

# Poster Session

## **Session I Weed Ecology**

### **Effect of ground cover management on beneficial ground-dwelling arthropods in organic and conventional apple orchards**

Myrto Barda; Vaya Kati; Filitsa Karamaouna; Theodoros Stathakis; Leonidas Oikonomou; Thomas Tscheulin; Dionysios Perdikis

### **Impact of the competitive hierarchy of *Ambrosia artemisiifolia* and *Ambrosia trifida* on their generative production**

Aleksandra Savic

### **A study on determination of *Echinochloa P. Beauv. spp.* in rice fields in the Edirne Province of Turkey**

Onur Göktepe; Necmi Aksoy; Ahmet Uludağ

### **Weeds found in Papaya plantation of Somalia**

Mohamed Said Omar; Hüsrev Mennan

### **Weed Problem in Olive Orchards according to Farmers from the Köprübaşı District, Turkey**

Sevgi Uyar; Ahmet Uludağ

### **Reintroduction of rare arable plants and their influence on ecosystem services and yield under various farming practices**

Rosa Witty; Matthias Schumacher; Roland Gerhards

### **A survey on *Amaranthus palmeri* S. Watson in Cukurova Region of Turkey - A recent record for Turkish flora**

Mehmet Nedim Dogan; Filiz Erbas; Suleyman Gurdal Turkseven; Ali Riza Ongun; Safiye Pinar Tunali; Cuneyt Ulgen; Anil Altug Pek; Mahmut Ertem

### **A New Alien Species and Weed Recorded in Banana Production in Turkey**

Hilmi Torun; Mine Özkil; İlhan Üremiş; Necmi Aksoy; Ahmet Uludağ

### **Comparing the efficiency of different weed sampling methods**

Christoph von Redwitz; Lena Ulber

### **Which structure and composition of agricultural land-use mosaics to enhance multiple services provided by arable weeds?**

Stéphane Cordeau; Séverin Yvoz; Sandrine Petit

### **Avenues for future research on tillage effects on weed communities and crop performance in fields previously conducted under conservation agriculture principles**

Stéphane Cordeau; Auxence Baudron; Guillaume Adeux

### **IPSIM-Cirsium, a qualitative expert-based model to predict infestations of *Cirsium arvense***

Marie-Hélène Robin; Octave Lacroix; Anna Doizy; Jean-Noël Aubertot

### **Fifth follow-up survey on weeds in spring cereal fields in Finland during 2020-2022**

J. Salonen; H. Jalli; A. Muotila; P. Ruuttunen; T. Hyvönen

### **Occurrence of *Phytolacca americana* in crop fields in Austria**

Swen Follak; Michael Schwarz; Franz Essl



## **The development of *Convolvulus arvensis* collected from different provinces under different temperature and CO<sub>2</sub> conditions**

N.T. Tursun; Yucel Karaman; Ahmet Uludag

## **Session II - Crop-Weed Interaction**

### **IF1 recognition from broomrapes triggers typical plant immune responses including ethylene and reactive oxygen species (ROS) production in tomato plants**

Mouna Khalloufi, Isabell Albert, Markus Albert

### **Weed – crop competition is influenced by soil characteristics**

Bàrbara Baraibar; Clàudia Canadell; Jordi Recasens

### **Shade induced by weed interference hindered soybean growth and yield**

D.S. Kim; J.A. Yoo; S.H. Lim; S.M. Han; J.E. Lee

### **Camelina (*Camelina sativa* (L.) Crantz) as a tool for suppressing winter weeds: corn poppy (*Papaver rhoeas* L.) as a weed model**

Noemí Codina-Pascual; Aritz Royo-Esnal

### **The effect of extracts of different parts of waxy leaved mustard (*Boreava orientalis*) on wheat germination**

Taiebeh Adeli; Iraj Tahmasebi; Sirwan Babaei

### **Studies on crop-weed competition in spring fodder legumes in Greece.**

M. Gerakari; D. Chachalis; E. Sarri; G. Mohammadi; E. Tani; E. Abraham

### **Winter wheat (*Triticum aestivum* L.) assessment of weed competitive ability using weed competitor and naturally weed-infested method**

Aleš Kolmanic; Andrej Zemljič; Matej Knapič; Andrej Vončina; Uroš Žibrat; Vladimir Meglič

## **SESSION III – Site Specific Weed Management**

### **Laser Weeding with an Autonomous Vehicle**

Mahin Saberi; Christian Andreasen

### **Using RetinaNet One-Step Neural Network to classify weed species and maize in RGB images**

J López Correa; J López Correa; A Ribeiro; J Bengochea-Guevara; Dionisio Andujar

### **Testing the performance of Smartphone Apps for Weed Identification**

Lena Ulber; Christoph von Redwitz

### **Parameterization of the DSS for IWM named IPMwise for Greek conditions using dose-response curves**

Alexandros Tataridas; Per Rydahl; Ole Bøjer; Panagiotis Kanatas; Ilias Travlos



## **Use of Multispectral Drone Images for Crop Growth and Health Monitoring, Phenotyping and Weed Detection at the Estonian Crop Research Institute**

HJ Kennedy; Reine Koppel; Anti Konsep

## **A sensor-based decision model for precision weed harrowing**

T. W. Berge; Frode Urdal; Torfinn Torp

## **SESSION IV - Herbicide Resistance**

### ***Cyperus difformis* cross-resistance among rice herbicides in South Portugal**

João Santos; Francisca Aguiar; Isabel M. Calha

### **Different 574-ALS allelic variants in resistant *Amaranthus hybridus* biotypes widespread in north-eastern Italy**

Andrea Milani; Samuele Pinton; Renato Antonio Danielis; Silvia Panozzo; Maurizio Sattin; Laura Scarabel

### **Crop production systems and the evolving status of herbicide-resistant grass weeds in Ireland**

A. V. Vijaya Bhaskar; Dermot Forristal; Sarah Cook; Susanne Barth; Hennessy Michael

### **Geographical distribution of *Lolium rigidum* resistance in Greece**

Thomas Gitsopoulos; Ilias Travlos; Demosthenis Chachalis; Eleni Tani; Ioannis Georgoulas

### **Molecular methods for early detection of glyphosate resistant *Lolium spp.* populations**

M Gerakari; N. Cheimona; E Tani; E Sarri; I Travlos; D Chachalis; D Loddo; S.K Mathiassen; T.K Gitsopoulos; L Scarabel; S Panozzo; M Kristensen; P. Kudsk; M Sattin

### **Seek and you will find: characterization of *Amaranthus palmeri* ALS-resistant populations from Spain and Italy**

Alfredo Manicardi; Andrea Milani; Joel Torra-Farré; Laura Scarabel

### **Five substitutions in Pro197 causing different levels of florasulam and tribenuron resistance in *Tripleurospermum inodorum* populations from several European countries**

K. Hamouzova; Pavlina Kosnarova; Lena Ulber; Wiktoria Kaczmarek-Derda; Björn Ringselle; Dagmar Rissel

### **Role of Glutathione-S-transferases in reduced sensitivity to VLCFA inhibitors in a German population of *Tripleurospermum perforatum***

Dagmar Rissel; Jeannette Lex; David Riewe; Christoph Böttcher; Lena Ulber

### **Resistance to (ALS)-inhibiting herbicides in white mustard (*Sinapis alba*) from Northern Tunisia**

M. Chtourou; J. Torra Farré; G. Mora Marin; Z. Hada; T. Souissi

### **Characterization of *Amaranthus tuberculatus* populations suspected as Glyphosate-resistant**

I. Roth; M. Sibony; B. Rubin



## **Resistance of *Avena fatua* and *Avena sterilis* to ALS and ACCase inhibitor herbicides**

E Kaya Altop; O Güzel; H Mennan

## **SESSION V- Non chemical Weed Control Tools**

### **Managing *Cynodon dactylon* in organic vineyards with rolled cover crops**

Carlos Cabrera; Bruna Català; Barbara Baraibar; Jordi Recasens

### **Cover crops in citrus orchards for weed management and support of natural enemies of insect pests**

Philippos Mylonas; Theodoros Stathakis; Leonidas Economou; Myrto Barda; Filitsa Karamaouna; Konstantinos Kassiotis; Vaya Kati

### **Weed suppression in cover crop mixtures under contrasted levels of resource availability**

Alicia Rouge; Guillaume Adeux; Delphine Moreau; Jean-Philippe Guillemain; Stéphane Cordeau

### **Suitability of *Alopecurus myosuroides* Huds. for Harvest Weed Seed Control in Germany**

Lena Ulber

### **Mechanical weed control evaluation in dry seeded rice in Italy**

Eleonora Miniotti; Marco Romani; Simone Sgariboldi; Elio Dinuccio; Silvia Fogliatto; Francesco Vidotto

### **Weed control in sweet maize (*Zea mays* var. *succharata*) eco-farming**

Milena Simić; Milan Brankov; Vesna Dragičević

### **Hot water treatment: an alternative solution for vegetation control on railway tracks**

Judith Wirth; Aurélie Gfeller; Frédéric Tschuy

### **Mechanical intra-row control efficacy is affected by species specific anchoring force**

Evyatar Asaf; Hanan Eizenberg; Ran Nisim Lati

### **Steam Soil Disinfestation to Control *Bromus sterilis* and *Echinochloa crus-galli***

Z Bitarafan; W Kaczmarek-Derda; C E Øyri; I S Fløistad

### **Control of *Heracleum mantegazzianum* (Sommier and Levier) by different mulches**

Terho Hyvönen; Marleena Hagner; Bengt Lindgvist; Hannu Ojanen

### **Removal/destruction of weed seeds during harvest (HWSC) in arable crops, a novel weed management approach in Israel**

Y. Kashti; M. Sibony; O. Keisar; I. Roth; D. J. Bonfil; B. Rubin

### **Processing *Eucalyptus globulus* foliage for allelopathic weed control**

Carolina G. Puig; María Pardo-Muras; Nuria Pedrol

### **The effectiveness of *Cytisus scoparius* foliage added to the soil for weed control relies on complex multiple interactions among volatile and water-soluble allelochemicals**



María Pardo-Muras; Carolina G. Puig; Nuria Pedrol

**Hot water as an alternative method of weed control in apple orchards**

Wiktoria Kaczmarek-Derda; Therese With Berge

**Allelopathic potential of aqueous extracts of *Cannabis sativa* L. on the seed germination and seedling growth of barnyard grass**

Angeliki Kousta; Panayiota Papastylianou; Ilias Travlos; Anastasia Karatza

**Assessing the herbicidal activity of some Mediterranean plant species extracts**

Mariano Fracchiolla; Generosa Jenny Calabrese; Saida Messgo Moumene; Angela Boari; Rym Boukhalfa; Maurizio Vurro

**Development and Testing of a new Mechanical Weeding Hoe for Re-compacted Ridge Tillage culture in Maize**

Oyebanji Alagbo; Michael Spaeth; Marcus Saile; Matthias Schumacher; Sebastian Hajek; Roland Gerhards

**Perennial weed control capacity of liquid spray-on-mulches (hydromulch) based on crop residues following circular economy criteria**

Alicia Cirujeda; Gabriel Pardo; Ana Isabel Marí; Joaquín Aibar; Maria Teresa Mas; Antoni Maria Claret Verdú

## **SESSION VI - Herbicides and Application Technology**

**Dose-response curves of pelargonic acid efficacy against summer and winter weeds in central Italy**

Euro Pannacci; Daniele Ottavini; Andrea Onofri; Francesco Tei

**The effects of biostimulant application, mechanical weed control and herbicide application on weed growth and maize (*Zea mays* L.) yield**

Ioannis Gazoulis; Nikolaos Antonopoulos; Alexandros Tataridas; Panagiotis Kanatas; Ilias Travlos

**Chemical control of ivy (*Hedera helix* L.) prior to reforestation of oak forests**

Verica Vasic; Predrag Pap; Sasa Orlovic; Sreten Vasic

**Preliminary results of herbicidal application with other plant protection products and biostimulants in winter wheat**

Nesho Neshev; Mariyan Yanev; Anyo Mitkov; Maya Dimitrova

**Management of *Melilotus sulcatus* in *Allium* crops in Israel**

Shaharit Ziv; Daryl Gillett; Abraham Gamliel; Maor Matzrafi

**Selectivity of pre- and post-emergence herbicides in castor bean (*Ricinus communis* L.)**

Anestis Karkanis; Andromachi Sortikou; Georgia Christodoulou; Spyridon Souipas; Kyriakos Giannoulis

**The combination of banded herbicide application and inter-row cultivation is an effective way to reduce herbicide use in soybean**

Jovana Krstić; Goran Malidža; Miloš Rajković; Maja Meseldžija



**Prickly sida (*Sida spinosa* L.) management in cotton with pre- and post-emergence herbicide combinations**

Vaya Kati; Ioannis Vasilakoglou; Thomas Gitsopoulos; Christos Vlachos; Philippos Mylonas

**Weed control and yield in cotton as affected by three different tillage systems**

T.G. Gitsopoulos; Eleni Tsaliki; Apostolos Kalyvas; Ioannis Georgoulas; Ioannis Panoras; Ioannis Grigoriadis

**Novel sensor-based method for the in-season rapid evaluation of herbicide efficacy under real field conditions in maize (*Zea mays* L.)**

Anastasia Tsekoura; Ilias Travlos; Ioannis Gazoulis; Nikolaos Antonopoulos; Panagiotis Kanatas

**SESSION VII - Agricultural, Economic and Societal Aspects of Weed Management**

**PestiRed: Weed management based on IPM principles**

Judith Wirth; Julie Buchmann; Sandie Masson; Anne-Valentine De Jong; Andrea Seiler; Philippe Jeanneret

**A participative rice farmer project for the adoption of weed management practices helps to increase environmental and naturalistic value of rice production**

Francesco Vidotto; Silvia Fogliatto; Barbara Moretti; Laura Zavattaro; Gabriele Omedé; Maria Martin; Daniele Tenni; Raffaella Pagano; Luca Cristaldi; Francesco Pellicciari

**A comprehensive comparison between three contrasting cropping systems for barley production in Spain**

C. Fernández-Quintanilla; J. Barroso; Y. Lechon; C. Lago; J.M. Peña; J. Dorado

**A grower survey on challenging grass weeds, resistance awareness and weed management practices in Ireland**

A. V. Vijaya Bhaskar; Sarah Cook; Susanne Barth; Michael Hennessy; Dermot Forristal

**How to manage weeds if glyphosate use is restricted?**

Fanny Vuillemin; Ludovic Bonin; Jérôme Labreuche; Franck Duroueix

**Are no-till herbicide-free systems possible? A simulation study**

Nathalie Colbach; Stéphane Cordeau

**Characterizing dredged sediments piles in order to assess the potential weed infestation in case of reuse in agriculture**

Smadar Tanner; Yael Laor; Roey Egozi; Maor Matzrafi

**The monitoring of the tropane alkaloids in corn and popcorn in Republic of Serbia**

Tijana Stojanović; Gorica Vuković; Bojan Konstantinović; Milena Popov; Nataša Samardžić; Nikola Puvača; Vojislava Bursić; Aleksandra Petrović; Dušan Marinković

**Reduced weeding compromises Cabbage (*Brassica oleracea*, var. *capitata*) yield but shows potential to reduce nutrient leaching in fall**

AV Virili; Anna-Camilla Moonen



***Solanum elaeagnifolium* Cav. (silverleaf nightshade): a threat to food security and environmental sustainability across the Mediterranean Basin, Central and Northern Europe**

Ahmet Uludag; Javid Kashefi ; Bojan Konstantinović; Tijana Stojanović; Necmi Aksoy; Mehmet Arslan; Thomas Alexandridis; Mohamed Abdelaziz Balah; Salmene Ben-Ghabrit; Dragana Božić; Marie Claude Bon; Massimo Cristofaro Cristofaro; Yasin Çiçek ; Najla Sayari ; Guillaume Fried; Eyüp Gülbandır; Anastasia Lagopodi; Francesca Marini; Heinz Müller-Schärer; Danijela Pavlović; Miloš Rajković; Ahmet Tansel Serim; Alexandros Tataridas ; Rumen Tomov ; Peter Toth ; Nihat Tursun ; Ilias S. Travlos ; İlhan Üremiş ; Vladimir Vladimirov ; Sava Vrbničanin; Giuseppe Brundu

**The legume choice in a relay intercropping system with durum wheat determines the economic viability of this IWM strategy in a Mediterranean low-input cropping system.**  
Federico Leoni; Pauline Triboulet ; Anna-Camilla Moonen

## **SESSION VIII - Weed Genomics**

**Silverleaf nightshade (*Solanum elaeagnifolium* Cav.) identification using features of pubescence and the development of DNA markers on the chloroplast genome based**  
Ekaterina Volodina; Juliana Kulakova; Maxim Anisimenko; Oxana Dobrovolskaya

## **SESSION IX - INTEGRATED WEED MANAGEMENT**

**Managing *Cirsium arvense*, *Sonchus arvensis* and *Elymus repens* in northern European arable farming – where are significant knowledge gaps?**

Kirsten S. Tørresen; Jukka Salonen; Lars Olav Brandsæter; Björn Ringselle; Marian M. Weigel; Eliyeh Ganji; Bärbel Gerowitt

**Redesign of an Integrated Weed Management strategy for arable cropping systems**

M.M. Riemens; Timo Sprangers; Hilfred Huiting

**Contribution of long-term crop rotation to weed control in maize**

Milena Simić; Milan Brankov; Vesna Dragičević

**Non-chemical RNAi-based approach as an integrated weed management tool: a case study on the troublesome weed *Amaranthus hybridus* L.**

Silvia Panozzo; Serena Bordignon; Silvia Farinati; Andrea Milani; Laura Scarabel; Serena Varotto

**Integrated weed management in olive orchards: influence on biodiversity, crop production and quality**

Veronica Pedraza; Juan Antonio Lezaun; Irache Garnica; José L. González-Andújar

**Crop rotation effect on weed flora and yield in durum wheat**

Christina Bourganou; Anestis Karkanis; Kyriakos Giannoulis; Christos Karamoutis

**Determination of genetic and morphological diversity of *Avena fatua* (L.)**

E Kaya Altop; O Güzel; H Mennan



## **SESSION X - Weed Biology and Physiology**

**Functional leaf anatomy of the invasive weed *Solanum rostratum* Dunal and its role in herbicide response**

Jackline Abu Nassar; Assaf Distelfeld; Ilana Shtein; Maor Matzrafi

**Investigating the germination and phenology capabilities of *Parthenium hysterophorus* populations in Israel**

Sahar Malka; Hanan Eizenberg; Maor Matzrafi

**Studies on stimulants and screening of germplasm to manage broomrape (*Orobancha* spp.) parasitism**

Dimitrios Argyris; Maria Gerakari; Nikolina Cheimona; Christos Megas; Dimosthenis Katsis; Eleni Tani; Demosthenis Chachalis

**Studies on the biology of bur chervil (*Anthriscus caucalis*)**

Rebecka Dücker; Jean Wagner; Johannes Herrmann; Martin Heß; Manja Landschreiber

**Effect of salinity and temperature interaction on germination and early growth for five weed species**

Aurora Ghirardelli; Nebojša Nikolić; Roberta Masin

**Weeds pollen rupture due to thunderstorms electric fields can increase allergy risk**

Y. Yair; Y. Yair; J. Silverman; B. Rubin

***Alopecurus myosuroides* seed production and shedding pattern**

Z Bitarafan; C Andreasen

**Methods to identify of Silverleaf nightshade (*Solanum elaeagnifolium*) for the phytosanitary in Russia**

Ekaterina Volodina; Yuliana Kulakova; Oxana Dobrovolskaya; Maksim Anisimenko

**Weed Seed Bank Model**

Markola Saulić; Ivica Djalovic; Mostafa Oveisi; Dragana Bozic; Sava Vrbnicanin

**Validation of hydrothermal model AlertInf for barnyardgrass emergence in Croatia maize crop**

Valentina Šoštarić; Roberta Masin; Donato Loddo; Zlatko Svečnjak; Vedran Rubinić; Maja Šćepanović

**The effect of crop rotations on the soil weed seed bank in rainfed agroecosystems**

María Inés Santín-Montanyá; María Luisa Gandía; Juan Pablo Del Monte