

- P-1 Life cycle assessment of Composting process and compost application effect on global warming potential**
Seung Tak JEONG, Gil Won KIM, and Pil Joo KIM
- P-2 *Withdrawn***
- P-3 *Withdrawn***
- P-4 Nitrogen-rich higher-molecular NOM fractions patterned by lignin degradation products: Considerations on the nature of soil organic nitrogen**
Falk LIEBNER, Luca BERTOLI, Georg POUR, Karl KLINGER, Antje POTTHAST and Thomas ROSENAU
- P-5 Changes in forest soil organic matter affected by windstorm and wildfire**
Gabriela BARANČÍKOVÁ, Erika GÖMÖRYOVÁ, Tadeáš LITAVEC and Dušan GÖ
- P-6 Organic Carbon Content and Elemental Composition of Cryosols**
Lubica POSPISILOVA, Vitezslav VLCEK, Vitezslav HYBLER, Peter UHLIK
- P-7 Effect of wild fire on the characteristics of humic substances in forest soil of**
Kazuto SAZAWA, Hironori YOSHIDA, Katsuya OKUSU and Hideki KURAMITZ
- P-8 Steady-state and Time-resolved fluorescence spectroscopy of aquatic humic substances (HS) isolated from Suwannee River and Nordic Lake produced by**
Vojtech Enev, Leos Dorskocil, Irena Turkeova, and Martina Klucakov
- P-9 Distribution and characteristics of ultraviolet absorption and fluorescence of dissolved organic matter in a large lake (Lake Biwa, Japan)**
Kazuhide HAYAKAWA, Reiji KOJIMA, Chizuru WADA, Tomoyo SUZUKI, Yuko SUGIYAMA, Tetsu KUMAGAI, Naoko TAKEI and Daiya BAMBABA
- P-10 Structural alterations in seawater extractable organic matter during a 90 day period of extraction by seawater under anaerobic conditions**
Hisanori IWAI, Masami FUKUSHIMA, Apichaya ANEKSAMPANT, Atsushi TANAKA and Mitsuo YAMAMOTO
- P-11 Molecular Level Characterization of Sequentially Extracted Labile SOM Fractions**
Hamada ABDELRAHMAN, Diana HOFMANN, Anne E. BERNIS, Claudio COCOZZA, Dan. OLK, Roland BOL and Teodoro MIANO
- P-12 Carbohydrates in biofertilizers produced from agroindustrial residues**
Leandro Antunes MENDES, Paula P. Barione, Maria D. Landgraf, Dan Olk and Maria Olímpia de Oliveira Rezande
- P-13 Application of the delayed luminescence for study of natural organic matter (NOM) derived from lake sediments**
Lilla MIELNIK
- P-14 Spectroscopic Characterization of DOM of the Small River Basin Waters (South Sikhote-Alin Mountains, Pacific Asia)**
Tatiana LUTSENKO, Vladimir SHAMOV, Nadezhda KOZHEVNIKOVA, Tatiana GUBAREVA, Boris GARTSMAN and Anna BOLDESKUL
- P-15 Features of Humus Composition in Urbic Technosol Molic**
Olga BEZUGLOVA, Sergei GORBOV and Anastasiya KARPUSHOVA
- P-16 Determination of aquatic humic substances in lakes and wetlands by the carbon concentration-based DAX-8 batch adsorption technique**
Kumiko TSUDA, Morimaru KIDA, Hajime SATO, Mitsuru HIROTA, Yuko SUGIYAMA, Kazuhide HAYAKAWA, Masayuki KAWAHIGASHI, Bolormaa OYUNTSETSEG, Viacheslav Victorovich KHAKHINOV and Nobuhide FUJITAKE
- P-17 Compositional study of mumiyo NOM using CHN elemental analysis and solution-state one- and two-dimensional NMR spectroscopy**
Andrey I. KONSTANTINOV, Yuri K. GRISHIN, Mikhail I. SAVINYKH and Irina V. PERMINOVA
- P-18 Selected properties of different molecular weight fractions of humic acids isolated from mountain fens**
Romualda BEJGER, Mariola SIENKIEWICZ, Jolanta CIEŚLA, Dorota GOŁĘBIOWSKA and Andrzej BIEGANOWSKI
- P-19 *Withdrawn***
- P-20 Changes in soil-derived DOM characteristics and dissolved iron concentrations by salinity and solar light irradiation**
Keitaro FUKUSHIMA, Ryohei TOMITA, Ryosuke Yanagi and Katsuhide
- P-21 Characterization of polycyclic aromatic hydrocarbons and their nitro-derivatives from indoor wood burning in rural household Thailand**
Walaiporn ORAKIJ, Chieko KASAHARA, Yaowatat BOONGLA, Thanyarat CHUESAARD, Thaneeya CHETIYANUKORNKUL, Ning TANG, Kazuichi
- P-22 Development of an analytical method for simultaneously determining polycyclic aromatic hydrocarbons and their nitro-derivatives by high-performance liquid chromatography with fluorescence detection**

- Yaowatat BOONGLA, Ning TANG, Kazuichi HAYAKAWA and Akira TORIBA
P-23 Bacterial growth variations induced by the presence of natural organic matter and silver nanoparticles at two salinities
Doiron K., Millour M., Gagné J.-P. and Lemarchand K.
- P-24 ROLE OF HUMIC ACIDS IN DEVELOPMENT OF HUMUS ILLUVIATION IN SOILS OF THE SOUTHERN FAR EAST OF RUSSIA**
Boris PSHENICHNIKOV and Nina PSHENICHNIKOVA
- P-25 Effect of pH on dynamic surface tension of biosolid derived dissolve organic**
Gilboa ARYE and Wei ZHANG
- P-26 Atrazine Sorption in Soil Treated with Biochar**
Etelvino Henrique NOVOTNY, Michele Fabri de RESENDE, Natalie de Alcantara RAMOS,
- P-27 Relationship between selected chemical properties of soil humic acids and parameters describing complexation process in humic acids-zinc ions system**
Patrycja BOGUTA and Zofia SOKOŁOWSKA
- P-28 Surface charge property of synthetic imogolite–humic acids complex and wettability of the thin layer**
Yohei UMEMOTO, Yasuhisa ADACHI and Yuji YAMASHITA
- P-29 Correlations between Natural Organic Matter Precursors and the Formation of Disinfection by Products after Water Treatment by Coagulation and Ion**
Erin LOSTY and Emma GOSLAN
- P-30 Stabilization of Natural Organic Matter on Fe/Al hydroxides**
Kai-Yue Chen, Yu-Ting Liu and Yu-Min Tzou
- P-31 Analysis of infrared spectra of humic acids complexes with zinc as a tool for assessment of binding mechanism of metal ions**
Patrycja BOGUTA and Zofia SOKOŁOWSKA
- P-32 The effect of humic acid preparation in chronic lead intoxication**
Ladislav VASKO, Janka VASKOVA, Maria JESENSKA, Pavol MUDRON, Klara KREMPASKA and Daniel ZATKO
- P-33 The effect of humic acid preparation in chronic lead intoxication on glutathione and glutathione related enzymes**
Janka VASKOVA, Ladislav VASKO, Daniel ZATKO and Klara KREMPASKA
- P-34 Transport properties of hydrogels based on humic substances**
Martina KLUČÁKOVÁ, Jiří SMILEK, Michal KALINA, Marcela LAŠTŮVKOVÁ and Petr SEDLÁČEK
- P-35 Influence of Structural Characteristics of Soil Humin on the Sorption Coefficient of a Phenanthrene: A Correlation Study**
Do-Hee LEE, Han-Sem LEE, Hyun-Sang SHIN and Mark A. SCHLAUTMAN
- P-36 Spatialization of soil carbon stock in a rural landscape – a study case in the Southeast of Brazil**
Luísa Lima LEAL and Ana Paula Dias TURETTA
- P-37 Veterinary Pharmaceuticals (VPs) adsorption on humic acids (HA) extracted from Chilean volcanic soils**
Mónica ANTILEN, Francisca CONTRERAS and Carolina DUARTE
- P-38 Electrochemical Evaluation of Enrofloxacin (Fluoroquinone) Adsorption on Soil Organic Matter**
Monica Antilén, Camila Valencia, Camila Canales, Christian Espinoza and Mauricio
- P-39 Humic substances as natural remedial agents of oil polluted waters**
E.V. LASAREVA, A.M. PARFENOVA, N.Yu GRECHISCHEVA and I.V.
- P-40 Effect of field shelterbelts on fractional humus composition and enzymatic activity of eroded loess soil**
Elżbieta J. BIELIŃSKA, and Barbara FUTA
- P-41 Time scale evaluation for the formation of humic substances based on the Maillard reaction**
Yuki NAKAYA, Satoru NAKASHIMA, Takahiro OTSUKA and Mihoko
- P-42 Tea bag model of soil organic matter decomposition**
Miloslav PEKAŘ, Martina KLUČÁKOVÁ, Vojtěch ENEV, and Petr SALAŠ
- P-43 HPLC study of dissolved organic matter dynamics and water quality in River Väana, Estonia**
Viia LEPANE and Kristel SUURSÖÖT
- P-44 Kinetics of hydrothermal transformation of humic substances**
Satoru NAKASHIMA, Takahiro OTSUKA and Yuki NAKAYA
- P-45 Molecular Characteristics and Diversity of Dissolved Organic Matter Produced by an Alphaproteobacteria, *Novosphingobium lentum* from Glucose and**
Shang SHEN, Shinnosuke YAMAGATA, Hiroki HASHIMOTO, Taketoshi KUSAKABE and Yoshihisa SHIMIZU
- P-46 Organic matter dynamics in maize agroecosystems**
Monika SKOWROŃSKA, Tadeusz FILIPEK, Paweł HARASIM, Piotr RUSEK, Wojciech STEPIEŃ and Tamara JADCZYSZYN
- P-47 Dynamics and temporal variation of artificial compounds in dissolved organic matter in the Sagami River, Japan**
Misaki NAGAYAMA, Kazuko KOYAMA, Miho UEMA and Shuichi YAMAMOTO
- P-48 Soil organic matter properties of disappearing peatbog of Ryte Blota (Northern Pol**

Maciej MARKIEWICZ, Łukasz MENDYK, Magdalena BANACH-SZOTT and Sławomir S. GONET

P-49 A Novel Polymer Blend By SH/PVA/PEG

Metin Turan, Mumin Dizman, Nurgül Kıtır, Mehmet Rüştü Karaman, Kenan Emiralioğlu, Şahika Yürek, Aygül Çamdibi, Seher Yetkiner and Cihan Demir

P-50 Historical charcoal additions potentially improve stability of soil organic carbon due to altered particulate carbon fractions

Diana HOFMANN, Bernhard STEFFEN, Hamada ABDELRAHMAN, Ulrich DISKO, Nele MEYER and Nils BORCHARD

P-51 Elution behaviors of iron from hematite to seawater during the oxidative polymerization of humic precursors

Atsushi TANAKA, Apichaya Aneksampant, Hisanori IWAI, Masami Fukushima, Mitsuo YAMAMOTO and Shunitz TANAKA

p-52 Assessment on Nitrous Oxide Emissions in Tropical Fruit Production, Eastern Thai Phenchan WHIJITARA and Suradet PATCHIMKUL

P-53 Effect of anthraquinone-2,7-disulfonate as a humic analogue on microbial leaching of iron from hematite into seawater

Apichaya ANEKSAMPANT, Xuefei TU, Atsushi TANAKA, Masami FUKUSHIMA, Hisanori IWAI and Mitsuo YAMAMOTO

Poster Session

September 15 (Thu) Core time for odd numbers 2:00PM - 3:00PM

September 16 (Fri) Core time for even numbers 11:00AM - 0:00PM

Large Assembly Room in Kanazawa Bunka Hall (2F)

Travel Award

- T-1 Isolation of Humic substances (Humic acids, Fulvic acids and Humin) from soil under Different Tree Stands Plantation in Tropical Rainforest, Nigeria**
S.I. Adebola, O.O. Awotoye, and J.K. Adesanwo
- T-2 Adsorption and fractionation of two types of dissolved organic matter (DOM)**
Shani Avneri, Robert B. Young, Amy M. McKenna, Huan Chen, Yuri E. Corilo, Tamara Polubesova, Thomas Borch, and Benny Chefetz
- T-3 Thermodynamic study of the Hydrogen Atom Transfer (HAT) process of [Humic Acid] and [Humic Acid- analogues]-Hybrids**
Eleni Bletsas, Vasiliki Papapetrou, Maria Louloudi, and Yiannis Deligiannakis
- T-4 Spectroscopic investigation by fluorescence and FTIR spectroscopy of digestate obtained by co-treatment of fruit and vegetable waste in sludge digesters**
Maria Rosaria Provenzano, Ornella Cavallo, Anna Daniela Malerba, Francesco Di Maria, Mirko Cucina, Luisa Massaccesi and Giovanni Gigliotti
- T-5 New Biotechnological Approach for Polycyclic Aromatic Hydrocarbon Degradation Using Bacteria from Tropical Peat**
A.C.F.S. Garcia, and L.P.C. Romão
- T-6 Soil Organic Matter chemical and isotopic composition as paleoenvironmental tracer in a subtropical South Brazilian toposequence**
Daniel Hanke, Deborah Pinheiro Dick, Heike Knicker, José Antonio Gonzalez-Pérez and Marta Velasco Molina
- T-7: The Characterization of Plant Cuticles and Their Usage in Simple Diffusion Processes for Simulation of Foliar Fertilizers**
Marcela LASTUVKOVA, Petr SEDLACEK, Jiří SMILEK and Martina
- T-8 Bacterial and plant DNA recovered in physically isolated, soil organic matter fractions: new insights towards understanding its mean residence time in**
Giulia MARTINO, Luciano BENEDEUCE, Concetta LOTTI, Micol BELLUCCI, Luigi RICCIARDI, Cesar PLAZA, and Claudio ZACCONE
- T-9 Effects of natural organic matter on silver nanoparticles aggregation at environmentally relevant concentrations**
M. Millour, E. Pelletier, and J.-P. Gagné
- T-10 Synthesis of redispersible gold nanoparticles: humic substances as a powerful alternative to sodium citrate**
Alexander POLYAKOV, Artem RUMYANTSEV, Vasily LEBEDEV, Evgeny SHIRSHIN, Irina PERMINOVA, and Eugene GOODILIN
- T-11 Riverine mixing at the molecular scale – An ultrahigh-resolution mass spectrometry study on the fate of Dissolved Organic Matter (DOM) and selected metals in the Amazon confluence zone (Manaus, Brazil)**
Carsten SIMON, Andrea KOSCHINSKY, and Thorsten DITTMAR
- T-12 Production of beneficial materials based on humic acids: from investigation of model fractions to scaling of technology and field tests**
Tatiana Skripkina, Alexey Bychkov, and Oleg Lomovsky
- T-13 Changes in redox properties of humic acids upon sorption to redox inert**
Edisson SUBDIAGA, Silvia ORSETTI, and Stefan HADERLEIN
- T-14 Preliminary study on application of VIS-NIR spectroscopy to evaluate SOM fractions in agricultural soils under industrial impact**
Aleksandra UKALSKA-JARUGA, Božena SMRECZAK, Guillaume DEBAENE, Barbara MALISZEWSKA-KORDYBACH
- T-15 Tracing sediment pore water dissolved organic matter during anaerobic**
Juliana VALLE, Michael GONSIOR, Mourad HARIR, Philippe SCHMITT-KOPPLIN, Norbert HERTKORN, David BASTVIKEN, Ralf CONRAD and Alex
- T-16 A multi-spectral approach to differentiate the effects of adsorbent pretreatments on the characteristics of NOM and membrane fouling**
Longfei WANG, and Mark M. BENJAMIN
- T-17 Eco-toxicological assessment of arsenic and cobalt in fractions of aquatic humic substances of different molecular sizes**
Cláudia Hitomi Watanabe, Adnivia Santos Costa Monteiro, Erik Sartori Jeunon Gontijo, Vivian Silva Lira, Carolina de Castro Bueno, Nirmal Tej Kumar, Renata
- T-18 Application of selective H/D exchange coupled to Fourier Transform Ion Cyclotron Resonance mass-spectrometry to investigation individual compartments of Humic Substances**
Alexander Zhrebkera, Oleg Kharibin, Derek Waggoner, Patrick G. Hatcher, Eugene Nikolaev, and Irina V. Perminova

General

- P-54 Chemical characterization of atmospheric polycyclic aromatic hydrocarbons and nitropolycyclic aromatic hydrocarbons in Beijing, China**
Ning TANG, Akira TORIBA and Kazuichi HAYAKAWA
- P-55 BURNING OF TROPICAL BRAZILIAN RAINFOREST OF SANDY SOIL: DOES IT AFFECT SOIL ORGANIC MATTER?**
Deborah P. DICK, Maurifran Oliveira LIMA, Falberni de Souza COSTA, Janaína B. da COSTA and Larissa Zacher Lara, Maria do Carmo PERALBA
- P-56 Temporal variations of particulate organic matter in Lake Kiba, Japan during**
Hong Tuoi BUI, Seiya NAGAO, Tomoyo SUZUKI, Yuriko KAWANO, Keisuke FUKUSHI, Kouichi HASHI, Shinya OCHIAI and Mosayoshi YAMAMOTO
- P-57 Decolorization properties of humic acids by versatile peroxidase**
Yukiko YANAGI, Ryutaro HACHIYA and Kota NAKAMURA
- P-58 Transport of POM in Fukuhsima River Systems after Heavy Rain Events in**
Seiya NAGAO, Masaki KANAMORI, Teruki UEMURA, Shu TADO, Shinya OCHIAI, Akira KIRISHIMA, Seiichi TOMIHARA, Yoshiaki MIYATA, Akiko GOTO and Takashi HASEGAWA
- P-59 Plantation impacts on the transport of particulate organic matter printed in the reservoir sediments in the Noto Peninsula, Japan**
Shinya OCHIAI, Seiya NAGAO, Tomoyo SUZUKI, Masami FUKUSHIMA, Koyo YONEBAYASHI, Taijiro FUKUYAMA, Masayoshi YAMAMOTO and Koji
- P-60 Humic substances of organic matter and alkaline extract in Agroforestry systems management**
Bruna de Freitas IWATA, Mirian Cristina Gomes COSTA and Luiz Fernando
- P-61 Dynamic of Polycyclic Aromatic Hydrocarbons in Soils Treated with Biochar**
Michele Fabri de RESENDE, Etelvino Henrique NOVOTNY, Taila Figueredo BRASIL, Annibal Duarte PEREIRA NETTO, Beáta Eموke MADARI
- P-62 INFLUENCE OF HUMILID ON THE STATE OF THE HEART MUSCLE IN RETS AFTER INJECTOIN OF ADRENALIN**
Stepchenko L.M., Diachenko L.M., Shevtsova A.I. and Paronic V.A.
- P-63 *Withdrawn***
- P-64 Role of an iron leonardite fertilizer in plant nutrition**
María Teresa CIESCHI, Miguel Ángel NARANJO, Nieves MENÉNDEZ and Juan José LUCENA
- P-65 The effect of compost application on the amount and quality of humus**
Barbora Badalikova, Jaroslava Novotna and Tomas Vymyslicky
- P-66 Quality of Soil Organic Matter in Haplic Cambisol after Exogenous Organic Material Application**
Lubica POSPISILOVA, Magdalena HABOVA, Tomas SIMON and Mikulas
- P-67 Behaviors of humic fractions immobilized in chitosan for the controlled-release**
Bruno R. ARAÚJO, Luciane P.C. ROMÃO, Marta E. DOUMER and Antonio S.
- P-68 New [Humic Acid]-SiO₂ Nano Hybrids for Antioxidant Technologies**
Maria Louloudi, Eleni Bletsa and Yiannis Deligiannakis
- P-69 Effect of humic substances on degradation of naphthalene and alkylnaphthalenes of crude oil by white-rot fungi in soil and peat at low**
Olga KOROLEVA, Natalia KULIKOVA, Dmitry PIVCHENKO, Olga KLEIN, Elena LANDESMAN and Natalia POZDNYAKOVA
- P-70 Investigation the Cr dynamics in plants of green bell peppers cultivates with vermicomposted tannery wastes**
Ramom Rachide NUNES, Lívia Botacini Favoretto PIGATIN, Rhaissa Mecca BONTEMPI, Ticiane OLIVIERA and Maria Olímpia de Oliveira REZENDE
- P-71 Effects of humic acid from low rank coals on the stress resistance of cucumber**
Caifeng ZHANG and Iiyue ZHANG
- P-72 Effects of fulvic acid from peat on stress resistance of chrysanthemum during growing period**
Caifeng ZHANG and Linlin LIU
- P-73 A PRELIMINARY STUDY ON THE MECHANISM OF ENHANCING THE RESISTANCE OF PLANTS BY FULVIC ACID**
Caifeng ZHANG and Yunbin WU
- P-74 The humic acids effect on the coronary perfusion and contractile activity in**
Maria ZYKOVA, Tatiana LASUKOVA, Sergey KRIVOSHCHKEV, Elena VERETENNIKOVA and Mikhail BELOUSOV
- P-75 Humates and Fulvates of Magnesium Used in the Oil Production of *Ricinus communis* Seeds**
Ruben LOPEZ-CERVANTES, Edmundo PEÑA-CERVANTES, Fidel Maximiano PEÑA-Ramos, Leopoldo-Javier RIOS-GONZALEZ and Ruben LOPEZ-SALAZAR
- P-76 Potassium and Magnesium Fulvate Behavior in Strawberry Quality**

- Ruben LOPEZ-CERVANTES, Edmundo PEÑA-CERVANTES, Jose Antonio GONZALEZ-FUENTES, Fidel Maximiano PEÑA-RAMOS, Emilio RASCON-ALVARADO and Ruben-LOPEZ-SALAZAR
- P-77 Energy and biochar in Ghana: characterization of two potential feedstock to enhance cooking methods and soil quality**
 Claudia Maria Branco de Freitas MAIA, Ricardo Lu í s BARATTO, Marcela GUIOTOKU, Etelvino Henrique NOVOTNY, Gilbert Ayine AKOLGO
- P-78 Effect of phenolic acids as humic models on the fixation of carbon dioxide via N -formylation of benzylamine**
 Mami IGARASHI, Kohei YOSHIDA and Masami FUKUSHIMA
- P-79 Artificial cultivation of *Sargassum horneri* during early stage using Fe fertilizer eluate under blue LED irradiation**
MAWARDI Marzuki, Osamu MIKI, Chikako OKUMURA, Chika KOSUGI and Toshiaki KATO
- P-80 Humic priming of in vitro plantlets for production of potato seed minitubers in a greenhouse**
Reza Shahryari
- P-81 Impact of biochar on the humification of pig slurry composting**
Deborah P. DICK, Cristiano FONTANIVA, Ana Cristina LÜDTKE, Janaina Berne da COSTA, Heike KNICKER and Marcelo HOLZ
- P-82 N dynamics and greenhouse gases emissions in pig slurry composting as affected by biochar addition**
Deborah P. DICK, Ana Cristina LÜDTKE, Heike KNICKER, Cimélio BAYER, Janaina B. da COSTA and Cristiano FONTANIVA
- P-83 Effective usage of the dephosphorization slag for the crops using compost**
Asuka SHIOZAKI, Masayuki TANI, Fumihito MIYATAKE, Morimaru KIDA, Nobuhide FUJITAKE, Hiroyuki OHSHIMA, Yoshiyuki MAEDA and Taku KATO
- P-84 Optical characteristics of the Natural Organic Matter (NOM) included in the cattle manures**
Taku KATO, Masayuki TANI, Fumihito MIYATAKE, Morimaru KIDA, Nobuhide FUJITAKE, Hiroyuki OHSHIMA and Yoshiyuki MAEDA
- P-85 Increasing of Water-stability of Soils Aggregates by Water-based humic substances-silsesquioxane soft materials**
Alexander VOLIKOV, Natalia KULIKOVA, Olga FILLIPOVA and Irina
- P-86 The Effect of Humic Substance Fractions on Soil Microbial Content**
 Robert H. Faust
- P-87 On the rice growth-promoting effect of dam sediment**
Jyun MIYAMOTO, Keisuke DZUSH, Hiroki KODAMA and Tohru MIYAJIMA
- P-88 Estimation of chronological change in chemical structure of soil organic matter in tropical peatland based on ¹⁴C age**
Faustina SANGOK, Yuki SUGIURA, Nagamitsu MAIE, Lulie MELLING and Akira WATANABE
- P-89 Synthesis of a hybrid magnetic adsorbent using water rich in natural organic matter (NOM) and its application in the remediation of chromium in industrial**
Daiane REQUIAO, Bruna SANTOS, Dayana ARAUJO, Grazielle CUNHA and Luciane ROMAO
- P-90 Dissolved organic matter dynamics in an ecosystem including a Japanese Cypress Forest and Andsol**
Yuko SUGIYAMA, Mina MORITANI, Nobuhide FUJITAKE, Nobuhito OHTE and Katsutoshi TAKAHASHI
- P-91 Optimization of removal and recycling ratio of cover crop biomass using Net ecosystem carbon budget (NECB) to sustain soil organic carbon stock during**
Jeong Gu LEE, Kyeong Dam GWON, Song Re CHO, Jin Ho LEE and Pil Joo KIM
- P-92 Humic-Like Water-Soluble Lignins as Plant Biostimulants**
 Davide SAVY, Vincenza COZZOLINO, Pierluigi MAZZEI, Antonio NEBBIOSO and Alessandro PICCOLO