROTRON FTIR MICROSCOPY*
- P106 YAMASHITA TAKASHI** *FABRICATION OF CELL PLASTICS AS NOVEL CARBON NEUTRAL MATERIALS*
- P107 YOSHIDOME DAISUKE** *MANUFACTURING L-GLUTAMATE FROM AERIAL NITROGEN USING NITROGEN-FIXING KLEBSIELLA OXYTOCA*

Nodule Function

- P108 ABREU ISIDRO** *THE MBFA IRON EXPORTER SAFEGUARD RHIZOBIA FROM AN IRON OVERLOAD BY THE HOST LEGUME*
- P109 BALLESTEROS-GUTIÉRREZ MARTA** *FUNCTIONAL ANALYSIS OF A HOST-SPECIFIC DIAMINOBUTYRATE AMINOTRANSFERASE FROM RHIZOBIUM LEGUMINOSARUM*
- P110 GAVRIN ALEKSANDR** *NEGATIVE REGULATION OF SYMBIOTIC NITROGEN FIXATION BY A DEFENCE-RELATED MOLECULAR MECHANISM*
- P111 GOORMACHTIG SOFIE** *CATCHING RHIZOBIA TO INTRODUCE HIGH PROTEIN CONTAINING SOYBEAN FOR A SUSTAINABLE AGRICULTURE IN EUROPE*

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- P112 KALO PETER** IDENTIFICATION OF MEDICAGO TRUNCATULA NCR PEPTIDES CRUCIAL OR NON-ESSENTIAL FOR SYMBIOTIC NITROGEN FIXATION
- P113 LEDERMANN RAPHAEL** POLYAMINES ARE ESSENTIAL FOR BACTEROID MAINTENANCE AND N₂-FIXATION
- P114 SOLDEK JOANNA** FUNCTIONAL AND REGULATORY ANALYSIS OF A HOST-DEPENDENT ABC METAL TRANSPORTER SYSTEM FROM RHIZOBIUM LEGUMINOSARUM
- P115 ROWSON MONIQUE** INVESTIGATING THE ROLE OF THE PLANT CIRCADIAN CLOCK IN REGULATING THE MEDICAGO TRUNCATULA – RHIZOBIA SYMBIOSIS VIA NODULE-SPECIFIC CYSTEINE-RICH PEPTIDES
- P116 VALKOV VLADIMIR TOTEV** FURTHER CHARACTERIZATION OF THREE L. JAPONICUS NITRATE TRANSPORTER GENES AND THEIR INVOLVEMENT IN NODULE FUNCTIONING

Nodule Development

- P117 AL BOUNI MOHAMAD ANAS** UNRAVELING THE ROLE OF NODULE-SPECIFIC GRPS IN NITROGEN-FIXING SYMBIOSIS
- P118 BHARDWAJ AKANKSHA** REGULATOR OF SYMBIOSOME DIFFERENTIATION (RSD) MEDIATED TRANSCRIPTIONAL CONTROL OF MEDICAGO TRUNCATULA NODULE DEVELOPMENT
- P119 BIRÓ JÁNOS BARNABÁS** TARGETED MUTAGENESIS OF MEDICAGO TRUNCATULA NODULE-SPECIFIC CYSTEINE-RICH (NCR) GENES USING AGROBACTERIUM RHIZOGENES-MEDIATED CRISPR-CAS9 SYSTEM
- P120 BRIDGE EDMUND** IDENTIFICATION OF A NOVEL PLAYER REQUIRED FOR INFECTION THREAD PROGRESSION WITHIN NODULES OF MEDICAGO TRUNCATULA
- P121 DOMONKOS AGOTA** TWO MEMBERS OF A NODULE-SPECIFIC CYSTEINE-RICH (NCR) PEPTIDE GENE CLUSTER ARE REQUIRED FOR SYMBIOTIC INTERACTION BETWEEN MEDICAGO TRUNCATULA AND RHIZOBIA
- P122 EAST ALISON** FACTORS GOVERNING ATTACHMENT OF RHIZOBIUM LEGUMINOSARUM TO LEGUME ROOTS AT DIFFERENT PHS
- P123 FRUGIS GIOVANNA** HORMONAL PATHWAYS CONTROLLED BY TALE TRANSCRIPTION FACTORS DURING SYMBIOTIC NODULE FORMATION
- P124 GAO JINPENG** AURORA KINASE INTERACTS WITH MICROTUBULE-ASSOCIATED PROTEIN AND KINESIN TO REGULATE SYMBIOTIC INFECTION
- P125 HASTWELL APRIL** USING PHYLOGENOMICS IN LEGUMES TO UNCOVER NOVEL NODULATION GENES
- P126 JHU MIN-YAO** FROM LATERAL ROOT TO FUNCTIONAL NODULE: SPATIOTEMPORAL UNDERSTANDING AND ENGINEERING ORGANOGENESIS IN BARLEY
- P127 JIAN JIAN** ESSENTIAL ROLE OF NODULE INCEPTION IN SYMBIOTIC NITROGEN FIXATION
- P128 KIRST MATIAS** NITFIX: PHYLOGENOMIC DISCOVERY AND ENGINEERING OF NITROGEN FIXATION
- P129 M. LIMA RUI** PRODUCTION OF NODULE-SPECIFIC PEPTIDE MUTANTS AND SCREENING FOR SYMBIOTIC PHENOTYPE
- P130 PÁL ALEXANDRA** EXPLORING THE FUNCTION OF THE MTNODGRP3C GENE IN THE DEVELOPMENT OF NITROGEN FIXING NODULES

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- P131 REYERO-SAAVEDRA ROCIO** IDENTIFICATION AND CHARACTERIZATION OF COMMON BEAN (*PHASEOLUS VULGARIS*) NON-NODULATING MUTANTS ALTERED IN RHIZOBIAL INFECTION
- P132 SRIVASTAVA DEEVITA** BHLH/HLH HETERODIMER REGULATES NODULE VASCULAR BUNDLE POSITION AT PERIPHERY IN MEDICAGO
- P133 VAN DEN EYNDE HELENA** THE POTENTIAL OF FLEMISH RHIZOBIA AS SOYBEAN INOCULANTS

Diversity and Evolution

- P134 BEUKES CHRIZELLE** BIOLOGICAL NITROGEN FIXATION BY SOYBEAN (*GLYCINE MAX* [L.] MERR.), A NOVEL, HIGH PROTEIN CROP IN SCOTLAND, REQUIRES INOCULATION WITH NON-NATIVE BRADYRHIZOBIA
- P135 BHATTACHARJEE OINDRILA** UNRAVELLING CELL WALL MODIFICATION MACHINERY ASSOCIATED WITH THE INTERCELLULAR INFECTION IN PEANUT
- P136 BRÍGIDO CLARISSE** GENOMIC ANALYSIS OF A *SINORHIZOBIUM* STRAIN ISOLATED FROM THE TUNISIAN DESERT
- P137 BURNS KIT** CROSS-COMPATIBILITY OF RHIZOBIA TO MAXIMISE NITROGEN FIXATION IN THE NEW ANNUAL PASTURE LEGUME *SCORPIURUS MURICATUS*
- P138 CATHEBRAS CHLOÉ** GENETIC ANALYSIS OF PLANT ROOT ENDOSYMBIOSES IN *DRYAS* (ROSACEAE)
- P139 CHUNG MARCUS** THE ROLE OF ICESYM IN SYMBIOTIC PERFORMANCE OF CHICKPEA *MESORHIZOBIA*
- P140 KOHLMEIER MACLEAN** COMPLETE GENOME SEQUENCING AND PHYLOGENETIC ANALYSIS OF THE AUSTRALIAN COMMERCIAL RHIZOBIAL INOCULANTS
- P141 KÜCK ANNA CARLOTTA** ISOTOPE RATIO ANALYSES TO INVESTIGATE NITROGEN FIXATION IN SYMBIOTIC LUCINID CLAMS
- P142 MENENDEZ ESTHER** COMPLETE GENOMES UNVEIL HIDDEN TAXONOMIC AND FUNCTIONAL FEATURES WITHIN THE GENUS *SINORHIZOBIUM*
- P143 MISSBAH EL IDRISSE MUSTAPHA** DIFFERENT SPECIES OF *BRADYRHIZOBIUM* FROM SYMBIOVARS *GENISTEARUM* AND *RETAMAE* NODULATE THE ENDEMIC *RETAMA DASYCARPA* IN THE HIGH ATLAS MOUNTAINS.
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