

# IPSAM 2015

Maynooth University 11-12 May



Irish  
Plant  
Scientists'  
Association

## Programme

MONDAY 11 <sup>th</sup> May 2015	
8.30-10.00	Registration and erection of posters
10.00	Welcome: Professor Paul Moynagh (Head of Biology Department, Maynooth University)
<b>Session 1: Plant Growth and Development</b>	<b>Chair: Paul McCabe</b>
10.10	Breeding system evolution in <i>Plantago lanceolata</i> . <b>Jackie Nugent, Maynooth University</b>
10.30	A fasciation phenotype caused by a T-DNA insertion at the <i>WUSCHEL</i> locus displays a paramutation like phenomenon in <i>Arabidopsis thaliana</i> . <b>Sandesh Rao, NUIG</b>
10.50	Analysis of <i>LEAFY</i> function during floral initiation in <i>Arabidopsis thaliana</i> . <b>Kevin Goslin, Maynooth University</b>
11.10	Gene regulatory network analysis of <i>Arabidopsis</i> flower development. <b>Frank Wellmer, TCD</b>
11.30-11.50	Coffee/tea
<b>Session 1: Plant Growth and Development (contd.)</b>	
11.50	Maternal DNA demethylases trigger seed abortion in unbalanced <i>Arabidopsis thaliana</i> interploidy crosses. <b>Antoine Fort, NUIG</b>

<b>12.10</b>	Direct repression of the leaf development program by floral organ identity factors. <b>Daragh Stewart, TCD</b>
<b>12.30</b>	Regulation of transcription: new insights into the roles of the ubiquitin system. <b>Emmanuelle Graciet, Maynooth University</b>
<b>12.50-14.10</b>	Lunch and informal poster session
<b>Session 2A: Biodiversity and Evolution</b>	<b>Chair:</b> Zoë Popper
<b>14.10</b>	Molecular evolution and expression analysis of orphan genes in the <i>Sorghum bicolor</i> genome. <b>Tuteja Reetu, NUIG</b>
<b>14.30</b>	The temporal and spatial distribution of peaks in <i>Pinus</i> and <i>Ulmus</i> populations in Europe during the Holocene. <b>Alwynne McGeever, TCD</b>
<b>14.50</b>	Plastid genome variation defines gene pools in newly collected bioenergy and forage grass germplasm of <i>Dactylis glomerata</i> and <i>Phalaris arundinacea</i> from NW Europe. <b>Trevor Hodkinson, TCD</b>
<b>15.10</b>	Testing the effects of biodiversity on ecosystem multifunctionality. <b>Áine Dooley, Maynooth University</b>
<b>Session 2B: Abiotic Stress</b>	<b>Chair:</b> Phil Dix
<b>14.10</b>	Exploring differentially expressed genes under water stress in reed canary grass ( <i>Phalaris arundinacea</i> ). <b>Manfred Klaas, Teagasc, Oak Park, Carlow</b>
<b>14.30</b>	A strong relationship persists between stomatal density and vein density in a range of basal plants under low O <sub>2</sub> /high CO <sub>2</sub> conditions. <b>Christiana Evans-Fitzgerald, UCD</b>
<b>14.50</b>	Varietal differences in salinity tolerance in switchgrass ( <i>Panicum virgatum</i> L.) <b>Ángel Cordero, UCD</b>

<b>15.10</b>	Effects of Nitrogen Enrichment on Surface Bound Enzyme Activities in Lichens. <b>Niall Higgins, Univeristy of Nottingham, UK</b>
<b>15.30</b>	Coffee/tea
<b>Keynote address 1</b>	<b>Chair:</b> Dr. Emmanuelle Graciet
<b>16.00</b>	Symmetry matters in gynoecium development. <b>Lars Østergaard, John Innes Centre, Norwich, UK</b>
<b>17.00 Open forum</b>	<b>Chair:</b> Conor Meade The Internatinal Association of Plant Biotechnology - Reasons to get involved. <b>Barbara Doyle-Preswick, UCC</b> Whither IPSA? <b>Bruce Osborne, UCD</b>
<b>17.40-19.00</b>	Poster session (authors in attendance)
<b>19.00</b>	Reception @ Phoenix Campus Restaurant
<b>TUESDAY 12<sup>th</sup> May 2015</b>	
<b>Session 3: Crop Improvement</b>	<b>Chair:</b> TBA
<b>09.00</b>	Maize vitamin A biofortification for micronutrient deficiencies in Africa – provitamin A bioaccessibility and bioavailability of biofortified tropical maize lines using human epithelial cell assays. <b>Galina Brychova, NUIG</b>
<b>09.20</b>	Two partially effective loci conferring resistance to <i>Globodera pallida</i> Pa2/3 act consistently across multiple nematode field populations. <b>Brian Rigney, Teagasc, Oak Park, Carlow.</b>

<b>09.40</b>	Expanding the potential of Ensifer-Mediated Transformation (EMT) – a novel method for the genetic transformation of plant genomes. <b>Ewen Mullins, Teagasc, Oak Park, Carlow</b>
<b>10.00</b>	Juvenile vigour of diverse Sitka spruce full-sibling families in a changing environment <b>Phillip Glombik, UCD</b>
<b>10.20</b>	Tree Breeding and things to do while you are waiting in Ireland: from selection of wild types to tree breeding based on progeny testing. <b>Ellen O'Connor, Research Consultant</b>
<b>10.40-11.10</b>	Coffee/tea
<b>Keynote address 2</b>	<b>Chair:</b> Dr. Jackie Nugent
<b>11.10</b>	Plant-soil feedbacks as drivers of plant diversity and productivity. <b>James Bever, Indiana University, USA</b>
<b>12.10-13.00</b>	Lunch
<b>Session 4A: Climate Change and Sustainable Agriculture</b>	<b>Chair:</b> Colin Kelleher
<b>13.00</b>	Impact of biostimulants on plant growth and stress tolerance. <b>O. Goñi, Tralee IT</b>
<b>13.20</b>	Vegetation responses to future global change – preliminary findings from six biomes. <b>Michelle Murray, UCD</b>
<b>13.40</b>	Newly discovered micro-organisms that will change the face of agriculture. <b>B. R. Murphy, TCD</b>
<b>14.00</b>	Partial desalination of four Irish seaweeds in a lyophilized powder form. <b>Paul Cherry, Ulster University</b>
<b>Session 4B: Biotic Interactions</b>	<b>Chair:</b> Ewen Mullins
<b>13.00</b>	Evolution of lettuce mosaic virus towards resistance-breaking in lettuce: involvement of

	the viral cylindrical inclusion. <b>Maud Sorel, Maynooth University</b>
<b>13.20</b>	Plant-Plant interactions: remodelling cell walls during parasitism. <b>Zoë Popper, NUIG</b>
<b>13.40</b>	Convergent protein evolution enabled phytoplasmas to reprogram flower development. <b>Rainer Melzer, UCD</b>
<b>14.00</b>	Unveiling the plant-aphid interaction-one protein at a time. <b>James Carolan, Maynooth University</b>
<b>14.20</b>	Characterisation of the genetic basis of foliage and tuber blight resistance in the potato variety Setanta using the Infinium 8303 Potato Array. <b>Joseph Mulhare, Teagasc, Oak Park Carlow &amp; UCD</b>
<b>14.40</b>	Close of Meeting