



uniss
DIPARTIMENTO DI
AGRARIA

XLV Convegno della Società Italiana di Agronomia

LA RICERCA AGRONOMICA VERSO IL 2030

gli obiettivi globali di sviluppo sostenibile

SASSARI, 20-21-22 settembre 2016



COMUNICAZIONI POSTER

Martedì 20 settembre

15:00 - 19:30 Sessione "**Cropping systems and climate change**"

Moderatore *Pier Paolo Roggero*
Università di Sassari

Poster rapporteur *Anna Dalla Marta e Roberto Ferrise*
Università di Firenze

Key notes The agronomy research towards 2030:
the Sustainable Development Goals
JOHN PORTER - UNIVERSITY OF COPENHAGEN, DENMARK

No data? No models! The future of modelling for
food security with climate change
CHRISTIAN KERSEBAUM - ZALF, MÜNCHENBERG, GERMANY

Elenco poster Soil respiration dynamics in conventional
cropping systems compared to transhumant
grazing system in Central Italy
MATTEO FRANCHIONI, ROBERTO LAI, PARIDE D'OTTAVIO,
LAURA TROZZO, KATARINA BUDIMIR, ELMIR SEDIĆ,
PIETRO AVANZOLINI, MARCO TODERI

Use of crop simulation models to study durum wheat phenological and productive response at variation of sowing date

GLORIA PADOVAN, ROBERTO FERRISE, LAURA ERCOLI,
IDUNA ARDUINI, MARCO BINDI

Evaluation of crop residue management as a strategy of adaptation and mitigation to climate change

DOMENICO VENTRELLA, LUISA GIGLIO, MARCO BINDI,
BRUNO BASSO, UMBERTO BONCIARELLI, ANNA DALLAMARTA,
FRANCESCO DANUSO, LUCA DORO, ROBERTO FERRISE,
FRANCESCO FORNARO, PASQUALE GAROFALO, FABRIZIO GINALDI,
ILEANA IOCOLA, PAOLO MERANTE, LAURA MULA,
ANDREA ONOFRI, SIMONE ORLANDINI, MASSIMILIANO PASQUI,
RODICA TOMOZEIU, GIULIA VILLANI,
ALESSANDRO VITTORIO VONELLA, PIER PAOLO ROGGERO

Soil nitrous oxide mitigation potential of agricultural practices in Mediterranean environment

SIMONA BOSCO, IRIDE VOLPI, NICOLETTA NASSI O DI
NASSO, PATRICIA LAVILLE, GIORGIO VIRGILI, ENRICO BONARI

Soil organic carbon stock variations in
conservation agriculture in north-eastern Italy

I. PICCOLI, F. CHIARINI, L. FURLAN, B. LAZZARO, A. BERTI,
F. MORARI

Impacts of climate change on SOC dynamic and
crop yield of Italian rainfed wheat-maize cropping
systems managed with conventional or
conservation tillage practices

ILEANA IOCOLA, DANIELE ANTICHI, BRUNO BASSO,
ANNA DALLAMARTA, FRANCESCO DANUSO, LUCA DORO,
ROBERTA FARINA, ROBERTO FERRISE, FABRIZIO GINALDI,
PAOLO MERANTE, MARCO MAZZONCINI, LAURA MULA,
ROBERTO ORSINI, MASSIMILIANO PASQUI, RODICA TOMOZEIU,
DOMENICO VENTRELLA, GIULIA VILLANI, LUIGI ZUCCARO,
PIER PAOLO ROGGERO

Crop rotations improve adaptation to climate
change in a Mediterranean area

ROBERTA FARINA, ROSA FRANCAVIGLIA, ANTONIO TROCCOLI

N₂O emissions in a silage maize crop under
Mediterranean conditions

ANTONIO PULINA, MARGHERITA RIZZU, CHIARA BERTORA,
AGOSTINO PIREDDA, GIOVANNA SEDDAIU, ROBERTO LAI,
CARLO GRIGNANI, PIER PAOLO ROGGERO

Energy and greenhouse gas analysis in faba bean
production: implications of conservation
technique

SALEM ALHAJJ ALI, LUIGI TEDONE, LEONARDO VERDINI,
GIUSEPPE DE MASTRO

Importance of crop model parameterization for
climate change studies at national scale

DAVIDE CAMMARANO, MIKE RIVINGTON, KEITH MATTHWES,
DOUGLAS WARDELL-JOHNSON

Effect of saline conditions on germination of
herbicide-resistant and sensitive Echinochloa
crus-galli populations collected in Italian rice
fields

FRANCESCO VIDOTTO, FRANCESCA SERRA, SILVIA FOGLIATTO,
ALDO FERRERO

Mercoledì 21 settembre

8:30 - 9:45

Sessione "Cropping systems and land degradation neutrality"

Moderatore

Laura Ercoli

Scuola Superiore Sant'Anna di Pisa

Poster rapporteur

Massimo Monteleone

Università di Foggia

Comunicazioni orali

The sheep-track network and the high nature value farmland in the Apulia region: a strategy for a systemic conservation

ANNA RITA BERNADETTE CAMMERINO, ROBERTA DE IULIO,
STEFANO BISCOTTI, MASSIMO MONTELEONE

Strip tillage and sowing: is precision planting indispensable in silage maize?

PAOLO BENINCASA, ANDREA ZORZI, FRANCESCO PANELLA,
GIACOMO TOSTI, MATTIA TREVINI

Different soil tillage and nitrogen fertilization in durum wheat: effect on yield and nitrogen utilization.

NICOLETTA NASSI O DI NASSO, IRIDE VOLPI, SIMONA BOSCO,
JONATHAN TRABUCCO, CRISTIANO TOZZINI, FABIO TACCINI,
STEFANIA NUOLI, LUIGI FABBRINI, ENRICO BONARI

Poster

The potential of native plants to accumulate heavy metals from an industrial polluted soil: preliminary results

DONATO VISCONTI, LAURA GIOIA, NUNZIO FIORENTINO,
ADRIANO STINCA, ANTONIO G. CAPORALE, RICCARDO MOTTI,
PAOLA ADAMO, MASSIMO FAGNANO

Soil-waste management as a chance to boost soil recovery and promote land restoration

MASSIMO MONTELEONE, MARCELLA MICHELA GIULIANI,
GIOVANNI DE CRISTOFARO, BRUNO GRANELLA

Effect of the application of mucilage from seeds of chia (*Salvia hispanica* L.) on the physical characteristics of agricultural soils

MARIANA AMATO, LAURA SCRANO, ANTONIO DI MARSICO,
MICHELE PERNIOLA, VIRGINIA LANZOTTI

Soil organic carbon and soil stability status under
legume-wheat rotation

LEONARDO VERDINI, LUIGI TEDONE, SALEM ALHAJJ ALI,
GIUSEPPE DE MASTRO

Accumulation of Zn and Cr in native plants
growing on a farm land polluted by illegal tannery
sludges disposal: preliminary results

DONATO VISCONTI, LAURA GIOIA, NUNZIO FIORENTINO,
ADRIANO STINCA, DIANA AGRELLI, RICCARDO MOTTI,
PAOLA ADAMO, MASSIMO FAGNANO

A model application for agronomic and soil
fertility assessment in wheat soil tillage and
residues management

MICHELE RINALDI, EMANUELE SCALCIONE, MICHELE PERNIOLA,
CARMEN MADDALUNO, PASQUALE GAROFALO

Erasmus + : interuniversity learning in higher
education on advanced land management Egypt
country - ILHAM-EC

LUCIANO GUTIERREZ, AHMED ABDEL-MAWGOOD,
BASSEM ASHOUR, AHMED GAD, FAWZY KISHK,
KONSTADINOS MATTAS, LINDSAY STRINGER

Experiences of sod seeding and minimum tillage in two Sardinian agricultural systems: rice and forage crops.

MARCELLO ONORATO, FRANCESCA FANTOLA, ROBERTO PEDDIS,
PAOLO SCHIRRU, MARIANO VACCA, MARCO GERARDI,
GUIDO DARDANI

10:00 - 13:15

Simposio "Feeding humans, animals and soils with pulses: an Italian perspective"

Moderatore

Michele Pisante
Università di Teramo

Can pulses efficiently feed the world in a sustainable agriculture? The FAO international year of pulses in action

SAMI GAIJI (HEAD OF FAO'S RESEARCH AND EXTENSION)

Grain legumes and sustainable cropping system: an overview

MICHELE PISANTE, FABIO STAGNARI (UNIVERSITY OF TERAMO), ALBINO MAGGIO (UNIVERSITY OF NAPOLI)

Faba bean (*Vicia faba* L.) in cropping systems:
results of 25 years of research in a Mediterranean
environment

PAOLO RUISI, GAETANO AMATO, GIUSEPPE BADAGLIACCA,
ALFONSO SALVATORE FRENDIA, DARIO GIAMBALVO,
GIUSEPPE DI MICELI (UNIVERSITY OF PALERMO)

Optimization of the management practices for
chickpeas in Mediterranean cropping systems

FRANCESCO ROSSINI, ROBERTO RUGGERI, PAOLO RUISI,
GAETANO AMATO, ALFONSO SALVATORE FRENDIA,
DARIO GIAMBALVO, GIUSEPPE DI MICELI
(UNIVERSITY OF VITERBO; UNIVERSITY OF PALERMO)

Feed legumes for truly sustainable crop-animal
systems

PAOLO ANNICHIARICO (CREA LODI)

Old and new bean cultivation systems in Northern
Italy: beyond the bean as food

PAOLO SAMBO (UNIVERSITY OF PADOVA)

Food technology for the valorisation of grain
legumes/pulses

EMANUELE MARCONI (UNIVERSITY OF CAMPOBASSO)

Pulses production: trade, marketing and policy
issues

RINO GHELFI, ALESSANDRO PALMIERI (UNIVERSITY OF BOLOGNA)

14:30 - 16:15

Sessione **"Sustainable management of natural
resources"**

Moderatore

Massimo Fagnano

Università di Napoli

Poster rapporteur

Tuttolomondo Teresa

Università di Palermo

Comunicazioni orali Assessment of feeding preferences of wild animals
in forage resources

GIOVANNI ARGENTI, VERONICA RACANELLI, SARA BARTOLOZZI,
NICOLINA STAGLIANÒ, FRANCESCO SORBETTI GUERRI

Environmental implications of different production
systems in a Sardinian dairy sheep farm

ENRICO VAGNONI E ANTONELLO FRANCA

The DIAnA project: integrating soil and crop sensing methods to support nitrogen fertilization on wheat and barley

BREGAGLIO SIMONE, BIANCA ORTUANI, MARTINA CORTI,
GIOVANNI CABASSI, DANIELE CAVALLI, ERMES MOVEDI,
CARLO GILARDELLI, LUIGI DEGANI, ROBERTO CONFALONIERI,
ARIANNA FACCHI, GIANLUCA GALASSI, LUCIO BOSCHI,
LUCA CASARICO, EDOARDO MAGNANI, CELESTE RIGHI RICCO,
DOMENICO DITTO, PIETRO MARINO GALLINA

Poster

Sustainable weed management in precision agriculture: the use of Unmanned Aerial Vehicles (UAV)

FEDERICO PELOSI, FABIO CASTALDI, SIMONE PASCUCCI,
RAFFAELE CASA

Effect of soil tillage system on weed emergence patterns in field

ROBERTA MASIN, DONATO LODDO, GIUSEPPE ZANIN

Farmers' perception of organic fertilizers use in Italy

SEAN D.C. CASE, LAURA ZAVATTARO, FABRIZIO GIOELLI,
CHIARA COSTAMAGNA, DAVIDE ASSANDRI, CARLO GRIGNANI,
PAOLO BALSARI, MYLES OELOFSE, YONG HOU, OENE OENEMA,
LARS S. JENSEN

Optimizing topdressing fertilization through
ground sensing measurements in rice

ELEONORA CORDERO, BARBARA MORETTI, ELEONORA MINIOTTI,
DANIELE TENNI, GIANLUCA BELTARRE, MARCO ROMANI,
DARIO SACCO

Evolution of soil organic carbon content in
Lombardy plain (Northern Italy) from
conventional tillage to conservation agriculture
practices

ALESSIA PEREGO, MATTEO SANTESSO, MARCELLO ERMIDO CHIODINI,
ALBERTO ROCCA, CALOGERO SCHILLACI, STEFANO BRENNIA,
MARCO ACUTIS

Characterization of autochthonous plant growth
promoting bacteria in relation to durum wheat
nitrogen use efficiency

NILDE A. DI BENEDETTO, DANIELA CAMPANIELLO,
ANTONIO BEVILACQUA, MARIAGRAZIA P. CATALDI,
MARIA ROSARIA CORBO, MILENA SINIGAGLIA, ZINA FLAGELLA

Life project REWAT: sustainable water
management in the lower Cornia Valley

CHIARA MARCHINA, ALBERTO MANTINO, ENRICO BONARI,
ALESSANDRO FABBRIZZI, RUDY ROSSETTO

Use of solid digestate as growing media for the
production of horticultural crops

DOMENICO RONGA, NICOLA PECCHIONI, JUSTYNA MILC,
STEFANO TAGLIAVINI, MASSIMO ZAGHI, ENRICO FRANCA

Effect of different mulching films on yield and
quality of zucchini grown in greenhouse

EUGENIO COZZOLINO, IDA DI MOLA, VINCENZO LEONE,
LUIGI GIUSEPPE DURI, LAURA GIOIA, MASSIMO FAGNANO,
MAURO MORI

Effects of new mulching films in San Marzano
tomato

IDA DI MOLA, EUGENIO COZZOLINO, LUCIA OTTAIANO,
VINCENZO LEONE, SABRINA NOCERINO, RICCARDO RICCARDI,
MAURO MORI, MASSIMO FAGNANO

Application of photo-selective films to manipulate wavelength of transmitted radiation in onion

S. D'EGIDIO, G. PAGNANI, A. GALIENI, S. SPECIA,
F. STAGNARI, M. PISANTE

Testing the potential applications of the UAVs imagery through a long term experiment on tillage and nitrogen fertilization of rainfed durum wheat under Mediterranean conditions: description of an experimental protocol

ROBERTO ORSINI, CARLO ALBERTO BOZZI, ADRIANO MANCINI,
SIMONE TIBERI, SOLOMON TADESSE ENDESHAW,
RODOLFO SANILOCCHI, ANDREA GALLI, GIORGIO MURRI,
GIOVANNA SEDDAIU, ILEANA IOCOLA, PIER PAOLO ROGGERO

Water footprint of urban agriculture: a first assessment in rome urban gardens

ANNA DALLA MARTA, FLAVIO LUPA, FRANCESCA GIARÈ,
ALESSANDRO MONTELEONE, EMANUELE SANTINI,
MICHELA MARINELLI, SIMONE ORLANDINI, FILIBERTO ALTABELLI

Top-soil pore-size distribution and wheat root mass density after 13 years of no-till : first results
ROSSI R., CASTELLINI M., STELLACCI A.M. , VONELLA A.V.,
GIGLIO. L., FORNARO F., MODUGNO F., VENTRELLA D.,
BITELLA G. AND AMATO M.

Comparison of different multivariate methods to select key soil variables for soil quality indices computation
A.M. STELLACCI, E. ARMENISE, R. ROSSI, C. VITTI,
M. CASTELLINI, R. LEOGRANDE, V. VONELLA, G.A. VIVALDI,
D. VENTRELLA, M. AMATO

Physiological characteristics of ancient durum wheat (*Triticum turgidum* L. var. durum) varieties inoculated with endophytes
GIANCARLO PAGNANI, SARA D'EGIDIO, ANGELICA GALIENI,
FEDERICA MATTEUCCI, STEFANO SPECA, MADDALENA DEL GALLO,
FABIO STAGNARI, MICHELE PISANTE

Wild plant species in the city of Palermo (Italy): identification and valorization for ornamental purposes
TERESA TUTTOLOMONDO, CLAUDIO LETO, GIUSEPPE VIRGA,

MARIA CRISTINA GENNARO, MARIO LICATA, ALFONSO LA ROSA,
MARIA LETIZIA GARGANO, GIUSEPPE VENTURELLA,
SALVATORE LA BELLA

Long term effect of conservation agriculture on
soil in the Mediterranean basin

GIANLUCA CARBONI, PAOLO MULÈ

Ecological and pastoral value of ex-arable lands:
the case study of the Alta Murgia National Park

MARIANO FRACCHIOLLA, MASSIMO TERZI, LUIGI TEDONE,
EUGENIO CAZZATO

Nitrogen use efficiency in one year horticulture
succession fertilized with digestate solid fraction

CARMELO MAUCIERI, CARLO NICOLETTO, PAOLO SAMBO,
MAURIZIO BORIN

Giovedì 22 settembre

9:00 -10:20

Sessione "**Cropping systems and food security**"

Parte I

Moderatore

Stefano Bocchi

Università di Milano

Poster rapporteur

Nunzio Fiorentino

Università di Napoli

Comunicazioni orali The impact of environmental conditions and crop practices on the contamination of emerging mycotoxins in cereals

MASSIMO BLANDINO, VALENTINA SCARPINO,

FRANCESCA VANARA, MICHAEL SULYOK, AMEDEO REYNERI

Effects of seeding season and density on yield, proximate composition and total tannins content of two kabuli chickpea cultivars

ROBERTO RUGGERI, RICCARDO PRIMI, PIER PAOLO DANIELI,

BRUNO RONCHI, FRANCESCO ROSSINI

Assessment of storage protein composition in old and modern durum wheat genotypes

MICHELE ANDREA DE SANTIS, MARCELLA MICHELA

GIULIANI, LUGIA GIUZIO, PASQUALE DE VITA, ZINA FLAGELLA

Molecules which improve crop response to salinity and drought stress

ALBINO MAGGIO, GIAMPAOLO RAIMONDI, MICHAEL VAN OOSTEN,

GIANCARLO BARBIERI, STEFANIA DE PASCALE,

YOUSSEF ROUPHAEL, EMILIO DI STASIO, SILVIA SILLETTI,

VALERIO CIRILLO

Agronomic biofortification affects iron and zinc concentration and nutraceuticals in wheat flour and bread

VALENTINA CICCOLINI, ANTONIO COCCINA, ELISA PELLEGRINO,

LAURA ERCOLI

10:40 - 12:00

Sessione "**Cropping systems and food security**"

Parte II

Moderatore

Zina Flagella

Università di Foggia

Poster rapporteur

Fabio Stagnari

Università di Teramo

Comunicazioni orali Yield progress in dryland wheat in Australia. What are the contributions from agronomy and breeding?

RICHARD RICHARDS

Prediction of the rate of development and anthesis date using QTL-based parameters of an ecophysiological model for durum wheat

PIERRE MARTRE, ROSELLA MOTZO, GAVINO SANNA,

ANNA MARIA MASTRANGELO, PASQUALE DE VITA,

FRANCESCO GIUNTA

Growing lettuce under multispectral led lamps
with adjustable light intensity: preliminary results

GIACOMO TOSTI, EURO PANNACCI, MARCELLO GUIDUCCI,
PAOLO BENINCASA, MICHELA FARNESELLI, ANDREA ONOFRI,
FRANCESCO TEI

Mechanical weed control in organic winter wheat

EURO PANNACCI, FRANCESCO TEI, MARCELLO GUIDUCCI

Cereal-legume mixtures for annual forage crop
under Mediterranean conditions

RITA A. M. MELIS, PAOLO ANNICCHIARICO,
CLAUDIO PORQUEDDU

Poster parte I e II

Agronomic assessment of soybean cultivated in
Southern Italy

EUGENIO NARDELLA, GIUSEPPE GATTA, FEDERICA CARUCCI,
ROBERTO ANZIVINO, MICHELE CASCAVILLA, DMITRY KUZNETSOV,
MARCELLA MICHELA GIULIANI

Agronomic methods to control parasitic
Phelipanche ramosa (L.) Pomel in processing
tomato crop

GRAZIA DISCIGLIO, GIUSEPPE GATTA, LAURA FRABBONI,
EMANUELE TARANTINO

TIP: a flexible tool for integrate agriculture
FRANCESCO SAVIAN, PAOLO CECCON, FRANCESCO DANUSO

Development of a smart app for deriving 3D
distributions of the angles of photosynthetic
tissues

R. CONFALONIERI, C. ZOPPOLATO, E. GRASSI, M. DIFRANCESCO,
R. DUÒ, L. SCOPELLITI, D. LOMBARDI, C. AGAPE, L. BAIA,
A. GHILARDI, A. MAGARINI, M. SALVAN, F. MASSARA,
G. BARONCHELLI, P. PAPETTI, G. TOMASONI, A. VAILATI,
O. VITTORI, A. ZANI, C. MICELINI, R. RAVASI,
M. COLALUCE, L. ROSSI, M. MARTINELLI, T. TADIELLO,
D. PARATICO, K. VALLOGGIA, I. FERRI, D. LOCATI,
A. GEROSA, E. COLOMBO, P. PITERÀ, P. INCONDI,
D. DI GAETANO, L. ANTONIETTI, F. MASSI, G. BORLINI,
F. FANTI, I. MINUSSI, S. VIGANÒ, D. BASSI, A. NEGRO,
L. MONOPOLI, U. ROLLA, R. MOTTA, A. MARABOTTI,
E. CARUGNO, M. BUGANA, P. DAL CIN, S. URZÌ,
D. BERTOCCHI, S. TARTARINI, W. THOELKE, A. CURATOLO,
F. BELLOMI, D. COLOMBO, F. NOVELLI, A. ROTA GRAZIOSI,
D. GAIA, V. FAUDA, A. BRUMANA, M. CHIARAVALLI,
F. FEDELI, D. NOÈ, F. PEREZ, A. RODIGARI, S. CELOZZI,
G. LONGARI, M. REBOLINI, G. ZAMBONI, E. MOVEDI,
L. PALEARI, V. PAGANI, T. GUARNERI, M. FOI

Increase of iron and zinc concentration in grain of bread wheat field-inoculated with arbuscular mycorrhizal fungi

LAURA ERCOLI, GAIA PIAZZA, VALENTINA CICCOLINI,
ENRICO BONARI, ELISA PELLEGRINO

Evolution of phenolic acids and antioxidant activity during kernel development of maize and correlation with mycotoxin contamination

DEBORA GIORDANO, TRUST BETA, AMEDEO REYNERI,
MASSIMO BLANDINO

Farming systems dynamics at the urban region level: the case of the Area Pisana

IRUNE RUIZ-MARTINEZ, SABINE GENNAI-SCHOTT,
TIZIANA SABBATINI, ENRICO BONARI, ELISA MARRACCINI

Effects of Trichoderma on growth and nitrogen uptake of lettuce (*Lactuca sativa*)

NUNZIO FIORENTINO, ARMANDO DE ROSA, LAURA GIOIA,
MAURO SENATORE, DONATO VISCONTI, LUCIA OTTAIANO,
VINCENZO CENVINZO, EUGENIO COZZOLINO, YOUSSEF ROUPHAEL,
SHERIDAN WOO, MAURO MORI, MASSIMO FAGNANO

Effect of Hoagland nutrient solution on mineral content of radish (*Raphanus sativus* L.) microgreens

VANESSA DE SIMONE, MARCELLA MICHELA GIULIANI,
GIANCARLO COLELLI, ZINA FLAGELLA

Salt-stress tolerance of tomato inoculated with *Azotobacter chroococcum* and nitrogen assimilation

MICHAEL JAMES VAN OOSTEN, EMILIO DI STASIO,
SILVIA SILLETTI, GIAMPAOLO RAIMONDI, OLIMPIA PEPE
AND ALBINO MAGGIO

Algal derivatives effects on the nutrient use efficiency and plant growth of tomato under salt stress

EMILIO DI STASIO, GIAMPAOLO RAIMONDI,
MICHAEL VAN OOSTEN, SILVIA SILLETTI, VALERIO CIRILLO,
PETRONIA CARILLO, ALBINO MAGGIO

Comparison between municipal solid waste compost and mineral fertilization in forage and grain barley crop

LORENZO SALIS, MARIA SITZIA, GIANLUCA CARBONI,
PAOLO MULÈ, ANDREA CABIDDU

Productivity of a new cultivar of early potato in
Acerra's plain

MAURO MORI, IDA DI MOLA, SABRINA NOCERINO,
MAURO MAZZEI, RICCARDO RICCARDI, MASSIMO FAGNANO,
EUGENIO COZZOLINO

Effect of different nitrogen doses on yield and
quality of zucchini grown in greenhouse

IDA DI MOLA, EUGENIO COZZOLINO, LUCIA OTTAIANO,
LUIGI GIUSEPPE DURI, VINCENZO CENVINZO,
MASSIMO FAGNANO, MAURO MORI

Potentially toxic elements in vegetables for
biomonitoring environmental quality of Campania
region.

LUCIA OTTAIANO, LUIGI GIUSEPPE DURI, NOCERINO SABRINA,
MAURO MORI, VINCENZO LEONE, MARIELLA PASSARI,
MASSIMO FAGNANO

Agricultural reuse of industrial process
by-product: the effect of lignocellulosic biomasses
processing waste on durum wheat (*Triticum durum*
Desf.) seed germination

MARIA GIORDANO, MARIA ISABELLA SIFOLA,
MIRELLA SORRENTINO, ANTONIO PANNICO, STEFANIA DE PASCALE

Vegetation indices to estimate phytochemical content in *Asparagus officinalis* L.

ANGELICA GALIENI, FABIO STAGNARI, MICHELE PISANTE,
SARA D'EGIDIO, GIANCARLO PAGNANI, STEFANO SPECIA,
ALDO BERTONE, MARIA ASSUNTA DATTOLI, CRISTIANO PLATANI,
MARIA SILVIA SEBASTIANI, NADIA FICCADENTI

Field co-inoculation with mycorrhizas and rhizobia greatly increases grain quality of soybean

ELISA PELLEGRINO, ALBERTO MANTINO, ENRICO BONARI,
LAURA ERCOLI

Growing performance of short- and long-day genotypes of *Salvia hispanica* L. under different plant density and irrigation in a Mediterranean environment

ROCCO BOCHICCHIO, ROSANNA LABELLA, GIANFRANCO BITELLA,
TIM D. PHILLIPS, ROBERTA ROSSI, MARIANA AMATO

Tomato growth and nematicidal response to soil treatments with essential oils

SEBASTIANO LAQUALE, MICHELE PERNIOLA, VINCENZO CANDIDO,
TRIFONE D'ADDABBO

Detection of micotoxins in kernels of durum wheat in Sardinia, Italy: results of 5 years of investigation

GIUSEPPA GODDI, BRUNO SATTA, TONINO SELIS,
GIUSEPPINA EMONTI, FRANCO MASIA, UMBERTO PIRISI,
VIRILIO BALMAS

DSS application for IPM in Sardinian farms

MARCELLO ONORATO, GIANVITTORIO SALE, MARCO GERARDI,
SALVATORE ARESU

12:00 -13:15

Sessione "**Renewable sources and no food cropping systems**"

Moderatore

Salvatore Cosentino
Università di Catania

Poster rapporteur

Alessia Perego
Università di Milano

Comunicazioni orali Impact of the growing conditions on the oil content and fatty acid metabolism in developing camelina seeds

RIGHINI, FEDERICA ZANETTI, MARA MANDRIOLI,
GIUSEPPE DI GIROLAMO , ANGELA VECCHI, TULLIA GALLINA
TOSCHI, ANDREA MONTI

Side-by-side comparison of Mediterranean perennial grasses for lignocellulosic feedstock production

DANILO SCORDIA, GIORGIO TESTA, SILVIO CALCAGNO,
GIANCARLO PATANÈ, VENERA COPANI, CRISTINA PATANÈ,
SALVATORE L. COSENTINO

Soil respiration as affected by conventional tillage in a maize-wheat rotation or by a perennial energy crop

ANDREA NOCENTINI, ANDREA MONTI

Poster

Performance of new cultivars for Italian burley tobacco areas

EUGENIO COZZOLINO, FRANCESCO RAIMO, MASSIMO ABET,
MARIAROSARIA SICIGNANO, GIOVANNI SCOGNAMIGLIO,
ANTONIO MOSÈ, SALVATORE BAIANO, TOMMASO ENOTRIO,
LUISA DEL PIANO

Seasonal dynamics of switchgrass (*Panicum virgatum* L.) aboveground biomass and nutrient uptakes under Mediterranean conditions

NICOLETTA NASSI O DI NASSO, MARIA VALENTINA LASORELLA,
CRISTIANO TOZZINI, FABIO TACCINI, ENRICO BONARI

Carthamus tinctorius L.: New opportunity for organic cropping systems of hilly lands of central Italy

SILVIA TAVARINI, MARCO MAZZONCINI, DANIELE ANTICHI,
LUCIANA G. ANGELINI

Physical-chemical characterization of Sambucus ebulus L. and Sambucus nigra L. for their use in the anaerobic digestion process

ANNA GAGLIARDI, MARIANGELA D'ANTUONO,
MATTEO FRANCAVILLA, GIUSEPPE GATTA

Giant reed growth analysis in marginal soils of southern Italy. second year results

VINCENZO CENVINZO, ARMANDO DE ROSA, DONATO VISCONTI,
VINCENZO LEONE, NUNZIO FIORENTINO, MAURO MORI,
MASSIMO FAGNANO

Effect of cover crops on nitrogen uptake, soil water content and biomass production in a short rotation poplar plantation

NICOLA SILVESTRI, VITTORIA GIANNINI, DANIELE ANTICHI

Evaluating wild *Miscanthus* germplasm for biomass potential in a Mediterranean environment

GIOVANNI SCALICI, GIORGIO TESTA, DANILO SCORDIA,
MARIA SCIFO, SILVIO CALCAGNO, SALVATORE L. COSENTINO

Influence of planting density and pre-flowering topping on tobacco yield of seed oil

EUGENIO COZZOLINO, FRANCESCO DE LUCIA, PATRIZIA SPIGNO,
IDA DI MOLA, VISCONTI DONATO, LUIGI GIUSEPPE DURI,
MAURO MORI, MASSIMO FAGNANO

The normalized water productivity (WP) of giant reed (*Arundo donax* L.): a case study of southern Italy.

ADRIANA IMPAGLIAZZO, ANTONELLO BONFANTE, MAURO MORI,
NUNZIO FIORENTINO, IDA DI MOLA, LUCIA OTTAIANO,
MASSIMO FAGNANO

Productive differences between two-year and four-year cutting cycle of short rotation forestry

MAURO MORI, IDA DI MOLA, EUGENIO COZZOLINO,
ADRIANA IMPAGLIAZZO, VINCENZO CENVINZO, ARMANDO DE ROSA,
MASSIMO FAGNANO

First yield data on the influence of mycorrhizae treatment on cardoon genotypes

LUCIA OTTAIANO, IDA DI MOLA, EUGENIO COZZOLINO,
ADRIANA IMPAGLIAZZO, PATRIZIA SPIGNO, MAURO MORI,
MASSIMO FAGNANO

A two-year effect of irrigation on an old plantation (19 years) of giant reed clones

GIORGIO TESTA, DANILO SCORDIA, VENERA COPANI, EZIO RIGGI,
SARAH SIDELLA, MAURO CENTRITTO,
SALVATORE LUCIANO COSENTINO

Is lignocellulosic bioethanol yield of perennial grasses affected by nitrogen fertilization and harvest time effect?

DANILO SCORDIA, GIORGIO TESTA, SILVIO CALCAGNO,
GIOVANNI SCALICI, SARAH SIDELLA, SANTO VIRGILLITO,
VENERA COPANI, CRISTINA PATANÈ, SALVATORE L. COSENTINO

A two-year trial of nitrogen and harvest time effect on biomass yield of Miscanthus and giant reed in the South Mediterranean areas

DANILO SCORDIA, GIORGIO TESTA, GIOVANNI SCALICI,
SARAH SIDELLA, MARIA SCIFO, GIANCARLO PATANÈ,
VENERA COPANI, CRISTINA PATANÈ, SALVATORE L. COSENTINO

Response of *Arundo donax* L clones at increasing levels of salinity and at different soil water content

SARAH SIDELLA, GIORGIO TESTA, DANILO SCORDIA,
VENERA COPANI, SEBASTIANO SCANDURRA,
SALVATORE LUCIANO COSENTINO

Digestate fertilization to giant reed (*Arundo donax* L.): preliminary results

FEDERICO DRAGONI, FRANCESCO SAVASTA,
NICOLETTA NASSI O DI NASSO, GIOVANNI PECCHIONI,
CRISTIANO TOZZINI, ENRICO BONARI, GIORGIO RAGAGLINI

New cultivars for Italian kentucky tobacco industry

FRANCESCO RAIMO, EUGENIO COZZOLINO, ROCCO MESSERE,
MASSIMO ABET, MARIAROSARIA SICIGNANO, ANTONIO MOSÈ,
GIOVANNI SCOGNAMIGLIO, SALVATORE BAIANO,
FRANCESCO MODESTIA, ANTONIO SALLUZZO, TOMMASO ENOTRIO,
LUISA DEL PIANO

Effects of implantation techniques on *Arundo donax* biomass yield under Mediterranean conditions

PASQUALE ARCA, GIACOMO PATERI, FEDERICO GRATI,
MARIA GRISSANTA DIANA, MARCELLA CARTA, TOMMASO BARSALI,
PIER PAOLO ROGGERO

Preliminary study about the adaptability of tree and herbaceous biomass crops in environments degraded by shallow saline groundwater

IDA DI MOLA, EUGENIO COZZOLINO, LUCIA OTTAIANO,
NUNZIO FIORENTINO, VINCENZO CENVINZO, LUIGI DURI,
MAURO MORI, MASSIMO FAGNANO

Agronomic evaluation of new tobacco lines for seed yield

LUISA DEL PIANO, EUGENIO COZZOLINO, FRANCESCO RAIMO,
MASSIMO ABET, MARIAROSARIA SICIGNANO,
GIOVANNI SCOGNAMIGLIO, ANTONIO MOSÈ, SALVATORE BAIANO,
FRANCESCO MODESTIA, ANTONIO SALLUZZO, TOMMASO ENOTRIO

Energetic exploitation of crop residues from globe artichoke

PAOLA A. DELIGIOS, GAVINO SANNA, MARIA T. TILOCA,
MARTINA BUFFA, LEONARDO SULAS, LUIGI LEDDA

Case study on a pilot CHP plant operating on pure rapeseed vegetable oil

SALVATORE LA BELLA, FABIO MASSARO, IGNAZIO CAMMALLERI,
MARIO LICATA, CLAUDIO LETO, GIUSEPPE VIRGA,
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Rosella Motzo

Luigi Ledda

Giovanni Pruneddu

Andrea Porceddu

Salvo Camiolo

Segreteria organizzativa

Giovanna Seddaiu
e-mail: segreteria@siagr.it

Francesca Demuro
e-mail: nrd@uniss.it



AGRITURISMO NATURABIO DI ENRICO & DANIELA BOI
AGRITURISMO SU SIDDADDU DI ZIRATTU BAINGIA ANGELA - AZIENDA AGRICOLA MULAS SEBASTIANO
AZIENDA AGRICOLA IL QUADRIFOGLIO DI TODDE MONICA FRANCESCA
AZIENDA AGRICOLA SALIS MICHELANGELO - AZIENDA AGRICOLA SALVATORE SANNA
AZIENDA AGRICOLA SA MURA DI SECHI ALESSANDRO - AZIENDA AGRICOLA SERRA ANTONIO
AZIENDA AGRICOLA SERRA STEFANO - AZIENDA AGRICOLA FRATELLI ARGHITTU DI ARGHITTU GIAMMARIA
AZIENDA AGRICOLA DI MUNTONI GIANNI - AZIENDA AGRICOLA DI LIGIOS SEBASTIANO
SOCIETA' AGRICOLA PIETRO & SERGIO SABA



TENUTE SELLA & MOSCA spa



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pro sviluppo in agricoltura
Agenzia regionale
per lo sviluppo in agricoltura



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