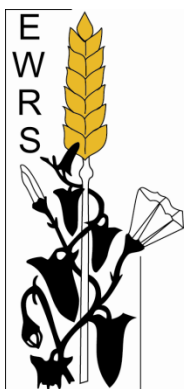


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**EUROPEAN WEED RESEARCH SOCIETY**

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Cornflower and bindweed growing in a wheat field near Frankfurt, Germany. In some parts of Northern Europe, cornflower still causes yield reductions up to more than two tons per hectare due to heavy field infestations. Histology of cornflower can be found in this Newsletter. (Picture and text: Hansjörg Krähmer).

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## FROM THE BOARD

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### PRESIDENT'S MESSAGE



Dear colleagues and friends,

these are crucial times for EU Member States. Pesticide use reduction has long been an objective of agricultural and environmental policies in the EU. The Sixth Environment Action Programme (2002-2012) indicated the sustainable use of pesticides as one of the seven Thematic Strategies to be addressed. To meet this challenge, in October 2009 the European Commission released a Framework Directive on Sustainable Pesticide Use (Directive 2009/128/EC) – hereafter referred to as 'The Directive' – as part of the so-called 'Pesticide Package', which also includes (a) Regulation (EC) No. 1107/2009 on the Placing of Plant Protection Products on the Market; (b) Regulation (EC) No. 1185/2009 on Statistics on Pesticides and (c) Directive 2009/127/EC on Machinery for Pesticide Application. For those of you who are less familiar with these issues, the full set of these documents can be accessed at:

[http://www.endure-network.eu/index.php/endure/about\\_ipm/european\\_commission\\_documents](http://www.endure-network.eu/index.php/endure/about_ipm/european_commission_documents).

Three issues of the Directive are particularly noteworthy. First, all EU Member States must design a National Action Plan (NAPs) by 14 December 2012, indicating how they intend to reach the various objectives set forth by the Directive. Second, all professional users must be trained and must hold a certificate to be able to sell or use pesticides. Third, all Member States must ensure that *a//* famers use IPM principles and techniques from 1 January 2014. I want to spend a few words on this third issue. If this will be fully taken up by Member States in their NAPs, we must expect substantial changes in the way agriculture is going to be practised in Europe. In Annex III, the Directive refers to eight 'fundamental' principles of IPM, which must be turned into concrete actions by Member States:

1. Prevention of harmful organisms (e.g. through crop rotation, stale seedbed technique, balanced fertilisation).
2. Monitoring of harmful organisms.
3. Application of science-based control thresholds.
4. Preference to use of non-chemical methods (e.g. biological, mechanical and thermal).
5. Use of selective pesticides (e.g. with least side effects on human health, non-target organisms and the environment)
6. Reduction of pesticide doses (e.g. reduced application frequencies and partial applications)
7. Application of anti-resistance strategies (e.g. use of multiple pesticides with different mode of actions).
8. Check the effect of applied measures (e.g. book-keeping on pesticide use and monitoring of effect on harmful organisms).

Besides the expected positive impact on the sustainable use of pesticides, I see this as an excellent opportunity to steer EU agricultural systems towards overall sustainability, with positive side-effects on other important global challenges such as the mitigation of (and adaptation to) climate change, and a more energy-efficient agriculture. Also, through the reduction in agricultural intensification, this Directive should also help preserve agricultural land against urban sprawl, which in my view is one of the emerging environmental challenges in Europe (e.g. see:

[http://www.eea.europa.eu/publications/eea\\_report\\_2006\\_10](http://www.eea.europa.eu/publications/eea_report_2006_10)).

If you look carefully at the eight IPM principles listed above, you will certainly realise that weed scientists will have a lot to say and do to help shape NAPs and the accompanying research priorities, which must be spelled out in the NAPs. Many of these subjects are well covered by EWRS Working Groups: I invite Working Group coordinators to collate the best science they produce and convey it through the national authorities responsible of shaping up NAPs and consequent actions. I also invite all EWRS members to use their Newsletter as an open forum to discuss any issues related to the Directive and the future of European Agriculture and to share their ideas.

Many of you are longing for a well-deserved summer break. As soon as you are back to work, with a refreshed mind and new inspiration, do not forget to submit your contributions to the next EWRS Symposium (Samsun, Turkey, 23 to 27 June 2013) through the dedicated website: <http://www.ewrs2013.org>. Abstract submission has already started and will be open until 15 September 2012.

I wish you all a relaxing summer.

*Ad majora!*

Paolo Bàrberi

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## SCIENTIFIC COMMITTEE AND WORKING GROUPS

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### MINUTES OF THE 53<sup>RD</sup> SciCOM MEETING

Agricultural Institute of Slovenia, Ljubljana  
Saturday 24 March 2012

**Members present:** L. Radics, P. Barberi, J. Soukup, H. Krähmer, G. Economou, P. Kudsk, B. Melander, B. Rubin, B. Gerowitt, P. Hatcher, H. Darmency

**Excused:** L. Bastiaans, J. Streibig, Ch. Bohren, A. Thompson, M. Vurro, S. Christensen, E. Pannacci, I. Rasmussen

**Chairperson:** Paolo Bàrberi/Laszlo Radics

#### 53.1 - Opening (P. Bàrberi)

- Opening and handing over of the function to the new SciCom chairman.

#### 53.2 – Welcome Laszlo Radics

- Introductory word by Prof. Laszlo Radics, the newly elected EWRS Vice-President. L. Radics introduced himself and promised to do his best for the EWRS during his functional period.

#### 53.3 Approval of the 52<sup>nd</sup> SciCom minutes (L. Radics)

- The minutes were approved with one voice.

#### 53.4 16<sup>th</sup> EWRS Symposium, Samsun (J. Soukup)

- J. Soukup presented progress in the preparations of the 16<sup>th</sup> EWRS Symposium in Samsun. The first circular has been already distributed and a very nice conference website launched. All important deadlines for handling abstracts were approved by SciCom. A special SciCom meeting is tentatively scheduled for the week between 5<sup>th</sup> and 9<sup>th</sup> November 2012 in Pisa where the details of the scientific programme will be refined including definition of session organizers and keynote speakers. The Scientific Secretary will publish a call on the EWRS website for submission of requests for junior scientists subsidies. A budget of € 12,000 is requested from Board for this purpose. A call for organization of 17<sup>th</sup> EWRS Symposium will also be prepared and launched by the Scientific Secretary via the EWRS website and Newsletter.

#### 53.5 VI<sup>th</sup> IWSS congress in Hangzhou, China (B. Rubin, P. Kudsk)

- The IWSS President, B. Rubin and Chairman of the congress P. Kudsk reported on allocation of subsidies for junior scientists attending the 2012 IWSS congress in Hangzhou, China. Only 2 or 3 requests are from the European region. The information about the opportunity to obtain subsidy was probably not sufficiently announced within the EWRS members. For future, better coordination with IWSS is necessary in allocation of subsidies, especially in keeping EWRS rules and potential contribution of subsidized for EWRS. B. Rubin will arrange a room in Hangzhou for 3 posters and information desk for the EWRS representative(s). The representative(s) will also be invited to be present at the meeting with subsidized students.

#### 53.6 Reports of individual WG coordinators (J. Soukup, WG coordinators)

- Present coordinators reported on their WG activities in 2011. All realized events were successful and the allocated budgets for individual events were used in accordance with EWRS rules.
  - Biological control of weeds: WG co-organized the 3<sup>rd</sup> International Symposium Environmental Weeds and Invasive Plants in Ascona, Switzerland. Next WG meeting is scheduled in Samsun in 2013. P. Hatcher expressed complaints about a diminishing number of people working actively in the area of biocontrol and difficulties in raising funds.

- Crop-weed interactions: Planned WG meeting was postponed till November 2012. L. Bastiaans got involved in the IWSS Congress.
- Education and training: J. Streibig led the course on non-linear regression in Belgrade in March 2011. Similar course is scheduled before the IWSS Congress in Hangzhou. In 2013, the courses on Scientific and documentary photography (D. Cloutier) and How to write a paper for Weed Research (J. Marshall) are scheduled and will be held before the Samsun symposium. Extra budget is requested for covering expenses of lecturers. SciCom proposed to allocate € 3,000.
- Germination and early growth: No information delivered.
- Herbicide resistance: Two days workshop was organized in Ghent in Belgium focussed on sharing data on resistance outbreaks, studying mechanisms of resistance, and practices to manage resistance.
- Invasive plants: the WG organized the 3<sup>rd</sup> International Symposium on Environmental Weeds and Invasive Plants in Ascona (CH).
- Optimisation of herbicide dose: as reported by P. Kudsk, the WG is recently not very active. There is difficult to run a specific workshop due to focus of members on recently important areas like e.g. IPM. B. Rubin proposed to organize a pre-conference joint workshop in Samsun focussed on an optimizing a herbicide use in semi-arid areas.
- Parasitic weeds: M. Vurro sent a written report with main focus on the 11<sup>th</sup> World Congress in Martina Franca which was co-organized by his WG.
- Physical and cultural weed control: B. Melander reported on WG workshop organized in Samsun. Research in the area of physical and cultural methods is becoming more important by reason of new European legislative rules coming into force.
- Site specific weed management: Short report about the activities of the WG was sent via e-mail by J. Streibig on behalf of S. Christensen. The WG is organizing a workshop in Copenhagen in May 2012.
- Weeds and biodiversity: B. Gerowitt reported on a successful WG workshop which was held in Dijon, France in 2011. After the workshop, one day training with the aim how to show and discuss methodologies for research in weed seed predation was attended by many young scientists. Next WG workshop is scheduled for Prague at the beginning of year 2013.
- Weed management in arid and semi-arid climate: B. Rubin gave report on WG workshop in Huesca, Spain which was organized jointly with the WG Weed management systems in vegetables. The next workshop will be probably organized in the Mediterranean region with focus on herbicide behaviour under semi-arid conditions and alkaline soils.
- Weed management systems in vegetables: A written report was send by E. Pannacci. Main part of the report was a summary of activities for last 2 years, and an information about the above mentioned Huesca workshop.
- Weed mapping: H: Krähmer summarized a history of the WG and handed over his function officially to G. Economou. She reported on new activities, especially progress in mapping of weeds in North Africa and Asia and announced also a workshop of the WG which should be held in Crete in spring 2013. In 2012, a workshop in Athens is scheduled for September.
- In 2013 only three WGs would like to organize their own events and are requesting extra budget – Weed and Biodiversity (€ 2,500) for workshop and training scheduled in Prague, Weed Mapping (€ 3,000) for organization of the workshop on Crete, and WG Education and Training for 2 pre-conference courses in Samsun (€ 3,000).

### **53.7 Proposals on establishing of new WGs (J. Soukup)**

- The SciCom has not approved the establishment of the new WG “Weed modelling” because of poor justification of its role and doubts about the contribution for broader community within the EWRS. Further interested parties from industry (BASF, Bayer CropSciences, Pioneer) support the establishment of the WG “Herbicide tolerant crops”. Because of ongoing introduction of various types of HT crops in Europe, SciCom consented to organize the first meeting of interested

scientists and institutions where the aims and role of the WG within the EWRS will be specified and its activities outlined. P. Bàrberi proposed to already allocate the standard budget (€ 2,500) for 2013 in the case the WG is established.

### **53.8 Typologies of training/education activities with EWRS involvement (J. Soukup, J. Streibig)**

- Not discussed because J. Streibig was not present. Postponed to next meeting (Nov 2012).

### **53.9 Office term of WG coordinators – definition of guidelines (J. Soukup, all)**

- Only 6 WG coordinators were present at the SciCom meeting from a total number of 14. Many of missing colleagues (S. Christensen, A. Thompson, I. Rasmussen) have not attended SciCom meetings repeatedly. Some coordinators will be notified by SciCom Chairman of the necessity to serve for the WG more actively or to hand over their functions. The EWRS President received in February a suggestion from a reputable EWRS member to ensure the possibility of 'changing of the guard' through election of coordinators within each WG. SciCom agreed to invite WG coordinators to ensure that at least every 3-4 years they ask their membership if someone else would like to propose herself/himself as coordinator, regardless of whether or not the present coordinator wants to step down. Should this be the case, a voting should be organised internally and the outcome promptly communicated to the Scientific Secretary. All WG coordinators are asked to nominate a deputy within June 2012 and communicate this to the Scientific Secretary. Deputies will fully be entitled to attend SciCom meetings on behalf of the coordinators in case of impedance.

### **53.10 Discussion about the establishing of the EWRS Media Officer (P. Hatcher, all)**

- The proposed function of the EWRS Media Officer is recently not supported by SciCom because of its unclear status and doubts about its necessity for EWRS mission.

### **53.11 Proposal on "EWRS Student travel grant" (L. Radics)**

- Not discussed because the EWRS Treasurer was not present to clarify all financial things. Postponed to next meeting (Nov 2012).

### **53.12 Information for WG coordinators from the EWRS Treasurer (B. Post)**

- Not discussed because the EWRS Treasurer was not present. Postponed to next meeting (Nov 2012).

### **53.13 Any other business (L. Radics)**

- None.

### **53.14 Next SciCom meeting (L. Radics)**

- A dedicated SciCom meeting to finalise the 16<sup>th</sup> EWRS Symposium scientific programme will be held in Pisa in November 2012. The actual dates will be fixed through a Doodle survey (action: J. Soukup).

### **53.15 Closing (L. Radics)**

Prepared by Prof. Josef Soukup  
EWRS Scientific Secretary

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## **WEED RESEARCH JOURNAL PERSPECTIVES FROM THE IWSC, HANGZHOU, CHINA**

Jon Marshall, Editor-in-Chief Weed Research; [jon.marshall@agroecol.co.uk](mailto:jon.marshall@agroecol.co.uk)

Nearly 600 weed scientist from 50 countries met in Hangzhou, China over the week of 16 to 23 June 2012 for the 6<sup>th</sup> International Weed Science Congress. This meeting, led by the International Weed Science Society, was staged by the Chinese Weed Science Society. Our hosts organised a great venue and gave us a good conference, interesting excursions and fine opening and closing ceremonies. As the Editor-in-Chief (E-i-C) of Weed Research, it was an opportunity to see and be seen and present a face behind those decision letters from Weed Research. The journal was well-represented, with nine Subject Editors present. We were also able to meet and discuss some of the work of the Editorial Board, including paper handling times, something all authors are sensitive about.

As the E-i-C, I was also invited to observe a meeting to discuss the next East Asia Weed Science Congress, This was chaired by Dr Do-Soon Kim (Seoul), a member of our Editorial Board. This meeting is jointly held between the Chinese, Japanese and Korean Weed Science Societies and it was agreed these will be held every 3 years, following the first meeting in Jeju in 2011. I therefore had the pleasure to meet the senior executives of all three societies:

- For the Japanese Weed Science Society, President Prof Hiroshi Matsumoto (Tsukuba; [hmatsu@biol.tsukuba.ac.jp](mailto:hmatsu@biol.tsukuba.ac.jp)), Prof Tohru Tominaga (Kyoto; [tominaga@kais.kyoto-u.ac.jp](mailto:tominaga@kais.kyoto-u.ac.jp)); Dr Shunji Kurokawa (NARO Tsukuba; [shunji@affrc.go.jp](mailto:shunji@affrc.go.jp)).
- For the Weed Science Society of China, Chairman Prof Chaoxian Zhang (Beijing; [cxzhang@wssc.org.cn](mailto:cxzhang@wssc.org.cn)), Vice-Chairman Prof Qiang Sheng (Nanjing; [wrl@njau.edu.cn](mailto:wrl@njau.edu.cn)); Prof Bo Li (Shanghai).
- For the Korean Society of Weed Science, Publication Secretary Dr In-Yong Lee (RDA Suwon; [leeinyong@korea.kr](mailto:leeinyong@korea.kr)), Director Dr Byeong-Chul Moon (RDA Suwon; [moonbc@korea.kr](mailto:moonbc@korea.kr)) and Planning Secretary Do-Soon Kim

Interestingly, it was also an opportunity to meet the executive of our sister Wiley journal, Weed Biology & Management. As you will know, this was started about 10 years ago by the Japanese Weed Science Society. As a new journal, it continues to cost that Society a significant amount of money to publish. In contrast, as a well-established journal, Weed Research contributes a significant income to EWRS.

On the final day in Hangzhou, I and Prof Jens Streibig (Copenhagen) taught a course on writing a paper for an international journal, from 09:30 to a little after 13:00. It was extremely gratifying and worthwhile to have an audience of 40 from 8 countries, especially as the course was a late addition to the programme. It is the policy of Weed Research to encourage submission from across the globe and to try to help authors with the submission and review process, while maintaining the high standards of the journal. These taught courses are one method of spreading this message and it will be repeated at Samsun next year, at the next EWRS Symposium.

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## **MEMBER CONTRIBUTIONS**

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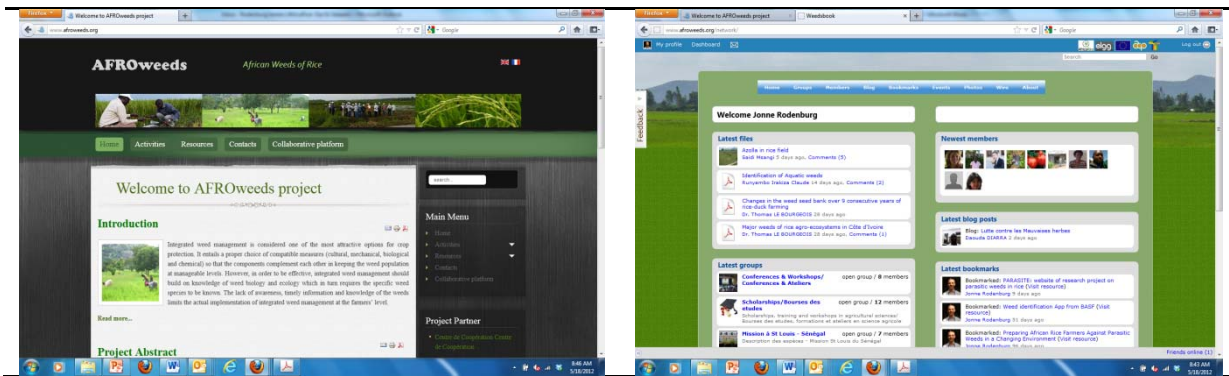
### **WEED NEWS FROM AFRICA**

Jonne Rodenburg (PhD), Agronomist, Africa Rice Center (AfricaRice); P.O. Box 33581, Dar es Salaam, Tanzania; [j.rodenburg@cgiar.org](mailto:j.rodenburg@cgiar.org)

### **Weedsbook: a social network for weed science students and professionals in Africa**

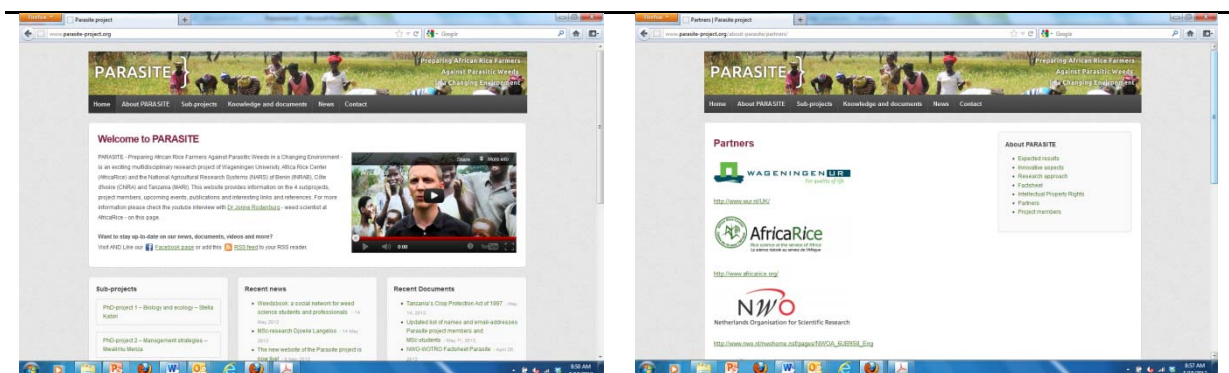
Weedsbook is an open-access collaborative platform that enables students and professionals, to share information and publications on weeds (e.g. management, identification, biology, ecology, distribution) and any other relevant issues (e.g. events, funding opportunities, scholarships, conferences, workshops), with a broad community of peers working in or for Africa. While membership to Weedsbook

is free of charge and obligations, it enables access to a myriad of information sources, contacts with colleagues and the possibility to participate in discussion fora. Weedsbook can also facilitate wider dissemination of your own outputs (such as research findings and products) and may as such enhance the impact of your work. Weedsbook can be accessed through the portal AFROweeds (<http://www.afroweeds.org>) by clicking on "Collaborative platform". This portal also give access to an online weed identification tool which is connected to a independently and freely accessible data base containing photos and botanic, biological and ecological descriptions of around 200 weed species and directions for their control. The medium term aim is to make Weedsbook the communication platform for an "African weed science network". For more information, check out the website or contact Jonne Rodenburg ([j.rodenburg@cgiar.org](mailto:j.rodenburg@cgiar.org)).



## **PARASITE: preparing African rice farmers against parasitic weeds in a changing environment**

PARASITE is an exciting multidisciplinary research project of Wageningen University, Africa Rice Center (AfricaRice) and the National Agricultural Research Systems (NARS) of Benin (INRAB), Côte d'Ivoire (CNRA) and Tanzania (MARI) ) funded through the Integrated Programme scheme of The Netherlands Organisation for Scientific Research, Science for Global Development (NWO-WOTRO). The overall aim of the project is to prepare the rice sector in threatened areas against projected increases in infestation levels of parasitic weeds such as the upland species *Striga asiatica* and *S. hermonthica* and the hydromorphic-lowland species *Rhaphicarpa fistulosa*. The project focuses on closing the knowledge gaps on the biology, ecology, economy and management of parasitic weeds in rice-based cropping systems in SSA, and how this is affected by changing environmental conditions, and identifying and facilitating the institutional innovations required to timely address newly occurring biotic production constraints. More information on the different Postdoc and PhD projects and the overall progress of the project can be found on: <http://www.parasite-project.org/> or by contacting Lammert Bastiaans ([lammert.bastiaans@wur.nl](mailto:lammert.bastiaans@wur.nl)) or Jonne Rodenburg ([j.rodenburg@cgiar.org](mailto:j.rodenburg@cgiar.org)).



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## **MY IMPRESSIONS FROM THE COURSE "WEED MANAGEMENT IN MODERN AGRICULTURE"**

By Dragana Bozic, University of Belgrade, Faculty of Agriculture, Serbia; [dbozic@agrif.bg.ac.rs](mailto:dbozic@agrif.bg.ac.rs)

The course entitled "Weed Management in Modern Agriculture" was held at the Mediterranean Agronomic Institute of Zaragoza from 16 to 21 April 2012. It was organized by the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), through the Mediterranean Agronomic Institute of Zaragoza (IAMZ), with the collaboration of the European Weed Research Society (EWRS), through the Working Groups on Education & Training and Weed Management Systems in Arid and Semi-Arid Environments, the Spanish Weed Science Society (SEMh) and the International Weed Science Society (IWSS). Twenty eight participants from nine countries (Algeria, Egypt, Germany, Latvia, Morocco, Serbia, Spain, Tunisia and Turkey), had the privilege to participate in lectures and discussions held by specialists in the field of weed management.

Although the duration of the course was quite short (in relation to the wide approach of lectures) and the organization required a great amount of work to prepare a suitable timetable for speakers and topics, the course was very successful. Diverse topics were discussed, starting from weed biology, ecology, economic thresholds through the GIS mapping and invasive species (Dr. Guillaume Fried), to non-chemical and chemical methods for weed control. The course was opened with lectures on weed life cycles (professor Jordi Recasens), seed bank dynamics and population dynamics (Dr. Joel Torra), followed by an overview on weed competition and economic thresholds and spatial distribution of weeds, GIS mapping and precision agriculture (Dr. Cesar Fernandez-Quintanilla). A practical lesson on weed identification was given by professors Joaquin Aibar and Jordi Recasens. The bases of integrated weed management (IWM) and non-chemical methods for weed control was presented by professor Steven Fennimore in lectures on mulching, solarisation, biofumigation, cover crops, rotations and tillage, followed by Dr. Jose Dorado with explanation of the impact of reduced and no tillage cultivation on weed management. Behaviour of herbicides in soil and environment and herbicide mode of action was presented by professor Baruch Rubin. Professor Albert Fischer had an interesting lecture on weed resistance to herbicides and the practical case of rice in California. Dr. Henri Darmency spoke about risks and benefits of herbicide resistant crops. Dr. Alicia Cirujeda showed us the importance of weed biodiversity. Dr. Milagros Saavedra developed the olive weed management as a practical case. Dr Carlos Zaragoza presented the case study regarding weed control in vegetables, while Dr. Andreu Taberner explained program of weed control in arable crops. The course also organized visits to a living weed collection, field experiments and organic fruit tree farm to give practical hands on topics about weed control in modern agriculture. During lectures and visits all participants had the opportunity to discuss different aspects of weed management and to interact with each other sharing their own experiences and exchange information and opinions. With the professors help the participants were able to ameliorate their knowledge and their understanding all approaches for weed control in modern agriculture. Moreover, during the course, participants have had the opportunity to meet colleagues from other countries and establish contacts for future cooperation.

The advanced course "Weed Management in Modern Agriculture" was an intensive course exploring linkages between fundamental aspects of weed sciences and practical measures for weed control. It was a wonderful learning experience. This experience boosts me with new insights, understanding and skills that I can utilize in my academic career and pass on to the students whom I facilitate in their studies.

At the end of the course all participants had the opportunity to fill an evaluation form and reflect their view about the program of the course, quality of the lectures and quality with which topics were explained. The participants were also requested to share their reflections - what they found good in the program/course and what they want to add to the program in the future.

I would like to express my gratitude to the EWRS for opportunity to participate on the course. Finally, I can conclude that we had a rarely valuable and helpful course in a exceptionally beautiful city!



Participants in the Advanced Course  
WEED MANAGEMENT IN MODERN AGRICULTURE  
Zaragoza (Spain), 16-21 April 2012



## HISTOLOGY OF *CENTAUREA CYANUS* L.

Dear Colleagues,

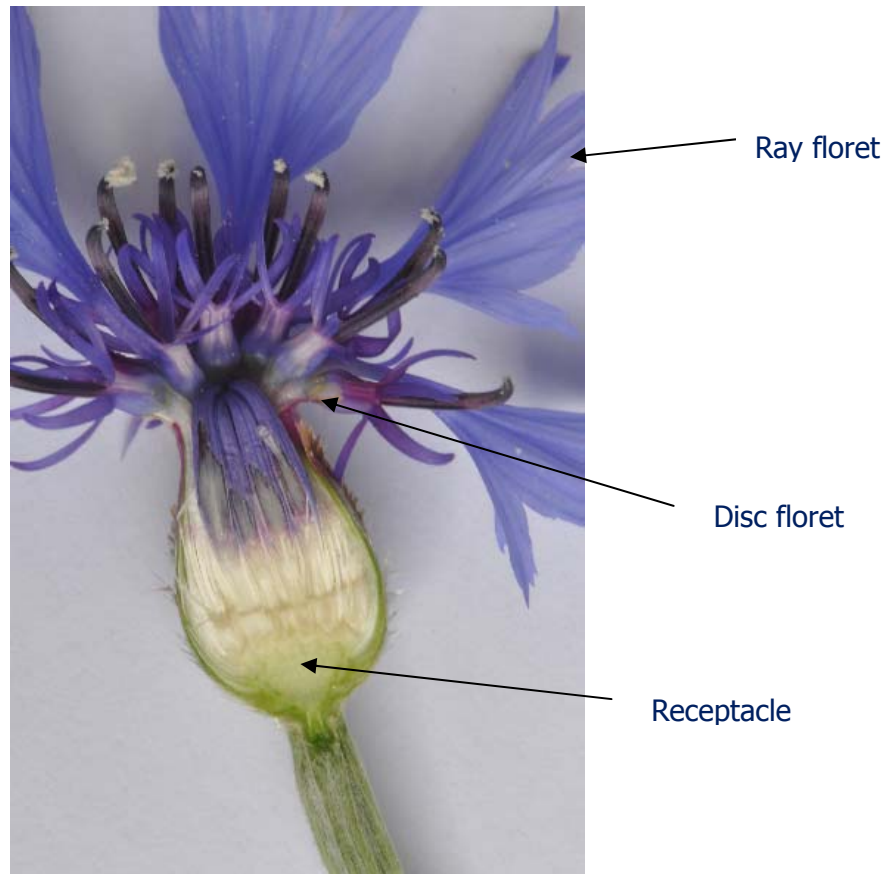
*Centaurea cyanus* L. (Bayer code: CENCY) or cornflower is the topic of my histology contribution to this Newsletter. It belongs to the Asteraceae or Compositae family. The Latin name cyanus talks about its blue colour which has made it attractive to artists for centuries. The last Newsletter issue (118) contained an article of Thomas Eggers with *Centaurea* motives on pictures and tableware. The flowers are arranged in flower heads with sterile ray florets surrounding fertile disc florets. Some of our colleagues believe that cornflower has become rare in some parts of Germany due to herbicides. It has, however, to be assumed that the increased cultivation of maize has more to do with the decline of its distribution. In some parts of Northern Europe, cornflower still causes yield reductions up to more than two tons per hectare due to heavy field infestations. In many private gardens and along road-sites, cornflower is planted as an ornamental.



*C. cyanus* growing in a wheat field near Frankfurt, Germany

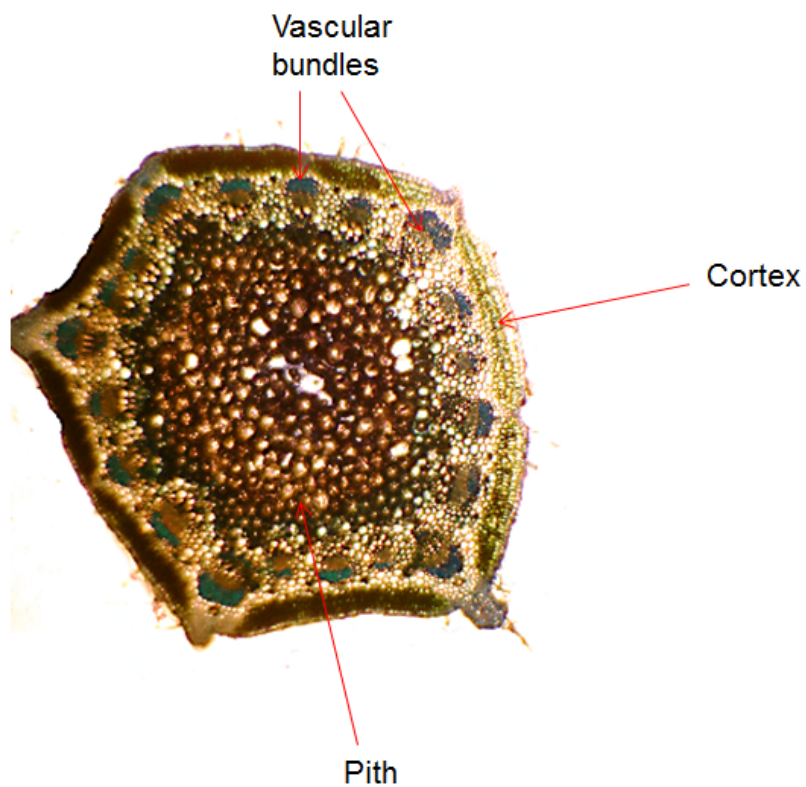


Flower head of *C. cyanus*

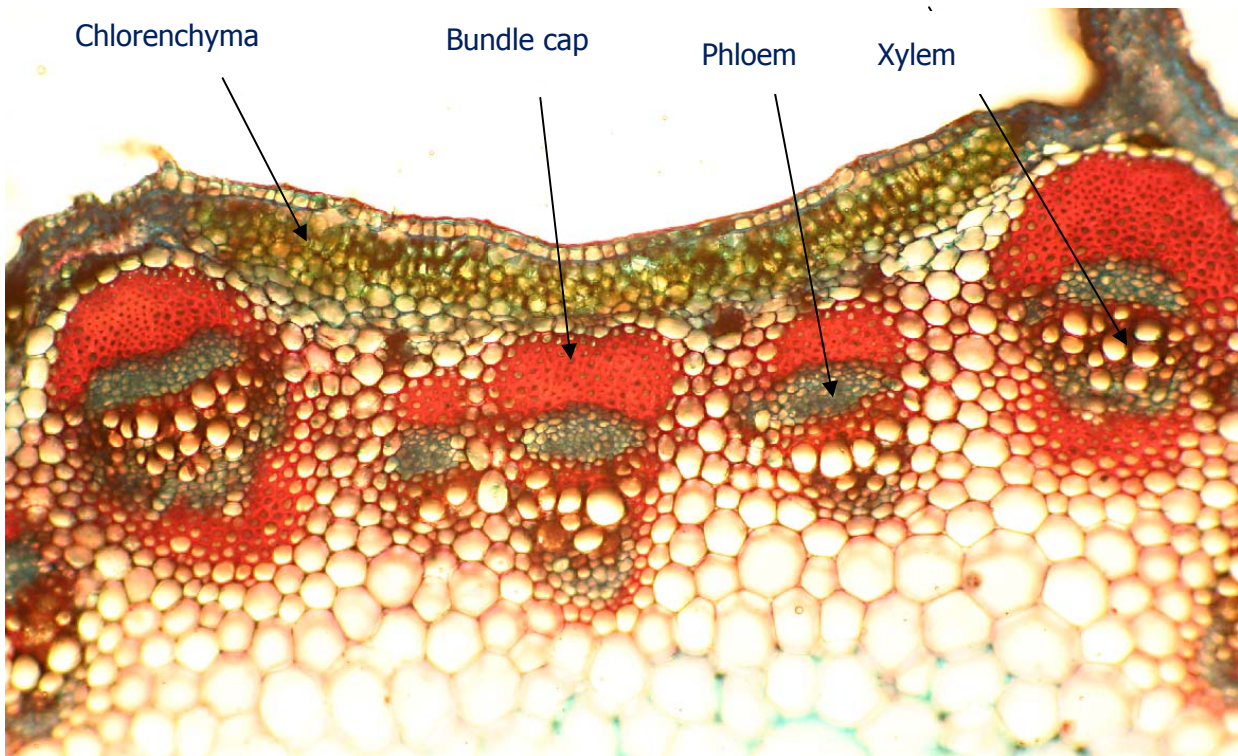


Flower head of *C. cyanus* split in half longitudinally

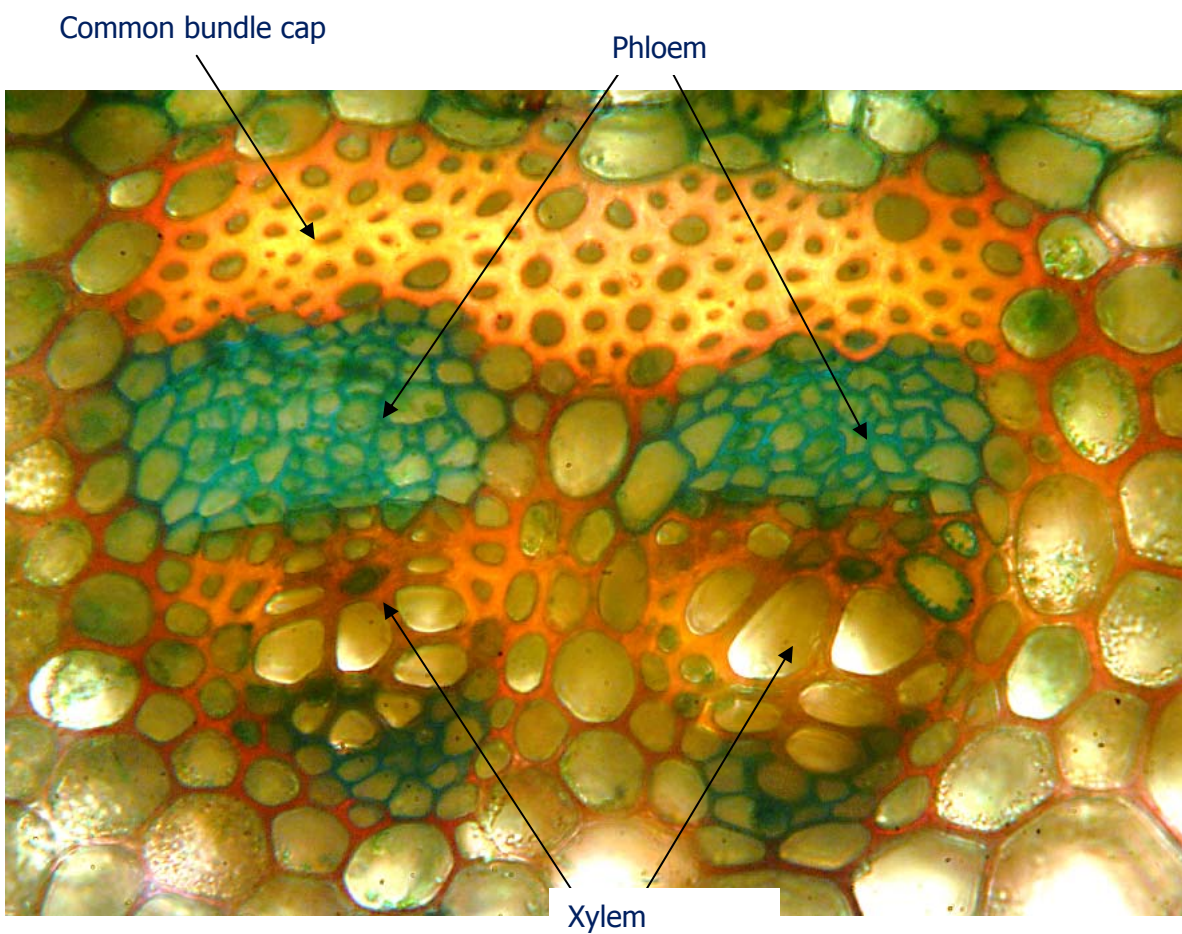
The vascular bundles are arranged on a ring. They are protected by lignified bundle caps. The cortex contains green chlorenchyma cells.



Transverse section through stem of *C. cyanus*; methylene blue, 40x



Transverse section through stem of *C. cyanus* ; Etzold blue, 100x



Transverse section through stem of *C. cyanus* ; acridine + acriflavin + astrablue according to Wacker, 400x.

H. Krämer

## WEED SCIENCE GOING ASTRAY?

By Thomas Eggers, [uth.eggers@googlemail.com](mailto:uth.eggers@googlemail.com)

### **WeedArt – blue & red & white flowering weed species: symbols for naturalness of products as well as subjects for art objects.**

Blue is a colour indicating loyalty, harmony, imagination and contentment. Red is a very powerful colour representing intensive feelings like love, joie de vivre and luck. White is the colour of perfection and purity. There are three remarkable weeds flowering in blue (*Centaurea cyanus*), red (*Papaver rhoeas*) and white (*Matricaria recutita*).

Different objects with these species alone, e.g. artificial poppy flowers for the annual Remembrance Day in countries of the British Commonwealth, or, more impressive, all 3 species together have been collected during more than 3 decades (books, paintings, pictures of still lives, yoghurt beakers, milk tubs, packagings of bread or rolls or margarine or honey, porcelain cups and saucers, bunches of artificial flowers). There was a demonstration of these objects during the German Weed Conference 2012 held at Braunschweig. The appropriate poster (see figures) got third prize out of some 50 posters presented during the poster session. The relevant publication is written in German:

EGGERS, Thomas: Blau & rot & weiß blühende Unkrautarten: Symbolik für Natürlichkeit und Kraft der Natur in Kunst und Kultur, Alltag und Werbung. - Julius-Kühn-Archiv 434, 2012, 727-734, ISBN 978-3-930037-84-1; DOI: 10.5073/jka.2012.434.095.

## Blue & red & white flowering weed species: symbols for naturalness and power of nature on products and as subjects for art objects

Thomas Eggers

**Blue**, colour of **harmony** and **contentment**, together with the powerful **red** representing **joie de vivre** and **white** as colour of **perfection** and **purity** must be of high attraction to choose this combination of colours in many areas of life, exuding harmony and reliability.



Wreaths at the memorial site of the Unknown Soldier, Arc de Triomphe, Paris



Children's books of Koch-Gotha & Sixtus [1924] and Zehn-Pinsel 1967



Vases: Topkapı-Palace, Istanbul; Art nouveau Galle



Demitasses from Sweden and Melitta

The colourful combination of the **blue** flowers of cornflower *Centaurea cyanus*, the **red** flowers of common and long-headed poppy *Papaver rhoeas* or *Papaver dubium* resp. and the **white** flowers of the mayweeds *Matricaria recutita* oder *Tripleurospermum inodorum* is manifold used:

in books, as pictures or texts, on paintings, in arts and crafts, on consumer goods, on packagings for foodstuffs or in advertising.



Van Gogh paintings: Still life 1890; postman Postilla 1889



*Centaurea cyanus*, Bombyx



*Papaver dubium*, Syrphide



*Tripleurospermum inodorum*, Apis



Box for crispbread (around 1990) on a flea market



Objects of every description collected 1975...2011

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## CALL FOR CONFERENCES

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### **1<sup>ST</sup> INTERNATIONAL RHEA CONFERENCE: "APPLICATIONS OF AUTOMATED SYSTEMS AND ROBOTICS FOR CROP PROTECTION IN SUSTAINABLE PRECISION AGRICULTURE"**

Pisa, Italy  
19 – 21 September 2012

#### **Context**

RHEA-2012 is being fostered by the project RHEA (Robot fleets for highly effective agriculture and forestry management, FP7-NMP 245986). The RHEA consortium comprises a number of research centres, universities, and companies funded by the European Commission through the Seventh Framework Programme to develop robotic fleets for sustainable weed control and pesticide management in agriculture and forestry.

#### **Aim**

The conference is aimed at spreading and sharing knowledge and information among researches related to the applications of automated systems and robotics for crop protection in sustainable precision agriculture.

#### **Themes**

The RHEA-2012 is divided into two main themes containing plenary and parallel sessions devoted to:

##### ***Theme 1: Strategies and tools for precision agriculture***

- Topic 1.1: Automated machines for chemical weed control.
- Topic 1.2: Automated machines for physical weed control.
- Topic 1.3: Automated machines for tree crop protection.
- Topic 1.4: Agronomical, economical and safety impacts of automated machines use.

##### ***Theme 2: Automation and robotics for precision agriculture***

- Topic 2.1: Design and control of autonomous agricultural vehicles and systems
- Topic 2.2: Sensing, computer vision and image analysis in agricultural processes
- Topic 2.3: ICT technologies in precision agriculture

#### **Venue**

The First International Conference on **Robotics and associated High-technologies and Equipment for Agriculture (RHEA-2012)** will be held in Pisa, Italy, from 19 to 21 September 2012. It is organized by the *Centro Interdipartimentale di ricerche agro-ambientali Enrico Avanzi (CIRAA), Facoltà di Agraria, Università di Pisa*.

#### **Registration**

The registration form can be downloaded from the RHEA conference website ([www.rhea-conference.eu/2012](http://www.rhea-conference.eu/2012)) and once completed it should be send to the Conference Secretariat ([Imartelloni@agr.unipi.it](mailto:Imartelloni@agr.unipi.it)).

#### **Important Dates**

- Full paper electronic submission: April 30, 2012
- Notification of final acceptance : May 31, 2012

## **INTERNATIONAL CONFERENCE GLOBAL HERBICIDE RESISTANCE CHALLENGE 2013**

18-22 February 2013  
Perth, Australia

Global food production is one of the greatest challenges of the 21<sup>st</sup> Century. Sustaining world food production requires reliable control of yield reducing crop weeds. Herbicides are the principal tool for crop weed control yet their sustainability is threatened by the evolution of herbicide resistant weed populations in many parts of the world. The latest chapter in resistance evolution is the widespread appearance of glyphosate resistant weeds threatening the success of glyphosate resistant crops. Crops with new herbicide resistance gene traits, new herbicides and non-chemical methods to manage weeds are being introduced to counter the weed/resistance threats.

The Global Resistance Challenge 2013 conference offers a multidisciplinary forum focused on all aspects of herbicide resistance in crops and weeds and their impact on global food production. Scientific sessions will range from the molecular basis of herbicide resistance evolution through agro-ecology and agronomy to on-farm resistance management.

The Global Resistance Challenge 2013 conference will provide a stage for young and established private and public sector researchers, crop consultants and others to present their work in front of a welcoming international audience in the beautiful portside city of Fremantle, Perth, Western Australia. We welcome everyone who wishes to discover the latest advances in herbicide resistance to Perth in February 2013, to experience a magnificent Western Australian late summer. For more information: <http://www.herbicideresistanceconference.com.au/>

## **16<sup>TH</sup> EWRS SYMPOSIUM**

24 – 27 June 2013  
Samsun, Turkey

Venue: Ondokuz Mayıs University, Samsun, Turkey

The First circular is now available. Click on the link below to download it:  
([EWRS 16th Symposium Samsun 1st circular.pdf](#), 7.3 Mb)

The EWRS 2013 Meeting Website has been launched.  
Go to <http://www.ewrs2013.org/default.aspx> or more details.

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## **UPCOMING CONFERENCES AND WORKSHOPS**

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### **GERMAN CROP PROTECTION CONFERENCE**

10-14 September 2012  
Braunschweig, Germany

<http://www.pflanzenschutztagung.de/>

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### **1<sup>ST</sup> INTERNATIONAL CONFERENCE ON ROBOTICS AND ASSOCIATED HIGH-TECHNOLOGIES AND EQUIPMENT FOR AGRICULTURE (RHEA): "APPLICATIONS OF AUTOMATED SYSTEMS AND ROBOTICS FOR CROP PROTECTION IN SUSTAINABLE PRECISION AGRICULTURE"**

19-21 September 2012  
Pisa, Italy

<http://www.rhea-conference.eu/2012>

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**18<sup>TH</sup> AUSTRALASIAN WEEDS CONFERENCE**

8– 11 October 2012  
Sebel and Citigate Albert Park, Melbourne, Australia  
<http://www.18awc.com>

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**2012 CANADIAN WEED SCIENCE SOCIETY ANNUAL MEETING**

12-15 November 2012  
The Fairmont, Winnipeg, Manitoba  
<http://www.weedscience.ca/home>

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**17<sup>TH</sup> GREEK WEED SCIENCE SOCIETY CONFERENCE**

22– 24 November 2012  
Athens, Greece  
[www.eze.org.gr](http://www.eze.org.gr)

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**CROP PROTECTION IN SOUTHERN BRITAIN (AAB/BCPC/AICC CONFERENCE)**

27-28 November 2012  
East of England Showground, Peterborough, UK  
<http://www.aab.org.uk/contentok.php?id=136&basket=wwwshowconfdets>

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**10<sup>TH</sup> INTERNATIONAL CONFERENCE ON PLANT DISEASES**

3 - 5 December 2012  
Tours, France  
<http://www.afpp.net>

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**WEED SCIENCE SOCIETY OF AMERICA ANNUAL MEETING**

4-7 February 2013  
Baltimore, Maryland, USA  
<http://www.wssa.net/>

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**INTERNATIONAL CONFERENCE GLOBAL HERBICIDE RESISTANCE CHALLENGE 2013**

18-22 February 2013  
Perth, Australia  
<http://www.herbicideresistanceconference.com.au/>

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**1<sup>ST</sup> PURE CONGRESS**

19-21 March 2013  
Riva del Garda, Italy  
<http://www.pure-ipm.eu/>

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**16<sup>TH</sup> EWRS SYMPOSIUM**

24 – 27 June 2013  
Samsun, Turkey  
<http://www.ewrs-org>

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## EDITORIAL

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### INSTRUCTIONS FOR CONTRIBUTORS

**Deadline for contributions to be published in the following Newsletter issue:  
1 October 2012**

#### Photographic images

It is possible to include photographic material. Please make sure that the images are taken at no less than 300 dpi otherwise the picture quality drops.

#### Questions

If you have any problems in writing or formatting your article, please do not hesitate to contact me. I'll be happy to assist you. As Technical Editor of the Newsletter, I prepare the final layout of the Newsletter prior to publishing. You can contact me by sending an E-mail to [newsletter@ewrs.org](mailto:newsletter@ewrs.org) / [moonen@sssup.it](mailto:moonen@sssup.it) or by calling me at +39 050 883567. I'm looking forward to receiving your contributions.

Camilla Moonen

### CHARGES FOR JOB ADVERTISING IN THE NEWSLETTER

- Job advertisements are free of charge for EWRS members from public research and education institutions.
- The rate for a job advertisement from private enterprises is € 100,00 page. Reductions can be negotiated with the Newsletter editor for half page adverts.
- Publication of a job advertisement on a special page of the EWRS website <http://www.ewrs.org> will be charged € 300,00 per advert.

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