





ENVIROMENT

PP046

Combining culture-dependent and -independent approaches for identifying plastic-degrading bacteria and enzymes in soil samples

Clémence Budin1, Jasmina Nikodinovic Runic2, Ramesh Babu Padamati3, Abraham Brouwer1,4, Tjalf De Boer1

1Microlife Solutions BV, Aterdam, Netherlands, 2IMGGE, University of Belgrade, Belgrade, Serbia, 3School of Chemistry, Trinity College Dublin, Dublin, Ireland, 4Faculty of Sciences, Department of Animal Ecology, VU Aterdam, Aterdam, The Netherlands

PP047

Composition of prokaryotic and eukaryotic microbial communities across the water column of the Eastern Mediterranean Sea.

Georgia Charalampous1,2, Evangelia Gontikaki1, Konstantinos Kormas3, Nicolas Kalogerakis1^{,3}

1 Institute of Geoenergy, FORTH, Chania, Greece, 2School of Chemical and Environmental Engineering, Technical University of Crete, Chania, Greece, 3 Department of Ichthyology and Aquatic Environment, University of Thessaly, Greece

PP048

PRELIMINARY DATA ON THE DIVERSITY OF THE GENUS AGARICUS SECTION MINORES IN GREECE

Savvas Christodoulou¹, Elias Polemis¹, Georgios Konstantinidis², Georgios Zervakis¹

¹Laboratory of General and Agricultural Microbiology, Agricultural University Of Athens, , Greece, ²Greek Mushroom

PP049

Optimizing Bacterial Cellulose Production using Post-Consumed TPA as a Non-Nutritional Adjunct in Twin-Bioreactor System

Everton Henrique Da Silva Pereira1, Olivia Adly Attallah, Bor Shin Shee, Eduardo Lanzagorta Garcia, Marija Mojicevic, Margaret Brennan Fournet 1Technological University Of The Shannon Midlands, Athlone, Ireland

PP050

MicroGLO: Effect based bioassays for antibiotic detection

Tjalf De Boer1, Muriel van Hamersveld1, Sumeyye Sari1, Bram Brouwer1

1Microlife Solutions, Aterdam, Netherlands

PP052

Municipal wastewater treatment: assessment of ecotoxicity and dispersion of bacterial antibiotic resistance

Nicoletta Stouraiti1, Eleftheria Sperelaki1, losifina Gounaki1, Athanasia Katsoni2, Danae Venieri1

1Technical University Of Crete, Chania, Greece, 2Municipal Water Supply and Sewerage Company of Platanias, Chania Greece, Greece







PP053

Removal of antibiotic-resistant Escherichia coli and antibiotic resistance genes in wastewater through wastewater chlorination

Maria Kalli1, Dimitrios Kontogiannatos2, Dimitrios Georgakopoulos2, Constantinos Noutsopoulos1, Daniel Mamais1

1Sanitary Engineering Laboratory, Department of Water Resources and Environmental Engineering, School of Civil Engineering, National Technical University of Athens, Zografou, Athens, Greece, 2Laboratory of General and Agricultural Microbiology, Agricultural University of Athens, Athens, Greece

PP054

SynComs in Microbial Ecotoxicology: Development and standardization of in vitro tests to assess the toxicity of pesticides on N microbial networks

Maria Kolovou1,2, Maria Papadatou2, EvangeliaPapadopoulou1, Dimitrios G Karpouzas2

1Laboratory of Environmental Microbiology, Department of Environmental Sciences, University of Thessaly, Larissa, Greece, 2Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece

PP055

EFFECT OF SYNTHETIC AND BIODEGRADABLE MICROPLASTICS. EITHER ALONE OR IN THE PRESENCE OF PESTICIDES OR VETERINARY DRUGS ON THE SOIL MICROBIOTA.

Eleni Rafaila Lamprou1

1Biochemistry And Biotechnology Department, Larissa, Greece

PP058

Biogas production using raw glycerol on a sunflower-seed-hulls-residues packed digester

Giorgos Markou1, Dimitrios Arapoglou1, Dimitrios Antonopoulos2, Lambis Chakalis2

1 Institute Of Technology Of Agricultural Products, Elgo-dimitra, Lykovrysi, Greece, 2Pavlos N. Pettas SA, Patras, Patras

PP059

Utilization of Mortierella ramanniana lipid fermentation wastewater as maceration water for Pleurotus and Ganoderma cultivation

s Eirini Maria Melanouri1,2, Marianna Dedousi1,2, Ilias Diamantis1,2, **Panagiota Diamantopoulou2,** Seraphim Papanikolaou1

1Agricultural University Of Athens, Department of Food Science and Human Nutrition, Laboratory of Food Microbiology & Biotechnology, Iera Odos 75, 11855 Athens, Greece, 2Hellenic Agricultural Organization ELGO-Dimitra, Institute of Technology of Agricultural Products (ITAP), Laboratory of Edible Fungi (LEF), Sof. Venizelou 1, 14123, Lykovrysi Athens, Greece







PP060

Impact of different soil salinity levels on the concentration of the polysaccharide acemannan and Plant Associated Microbial Communities in Aloe vera (Aloe Barbadensis Miller) plants.

Christina Nikolaou1, Myrto Tsiknia1, Dionysios Gasparatos1, Constantinos Ehaliotis1

1Laboratory of Soil Science and Agricultural Chemistry, Department of Natural Resources and Agricultural Engineering, Agricultural University of Athens, Athens, Greece

PP061

Exploring the diversity and antimicrobial potential of Streptomyces strains in Greek environments.

Georgia C Ntroumpogianni, Ioannis Papageorgopoulos, Paris Laskaris, Efstathios A. Katsifas, Amalia D. Karagouni

1Microbiology Laboratory, Dept Of Biology, National And Kapodistrian University Of Athens, Greece, , Greece

PP063

BACTERIAL AND BIOCHAR-ASSISTED PHYTOREMEDIATION OF MULTI-METAL CONTAMINATED SOIL USING CROTALARIA RETUSA

Michael Nwokoye1

1University Of Nigeria, Nsukka, Nsukka, Nigeria

PP064

ESTABLISHMENT OF SYNTHETIC MICROBIAL COMMUNITIES ACROSS TROPHIC LEVELS TO ASSESS PESTICIDE SOIL MICROBIAL TOXICITY IN AN ECOSYSTEM RELEVANT IN VITRO SYSTEM.

Maria Papadatou1, Maria Kolovou1, Eleftheria Vryzidou1, Evangelia S. Papadopoulou1, Antonis Chatzinotas2,3, Dimitrios G. Karpouzas1

1Laboratory of Plant and Environmental Biotechnology, Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece, 2Department of Environmental Microbiology, Helmholtz Centre for Environmental Research - UFZ, Leipzig, Germany, 3German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, Leipzig, Germany

PP065

Evaluation of the toxicity of three fungicides on Arbuscular Mycorrhizal Fungi (DAOM, Rhizophagus irregularis) using an in-situ monoxenic sandwich system.

Christos Papadopoulos1, Georgia Papadopoulou1, Daniela Tsikou1, Kalliope K. Papadopoulou1, Dimitrios G. Karpouzas1

1University Of Thessaly, Laboratory of Plant and Environmental Biotechnology, Larissa, Greece







PP066

In vitro assessment of the toxicity of anthelmintics on soil ammonia-oxidizing archaea and bacteria: Benchmarking the soil microbial toxicity of anthelminthic veterinary drugs

Evangelia Papadopoulou1, Despoina Tampou1, Athanasia Tsitsela2, Corentin Mora2, Maria Kolovou1, Stathis Lagos2, Dimitrios Karpouzas2

1University of Thessaly, Department of Environmental Sciences, Laboratory of Environmental Microbiology Larissa, Greece, 2University of Thessaly, Department of Biochemistry and Biotechnology, Laboratory of Plant and Environmental Biotechnology Larisssa, Greece

PP067

Biodiversity study of rice commercial samples with RAPDS

Charoula Psallida1, Dimitrios N. Argyropoulos1

1Genetic Identification Laboratory, Institute of Technology of Agricultural Products, Hellenic Agricultural Organization - Dimitra, S. Venizelou 1, 14123, Lycovrissi, Greece

PP068

Antimicrobial and antibiofilm activities of three Pseudoalteromonas strains against fish pathogen Tenacibaculum discolor strain B487

Eirini Schoina1, Christine Delbarre-Laat2, Françoise Leroi2, Delphine Passerini2, Georege-John Nychas1,Laetitia Kolypczuk2

1Agricultural University Of Athens, Athens, Greece, 2Ifremer, MASAE, Nantes, France

PP069

DIMITRA: an upcoming database on effects of pesticides on the soil microbiome and meta-analytic analysis

Mark Swaine1, Alessano Bergna2, Ben Oyserman2, Sotiris Vasileiadis1, Panagiotis Karas1, Claudio Screpanti2, Dimitiros Karpouzas1

1University Of Thessaly, Larissa, Greece, 2Syngenta, Stein, Switzerland

PP070

MICROBIAL POPULATIONS ON THE SURFACE OF A MARBLE MONUMENT IN ATHENS, GREECE

Panagiota Theodoropoulou1,2, Diomi Mamma1, Savvas Genitsaris2, Maria Savvidou1, Ekaterini T. Delegou3, Antonia Moropoulou3, Fragiskos Kolisis1

1Biotechnology Laboratory, School of Chemical Engineering, National Technical University of Athens, 15773 Athens, Greece, , Greece, 2Section of Ecology and Taxonomy, School of Biology, National and Kapodistrian University of Athens, 15784 Athens, Greece, , Greece, 3Laboratory of Materials Science & Engineering, School of Chemical Engineering, National Technical University of Athens, 15773 Athens, Greece, , Greece

PP071

Protocatechuate 4,5-dioxygenase directed evolution: sometimes small changes are all that it takes.







Epameinondas Tsagogiannis1, Maria Kassara1, Maria-Vasiliki Tsokri1, Anna-Irini Koukkou1

1Laboratory of Biochemistry, Sector of Organic Chemistry and Biochemistry, Department of Chemistry, University of Ioannina, Ioannina, Greece

PP073

Characterizing the symbiotic profile of natural and laboratory populations of Aedes albopictus

Georgia Apostolopoulou1, Ioannis Galiatsatos1, Panagiota Stathopoulou1, Antonios Augustinos2, Antonios Michaelakis3, Nikolaos Papadopoulos4, George Tsiamis1

1Lab of Syste Microbiology and Applied Genomics, Department of Sustainable Agriculture, University of Patras, 2 Seferi St., 30100 Agrinio, Greece, 2Department of Plant Protection, Institute of Industrial and Forage Crops, Hellenic Agricultural Organization-Demeter, 26442, Patras, Greece, 3Department of Entomology and Agricultural Zoology, Benaki Phytopathological Institute, 8, S. Delta str., 14561 Kifissia, Greece, 4Department of Agriculture, Crop Production and Rural Environment, University of Thessaly, 384-46, Fitokou St., Magnisia, Greece,

PP074

The linkage between boreal peatlands and greenhouse gases: A review of recent efforts to characterize the diversity and functionality of the Sphagnum microbiome.

Georgios Tsipas1, Georgakilas A.G.2, Konstantinidis K.T.3

1Hellenic Open University, Patras, Greece, 2Physics Department, School of Applied Mathematical and Physical Sciences, National Technical University of Athens (NTUA), Athens, Greece, 3School of Civil and Environmental Engineering, Georgia Institute of Technology, Atlanta, U.S.A.

PP075

Municipal wastewater treatment by means of pilot scale constructed wetlands: elimination of microorganis and antibiotic resistance genes

s Maria Antonia Aretaki1, Konstantinos Stavroulakis1, losifina Gounaki1, Alexanos Stefanakis1, **Danae Venieri1**

1Technical University of Crete, Chania, Greece

PP076

Study of the ecotoxicity and biodegradation of bioplastics

Konstantina Karakoula1, Dimitra Morfogianni1*, Giacomo Tedeschi2, Iosifina Gounaki1 AthanassiaAthanassiou2, Despina Fragouli2, Danae Venieri1*1

School of Chemical and Environmental Engineering, Technical University of Crete, 73100 Chania, Greece.2 Istituto Italiano di Tecnologia, Smart Materials, via Morego 30, 16163 Genova, Italy.

PP076a

The use of microbial cultures with microalgal species for the degradation of bioplastics (PHB and TPS)

Evdokia Syranidou1, Antonia Nicodemou1, Fryni Pyrilli1, Athanasios Fountoulakis2, Nicolas Kalogerakis2, Michalis Koutinas1

1Cyprus University Of Technology, Limassol, Cyprus, 2Technical University of Crete, Chania, Greece