Università Politecnica delle Marche
Dipartimento di Scienze Agrarie, Alimentari ed Ambientali

Environmental Risk Assessment of new agricultural technology

Maggio 2014

Dott Jeremy Sweet Visiting Scientist D3A

National Institute of Agricultural Botany (NIAB) Cambrige UK
Vice-chairman EFSA GMO Panel & Chairman of Environment WG
Member of Environment Working Group (EFSA)
Workpackage Leader GRACE EU GMO project
Environmental and Research Consultant
Email: jeremysweet303@aol.com

Objectives: Lectures, and exercises of about 20-24 hours on aspects of Environmental Protection, Regulation and environmental biosafety assessment and management

Subjects :

- Environmental Protection Goals for vital ecosystem services and functions in agricultural and semi-natural environments
- Comparisons of pesticide and GMO regulations, and risk assessments.
- ERA methods including Problem Formulation, Hazard characterisation and Exposure assessments
- Case studies of insect resistant and herbicide tolerant crops where pesticide and GMO regulations interact
- Risk assessments, case studies and practical exercises using current and future GM crops including those being developed by UPM and other organisations in Europe
- Non-target and off–target effects
- Risk management and mitigation of GM crops and pesticides
- Coexistence of GM and non-GM crops, including isolation, labelling, traceability, thresholds and detection.
- Environmental Monitoring: feasibility and methods
- Student exercises where students will describe risk assessments and risk management requirements for new crops
- Social and economic considerations of GMOs and pesticides in relation to food, and agriculture.
- Visit to sugar beet breeding centre
- 2 hours examination on ERA approaches and methods.

Environmental Risk Assessment of new agricultural technology Programma del Corso			
	AM	PM	
Time table	**09:00 - 10.30**	**14.00-15.30**	**16.00/16.30-**
Date			
Mag-07 **Aula A**			**16.30** Environmental Risk Assessment: Principals and approaches Pesticides and GMOs
8 **Aula M**	Environmental Risk Assessement GM Plants	ERA: Gene flow, Fitness and Invasiveness	**16.00** Coexistence, traceability, detection, labelling
9 **Aula A**		Non Target Organisms Insect Target Effects	**16.00** Insect Resistance management
14 **Aula A**			**16.30** Herbicide tolerance Rice case study
15 **Aula A**	ALL DAY : Visit to CRA-CIN (Rovigo : Sugar beet or Bologna Industrial crops) http://sito.entecra.it/portale/cra_dati_istituto.php?id=206		
16 **Aula A**		GM Sugar beet case studies	**16.00** Post Market Environmental Monitoring and Management
21 **Aula A**			**16.30** Gene stacking
22 **Aula M**	GM perennial species : issues	Risk assessment exercises: GM Potato and tree	16.00 Risk management Exercises
23 **Aula A**		GM animals : insects, fish, farm animals	**16.00** Risk assessment exercise GM salmon
28 **Aula A**			**16.30** Socio economic considerations
29 **Aula M**	Tutorial Session	**14.00** Examination 2 hours	