30<sup>th</sup> August - 1<sup>st</sup> September 2011





# **XIV Symposium in Pesticide Chemistry**

Pesticides in the environment: fate, modelling and risk mitigation

## Piacenza

**Università Cattolica del Sacro Cuore** Auditorium Gian Carlo Mazzocchi • Via Emilia Parmense 84

# **FINAL PROGRAM**





www.symposiumpesticide.org

# Welcome address and foreword

After 32 years the Symposium is not chaired by Attilio Del Re, retired last November, who organised the first edition in the 1979 with Paolo Fontana. Attilio was able to drive the Symposium from national to international features and to keep it at the scientific top level during these years. We wish to thank him for his commitment to the scientific growth of the Symposium and of our community.

General and specialist subjects are covered in this edition on the pesticide behaviour in air, plant, soil and water system. Particular focus is on the use of modelling to support regulatory and policy decision-making. Sessions are dedicated to: advanced laboratory and field studies, monitoring programmes in EU, use of different mathematical techniques to predict environmental contamination, landscape risk assessment of pesticides and its mitigation, regulatory aspects of pesticides use.

These themes are broadly covered in the six sessions of the Symposium, during which speakers set the scene by identifying emerging themes of research and chairmen stimulate discussion. Platform presentations and poster sessions provide an evaluation of current progress in: basic processes (i.e. sorption, transformation, volatilization, plant interaction), models of pesticides environmental fate, indicators of environment quality, landscape risk assessment, mitigation techniques, and environmental monitoring programs.

The purpose of the Organising Committee was to develop a forum to stimulate exchange of the most recent information in the various field of pesticides science and to promote development of constructive interactions between research, regulatory and industrial communities. Given the large number of contributions (more than 140), these expectations have been fulfilled.

In your participant kit you find an USB flash drive where the contributions presented during the 14<sup>th</sup> Symposium in Pesticide Chemistry are collected. Indeed, for the first time the Symposium doesn't have paper proceedings but electronic ones. Also we are moving from refereed papers to extended abstracts.

Thanks are due to the many colleagues from our institution who collaborated to make this 14<sup>th</sup> Symposium happen. Thanks are also due to participants and sponsors, and to the Scientific Committee.

Marca norman

Marco Trevisan & Ettore Capri

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## Sponsors contribution

Symposium Organizers gratefully acknowledge all the sponsors for their concrete support with the followings:



A SIPCAM

coffee break

# Organization and committees

#### Symposium Organizers

Ettore Capri (OPERA Research Center, Università Cattolica del Sacro Cuore, Italy) Colin Brown (University of York, UK) Marco Trevisan (Istituto di Chimica Agraria e Ambientale, Università Cattolica del Sacro Cuore, Italy)

#### Symposium Secretariat

Paola Grasso, Angela Sacchi, Servizio Formazione Permanente

#### Web Service

Anna Grazia Brambilla

#### Local Organizing Committee

Pierluisa Fantini, Maria Arena, Nicoleta Suciu, Lucrezia Lamastra, Erika Carla Guadagni, Paola Riscazzi, Federico Ferrari, Matteo Balderacchi, Marco Zanetti, Gabriele Sacchettini, Elisa Novelli, Elena Manara, Francesca Tiberto

#### **Steering Committee**

Ettore Capri, Colin Brown, Marco Trevisan

#### **Scientific Committee**

Carole Bedos (INRA, France), Pierre Benoit (INRA, France), Sabine Beulke (FERA, UK), Jos Boesten (Alterra, the Netherlands), Colin Brown (University of York, UK), Ettore Capri (Università Cattolica del Sacro Cuore, Italy), Mark Egsmose (EFSA, Italy), Bernhard Gottesbüren (BASF, Germany), Melanie Kah (University of Vienna, Austria), Dimitrios Karpouzas (University of Thessaly, Greece), Jenny Krueger (Swedish University of Agricultural Sciences, Sweden), Christopher Lythgo (EFSA, Italy), Amy Ritter (Waterborne Environmental, USA), Walter Steurbaut (Ghent University, Belgium), Marco Trevisan (Università Cattolica del Sacro Cuore, Italy), Jan Vanderborght (Agrosphere, Germany)

#### Useful telephone numbers and address

Istituto di Chimica Agraria e Ambientale Università Cattolica del Sacro Cuore Via Emilia Parmense 84, 29100 Piacenza, Italy Tel. +39 0523 599345 | Fax +39 0523 599217 e-mail **XIVsymposium.pesticide@unicatt.it** 

For urgent requirements: mobile +39 340 2246769

Administrative Secretariat e-mail *ser.formpermanente-pc@unicatt.it* 

## Registration and social events

#### **Registration desk**

Pre-registration desk is set up at 18.00-19.30 on Monday 29 August at the Congress Centre, service which is available only for participants who are already registered and not need an on site registration.

Registration will be available on first day of the Symposium 30 August from 8.00 to 10.00 am at the Congress Centre.



#### **Registration on site**

Registration onsite will be available only on 30 August from 8.00 to 10.00 am at Congress Centre. On site fees (VAT included): 350 (full registration), 250 euros (PhD students, post docs), Credit card and cash are the two available payment possibilities for on site registration.

#### Wireless connection

Free wireless connection is available in the auditorium and in the adjacent area. In order to obtain the password you need to register with your identity card at the wireless desk in the foyer of the auditorium. The password is valid for the entire period of the congress.



#### **Meals and Refreshments**

Coffee breaks and buffet lunches will be served in the fover of the auditorium. On 1<sup>st</sup> September lunch will be served at the University canteen (Collegio S. Isidoro) which is located next to the University (see map below).

All lunches, coffee breaks, welcome party and social dinner are included in the registration fee and will be served according to the program.

#### Social program

The social program of this edition takes place at Collegio Alberoni (via E. Parmense 77, see map at previous page), a famous building started to be built by Cardinal Giulio Alberoni in 1732, rich of charm and treasures.

Giulio Alberoni (Piacenza 1664-1752) was a churchman, a man of the world, a capable politician and diplomat, a businessman, a learned art collector and a munificent benefactor of his native town. After his studies and early steps in the ecclesiastical order, he started his brilliant political and diplomatic career serving Francesco Farnese, duke of Parma during the war of Spanish succession (1702-1713). Abbot Alberoni managed to win the king of France's favour and, above all, the favour of Philip Bourbon duke of Anjou, who was to become king of Spain as Philip V. He became his most authoritative counsellor and a sort of Prime Minister. Thanks to his diplomatic success he was appointed cardinal by Pope Clement XI in the secret Concistory of 12th July 1717. In Rome he was officially conferred the scarlet hat by Pope Innocent XIII on January 12th, 1724. He spent there the most peaceful years of his life until 1735, devoting himself to social relations, collecting works of art for the fittings of his residences, the Palace of the Guardian Angels in Rione Trevi and the suburban villa near St Agnes in Via Nomentana, until a new phase of his ecclesiastic mission started within the Roman Curia, thanks to the favour of Clement VII and Benedict XIV. On account of his proven experience he was entrusted with the government of the Legation of Romagna (1735-1739) and, later on, Bologna (1740-1743), but the actual achievement of Alberoni's active old age was the College for the education of young priests, which construction, just outside the town of Piacenza not far from the old St Lazarus' Hospital, started in 1732. He took care personally of the pulling down of the old building as well as of the plan and construction of the new one, but then he entrusted the Congregation of the Mission, established by St Vincent de Paoli with its management. In the autumn of 1751 the College could welcome the first eighteen young people and on 26th June 1752, when the cardinal died, he left all his properties to the charitable institution which still preserves them.

3 are the social events scheduled at Collegio Alberoni:

#### Welcome party

30 August at 19.00, in the lovely cloister, via E. Parmense, 77





**Guided visit of Collegio 31 August at 19.00** Collegio Alberoni, via E. Parmense, 67

The visit will start from the Cardinal's apartments with its beautiful collection of paintings.

Giulio Alberoni started collecting works of art early in his youth in Piacenza. Later on, he enriched his collection during his stay in Spain and above all in Rome starting from the 1720's. The cardinal enjoyed good relations with various contemporary artists, but he was also interested in the collection of work of artists of the previous centuries, like this unforgettable **Ecce Homo by Antonello da Messina** -one of the masterpieces of the author- and other famous paintings like those by Jan Provost.

The visit will continue with the library of the College, with its **collection of 130.000 books** and with the unforgettable refectory.



The visit will end with the Cabinet of Physics, the Meteorological Observatory born in 1802 and the Astronomy Observatory.



#### Social dinner

#### 31 August at 20.30

Arazzi Hall of Collegio Alberoni, via E. Parmense, 67

The collection of tapestries left by the cardinal is highly valuable both for the quantity of the pieces and their quality. The 18 magnificent masterpieces are divided into three different series. Eight pieces, known as the Series of Aeneas and Dido, were woven by a tapestry weaver from Antwerp (Michel Wauters, around 1670), from paper drawings by Giovan Francesco Romanelli, the best alumn of Pietro from Cortona.

Eight more pieces are known as Alexander the Great Series, and were woven by an unknown Flemish Tapestry weaver working in Brussels during the second half of the 17th century (probably Jan Leyniers) perhaps from paper drawings by Jacob Jordaens, one of the most important followers of Rubens. Last but not least, come the most ancient and valuable ones belonging to the so-called Priam's Series.

You All will be introduced to the tapestries collection just before the social dinner.



# Scientific contributions

#### **Oral sessions**

Presenters are invited to be in the auditorium some minutes before the beginning of the session, and introduce themselves to the chairperson. Oral presenters will be provided of 20 minutes, 15 minutes for the presentation and 5 minutes for the discussion.

Presenters that were not able to send their presentations by e-mail are kindly asked to upload them at the presentations desk in the foyer of the auditorium.

#### Posters

Poster size is maximum 90 x 120 cm (width x height). Posters should be displayed on Monday 29 August 18-19.30 or Tuesday 30 August from 8 to 10.00.

Authors must be present during the lunch breaks, the coffee breaks and the dedicated poster session (Wednesday 31 August from 16.50 to 18.00). Posters remain also accessible to attenders throughout the meeting.

#### **Paolo Cabras Best Poster Awards**

The XIV Symposium in Pesticide Chemistry includes two Scientist Awards for best Posters. The Paolo Cabras Best Poster Awards is established in memorial of Prof. Paolo Cabras (+2010) who was Professor of Food Chemistry (Faculty of Pharmacy at University of Cagliari, Italy) and a driving force for the advancement of pesticide-food-environment problems at Italian and International level.

He founded GRIFA (Italian Research Group for Pesticides and the Environment) and as President he founded in 1999 MGPR (Mediterranean Group of Pesticides Research), an International Scientific Association that involves Mediterranean researchers on pesticides residues in food. These two associations bring together researchers from Italy and the whole Mediterranean basin who study pesticides, with regard to their environmental and residual impact and risk evaluation.

Awards assignment is judged by the Steering Committee, that includes a good cross-section of main issues of the Symposium. Winners will receive a prize money.

The ceremony for the "Paolo Cabras Best Poster Awards" is scheduled in the final session of the conference, on Thursday 1<sup>st</sup> September, at 11.20.

#### **Enviresearch Young Scientist Awards**

The XIV Symposium in Pesticide Chemistry includes two Young Scientist Awards for scientists up to 35 years old that presented the two best oral or poster contributions to the Symposium. Awards assignment is judged by the Steering Committee. The awards are prize moneys. The ceremony for the "Enviresearch Young Scientist Awards" is scheduled in the final session of the conference, on Thursday 1st September at 13.10.

## Useful information

#### Transport

Public transport in Piacenza is provided by the lines TEMPI bus system (**www.tempi.piacenza.it**). Bus lines 2 & 3 allow passengers to reach the university campus and train station in ten minutes and the city centre in ten minutes from the station (20 min from the University). Tickets cost € 1.20 and are valid for one hour.

**Trenitalia** is the Italian train rail network: you can buy tickets from the website **www.trenitalia. com**, or at train ticket vending machines found throughout all train stations.

A **taxi** stand is available at the Piacenza train station. A taxi service is available at the phone number 0523 59 19 19.

The **airport of Milan Malpensa** – **MPX** - (located 50 km northwest) is connected with central railway station by "Malpensa express" trains which takes you 40 minutes from Milan Cadorna station to Malpensa Airport (website: http://www.malpensaexpress.it) (to reach Cadorna from Central Rail station the metro - green line - direction Assago/Abbiategrasso, stopping in Cadorna). At Milan central railway station shuttle bus connect each 20 minutes the station with Malpensa Airport (http://www.malpensashuttle.it/index.html); it takes approximately 1 hour.

Bus line connects Linate airport – LIN - (located 15 km southeast of the city) to Milan central station, it takes about 25 minutes.

From **Bergamo Orio al Serio – BGY** – (55 km from central Milan) to Milan Central railway station takes you 60 minutes, shuttle bus connection is available.

#### Maps

A full map of Piacenza is available with the conference material. The following map help you in localizing the University, the city centre and the railway station.



#### **Restaurants and pizzerie**

In the University surroundings

**Restaurant Commercio** - Via Cristoforo Colombo, 118 – close on Saturday- +39 0523 614272 **Pizzeria Restaurant O Professore** - Via Emilia Parmense, 3 – close on Tuesday - +39 0523 571899

#### In the center

Restaurant La Carrozza - Via 10 Giugno, 122- never closed- +39 0523 326297

Pizzeria Tosello - Via francesco Daveri, 10- closed on Sunday evening and Monday lunch- +39 0523 324824

#### **Tourist information**

I.A.T. Tourist information office Piazza dei Cavalli, 2, 29121 Piacenza 0523 329324 *http://www.emiliaromagnaturismo.it/en/* 

If you have general inquiries you can contact the Congress Secretariat at the registration desk or at *XIVsymposium.pesticide@unicatt.it* 



# Short program

### **Monday 29 August**

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### **Tuesday 30 August**

08.00 • 10.00	Registration and poster display
10.00 • 12.15	Welcome address and plenary presentations
12.15 • 14.00	Buffet lunch and poster session
14.00 • 16.00	Presentations LAB session
16.00 • 16.30	Coffee break and poster session
16.30 • 18.30	Presentations FIELD session 1
19.00	Welcome party at Collegio Alberoni

### Wednesday 31 August

08.50 • 10.50	Presentations FIELD session 2
10.50 • 11.20	Coffee break and poster session
11.20 • 13.20	Presentations MODELLING session 1
13.20 • 14.50	Buffet lunch and poster session
14.50 • 16.50	Presentations MODELLING session 2
16.50 • 18.00	Coffee break and poster discussion
19.00	Guided tour of Collegio Alberoni
20.30	Social dinner at Collegio Alberoni

### **Thursday 1 September**

08.50 • 10.50	Presentations REGULATORY session
10.50 • 11.20	Coffee break and poster session
11.20 • 11.30	Paolo Cabras Best Posters Award
11.30 • 13.10	Presentations RISK PREVENTION/RISK MITIGATION session
13.10 • 13.20	Enviresearch Young Scientists Award
13.20 • 13.30	Closing remarks by the Steering Committee
13.30	Lunch break at the university canteen

## Extended program

### Monday 29 August

18:00 • 19:30 Pre-registration (for participants who finalised registration before 20 August, on site registration only possible on Tuesday 30 August) and poster display

### **Tuesday 30 August**

8:00 • 10:00 Registration and poster display

#### PLENARY PRESENTATIONS

**Chairs:** Colin Brown (University of York, UK) and Marco Trevisan (Istituto di Chimica Agraria e Ambientale, Università Cattolica del Sacro Cuore, Italy)

10:00 • 10:15	<b>Official XIV Symposium Opening: Welcome Address</b> <i>Marco Trevisan</i> , Istituto di Chimica Agraria e Ambientale, Università Cattolica del Sacro Cuore, Italy
10:15 • 10:55	Impact of Regulatory requirements on the development of Plant Protection Products today and in the future Richard Maycock, Dow AgroSciences, UK
10:55 • 11:35	The Pesticides Unit within the new EFSA structure: tasks, challenges, vision Herman Fontier, PesticidesUnit, EFSA
11:35 • 11:55	<b>Risk reduction: opportunities and challenges</b> <b>Ettore Capri</b> , OPERA Research Center, Università Cattolica del Sacro Cuore, Italy
11:55 • 12:15	General Discussion
12:15 • 14:00	Buffet lunch and poster session
LABORATORY STUDIES SESSION Chairs: Sabine Beulke (FERA TIK) and Dimitrios Karpouzas (University of Thessaly Greece)	

14:00 • 14:20 Do lab derived Koc values of pesticides match Koc values determined from column and field scale experiments? A critical analysis of relevant literature Jan Vanderborght, Agrosphere, Germany

14:20 • 14:40	Pesticide transfer in the unsaturated zone: sorption and degradation process in geological stratum Hélène Blanchoud, EPHE-UMR Sisyphe, France
14:40 • 15:00	Enantioselective Transformation of the Chiral herbicide beflubutamid in soil Ignaz J. Buerge, Agroscope, Switzerland
15:00 • 15:20	Photodegradation of profoxydim in natural waters. Comparative study of the photolytic behavior of the active substance and its formulation AURA® Beatriz Sevilla-Morán, INIA, Spain
15:20 • 15:40	Searching for Fungi in vermicomposts to Degrade Persistent pesticide metabolites Jean Manuel Castillo-Diaz, EEZ-CSIC, Spain
15:40 • 16:00	Microbial degradation of fluroxypyr in railway subgrade Harald Cederlund, Swedish University of Agricultural Sciences, Sweden
16:00 • 16:30	Coffee break and poster session

#### FIELD STUDIES SESSION

**Chairs:** *Melanie Kah* (University of Vienna, Austria) and *Pierre Benoit* (INRA, France)

16:30 • 16:50	Kinetic sorption of pesticides in soil: bridging from laboratory to the field Klaus Hammel, Bayer CropScience AG, Germany
16:50 • 17:10	Behavior of nursery-box-applied fipronil and fipronil sulfone in rice paddy field Dang Quoc Thuyet, Tokyo University of Agriculture and Technology, Japan
17:10 • 17:30	Environmental fate of Flufenacet in a lowland catchment in Northern Germany Uta Ulrich, University of Kiel, Germany
17:30 • 17:50	The impacts of Azoxystrobin on overall and active soil microbial communities Christopher C. Howell, University of Warwick, UK
17:50 • 18:10	Guttation of seed treated crop plants – A "new" way of exposure from systemic plant protection products for honeybees? Ina Joachimsmeier, Julius Kühn-Institut, Germany
18:10 • 18:30	Biological study of herbicide formulations containing synthetic auxins chemically bonded to (R,S)-3-hydroxybutyric acid oligomers Witold J. Kowalski, Jan Dlugosz University, Poland
19:00	<b>Welcome party at Collegio Alberoni</b> (via E. Parmense, 77 - Piacenza)

### Wednesday 31 August

#### FIELD STUDIES SESSION

**Chairs:** Jenny Kreuger (Swedish University of Agricultural Sciences, Sweden), and Jan Vanderborght (Agrosphere, Germany)

8:50 • 9:10	Exposure monitoring and bioaccumulation potential of Quinoxyfen residues in soil and aquatic sediment following repeated use in cereal
	growing regions of Germany Gunnar Fent, RLP AgroScience, Germany

- 9:10 9:30 Comparison of pesticide monitoring techniques using passive samplers and automatic water samplers in a Swedish stream Stina Adielsson, Swedish University of Agricultural Sciences, Sweden
- 9:30 9:50 Application of the in situ Stir Bar Sorptive Extraction as a passive sampling technique for the monitoring of agricultural pesticides in natural waters Azziz Assoumani, Cemagref, France
- 9:50 10:10 Presence of glyphosate and its soil metabolite aminomethylphosphonic acid (AMPA) in surface water : what does it mean for the environment and for human health? Richard P. Garnett, Monsanto Europe, Belgium
- 10:10 10:30 Traking pesticides residues in WWTPs Marianne A. Köck Schulmeyer, IDAEA-CSIC, Spain
- 10:30 10:50 Emissions of plant protection products from protected crops to environmental receptors Ton Van der Linden, RIVM, the Netherlands
- 10.50 11.20 Coffee break and poster session

#### **MODELLING SESSION**

Chairs: Bernhard Gottesbüren (BASF, Germany) and Carole Bedos (INRA, France)

11:20 • 11:40Towards operational models for water and pesticides fluxes at the<br/>catchment scale: model performance vs data quality<br/>Lionel Bouvet, INRA and Envilys, France11:40 • 12:00Measuring and modelling pesticide leaching in macroporous soils along<br/>a hill slope

Ingeborg Joris, VITO, Belgium

- 12:00 12:20 MACRO-SE, A versatile tool for scenario-based pesticide risk assessments: presentation & application Julien Moeys, Swedish University of Agricultural Sciences, Sweden
- 12:20 12:40 Assessment of pesticide exposure concentrations in a small catchment using the CASCADE-TOXSWA model Erik Van den Berg, Alterra, the Netherlands

- 12:40 13:00 Development and testing of a mechanistic algorithm to calculate the influence of a shallow water table on flow dynamics through vegetative filter strips Claire Lauvernet, CEMAGREF, France
- 13:00 13:20 Modelling the fate of pesticides in vegetated filter strips using VFSMOD-W Colin Brown, University of York, UK
- 13:20 14:50 Buffet lunch and poster session

#### MODELLING SESSION

Chairs: Amy Ritter (Waterborne Environmental, USA) and Mark Egsmose (Pesticides Unit, EFSA)

Implications of future climatic changes on pesticide leaching through 14:50 • 15:10 Danish clayey and sandy soils Annette Elisabeth Rosenbom, Geological Survey of Denmark and Greenland, Denmark 15:10 • 15:30 Effect of uncertain statistics of pesticide fate parameters on predicted worst-case environmental concentrations Jan Vanderborght, Agrosphere, Germany 15:30 • 15:50 Assessing persistence of plant protection products using process based models Bernhard Gottesbüren, BASF SE, Germany 15:50 • 16:10 Modelling pesticide volatilization from crop at the field scale Carole Bedos. INRA. France Developing groundwater scenarios for Northen China and comparison 16:10 • 16:30 of their vulnerability with focus groundwater scenarios Gabriella Fait. Alterra, the Netherlands 16:30 • 16:50 A Scenario for exposure of water organisms in the Netherlands Aaldrik Tiktak, PBL, the Netherlands 16:50 • 18:00 Coffee break and poster discussion (along the posters) 19:00 Guided tour of Collegio Alberoni 20:30 Social Dinner at Collegio Alberoni (via E. Parmense, 67 - Piacenza)

### **Thursday 1 September**

#### **REGULATORY SESSION**

**Chairs:** Jos Boesten (Alterra, the Netherlands) and Christopher Lythgo (PesticidesUnit, EFSA)

8:50 • 9:10	Nano-pesticides: state of knowledge, impacts and exposure assessment <i>Mélanie Kah</i> , University of Vienna, Austria
9:10 • 9:30	The necessity to have national drift curves: example of drift curves for vineyards in Northen Italy Paolo Balsari, Università degli Studi di Torino, Italy
9:30 • 9:50	Evaluating laboratory and field dissipation studies to obtain DegT50 in soil Michael Klein, Fraunhofer IME, Germany
9:50 • 10:10	Evaluation of draft guidance for deriving non-equilibrium sorption parameters for use in groundwater modelling Ian Hardy, Battelle UK Ltd, UK
10:10 • 10:30	Estimating Confidence Intervals for Metabolite Degradation Rates Russell L. Jones, Bayer CropScience, USA
10:30 • 10:50	Possible impact of new EU regulations on national PPPs market Maristella Rubbiani, Istituto Superiore di Sanità, Italy
10.50 • 11.20	Coffee break and poster session
11:20 • 11:30	Paolo Cabras Best Poster Awards

#### **RISK PREVENTION/RISK MITIGATION SESSION**

Chairs: Colin Brown (University of York, UK) and Walter Steurbaut (Ghent University, Belgium)

- 11:30 11:50
   Towards the development of a biofilter for treating pesticidecontaminated wastewaters from the fruit packaging industry Dimitrios G. Karpouzas, University of Thessaly, Greece
- 11:50 12:10Buffer strip width and agricultural pesticide contamination in Danish<br/>lowland streams: Implications for stream and riparian management<br/>Jens Rasmussen, University of Aarhus, Denmark
- 12:10 12:30 Reduction of plant protection product (PPP) losses to water through environmentally optimized sprayers (EOS) - Results from the EOS Project Manfred Roettele, Better Decisions, Germany

12:30 • 12:50	Urban pesticide best management practices: results of Phyt'Eaux Cités, a program to reduce river contamination (FRANCE, 2007-2010) Fabrizio Botta, EPHE-UMR Sisyphe, France
12:50 • 13:10	Agricultural runoff and best management practices for protection and productivity Jeremy Dyson, Syngenta Crop Protection, Switzerland
13.10 • 13.20	Enviresearch Young Scientist Awards
13:20 • 13:30	<b>Closing remarks by the Steering Committee</b> <b>Ettore Capri</b> (OPERA Research Center, Università Cattolica del Sacro Cuore, Italy), <b>Colin Brown</b> (University of York, UK), <b>Marco Trevisan</b> (Istituto di Chimica Agraria e Ambientale, Università Cattolica del Sacro Cuore, Italy)
13:30	Lunch at the University canteen

### Posters session

Posters session takes place during lunch breaks, coffee breaks and the dedicated poster session on Wednesday 31 August from 16.50 to 18.00.

Posters remain also accessible to attenders throughout the meeting.

# Posters series

- 01 AMPA (aminomethyl-phosphonic acid) multiple origins in surface water: a newlaboratory test Botta F., Couturier G., Blanchoud H., Lavison-Bompard G.
- 02 QQQ and q-tof mass spectrometry direct aqueous analysis of pesticides in water *Lucini L., Pellegrino R., Cimino N., Molinari G.P.*
- 03 Detection of Cr VI in organic substrates Medini L., Cavalleri P., Bruzzone D., Accinelli C., Minuto A., Minuto G.
- 04 Analytical method for the residue analysis of benalxyl-m, the active isomer of the fungicide benalaxyl, in agricultural and processed commodities and on food of animal origin Sicbaldi F., Soddu R., Riccelli S., Arienta S.
- 05 Degradation and racemization of haloxyfop-methyl and free haloxyfop enantiomers in soil investigated by enantioselective HRGC and various mass spectrometric detection techniques

Balmer M.E., Poiger T., Buerge I.J., Buser H.R., Müller M.D.

- **06** Validation of a method for the analysis of 1,3-dichloropropene and chloropicrin in soil and their determination in greenhouse pepper crop in the south of spain Sandín-España P., Carrasco-Amado C., Villarroya-Ferruz M., Mateo-Miranda M., Alonso-Prados Jl., López-Goti C.
- 07 *E. coli* and *Staphylococcus aureus* as model systems for screening of pesticide toxicity *Polláková J, Kovalkovičová N., Pistl J., Csank.T., Legáth J.*
- 08 Photostability of transformation products from three selected pesticides exposed to simulated sunlight conditions *Žabar R., Trebše P.*

- 09 An isotope exchange technique to quantify irreversibility in chlorotoluron sorptiondesorption by three British soils Suddaby L A., Beulke S., Van Beinum W., Oliver R G., Kuet S., Brown C D.
- 10 Atmospheric degradation of the propachlor herbicide and related compounds. Kinetics and degradation products Muñoz A., Vera T., Sidebottom H., Mellouki A., Rodenas M., Borras E.
- 11 Evaluation of pesticide accumulation in biofilm: method development and accumulation kinetics Lahjiouj F., Margoum C., Tlili A., Coquery M., Montuelle B.
- 12 Simple standardized soil column transport experiments to evaluate the effective sorption behaviour of four different pesticides in four different soils *Fent G., Geissler S., Hammel K.*
- 13 Oxamyl-degrading bacteria: isolation, characterization and the gene involved in the hydrolysis of carbamates Chanika E., Georgiadou D., Rousidou C., Karpouzas D.G.
- 14 Metribuzin adsorption on a silty-clay soil of Algeria: effects of fertilizer and pH Oukali-Haouchine O., Moussaoui K.M., Harik D., Mayata Y.
- 15 Laboratory study to investigate the effect of humic acid on photodegradation of 14C-parathion-methyl Setzer S., Fent G., Kubiak R.
- 16 Adsorption/desorption behavior of thiram and its formulation pomarsul<sup>®</sup> onto commercial humic acids Filipe O., Vidal M., Duarte A., Santos E.
- 17 Coadsorption of two pesticides (diuron and metribuzin) on powdered activated carbon Boucif A., Boussahel R., Harik D., Moussaoui K.M.
- 18 Effect of soil sterilization on terbuthylazine and diuron dissipation in amended and unamended soils *Muñoz, A., Cox, L., Hermosin M. C., Cornejo J.*
- 19 Adsorption-desorption behavior of three pesticides as influenced by chemical composition of decomposing maize mulch Aslam S., Bergheaud V., Garnier P., Rumpel C., Thiebeau P., Benoit P.

- 20 Dissipation and degradation of endosulfan in/on cauliflower (*Brassica oleracea l., var. botrytis*) Duhan A., Duhan S., Kumari B.
- 21 Uptake and translocation of acibenzolar-s-methyl in tomato plants after soil application Myresiotis C.K., Vryzas Z., Papadopoulou-Mourkidou E.
- 22 Fate of azoxystrobin in a vineyard soil under laboratory and field conditions: influence of spent mushroom substrate Herrero-Hernández E., Andrades M.S., Marín-Benito J.M., Sánchez-Martín M.J., Rodríguez-Cruz M.S.
- 23 Degradation half-lives of 2,6-dichlorobenzamide (BAM) in soil based on field dissipation and field leaching trials *Sur R., Kley C.*
- 24 Two-dimensional deposition rates of volatilised lindane investigated in large outdoor wind tunnel studies Staffa C., Fent G., Kubiak R.
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