

## [The Trinity College Dublin Botany Department Newsletter](#)

### Accomplishments

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Congratulations to **Sukontip Sirimongkol**, whose Ph.D. viva was held on the 5<sup>th</sup> of May, and which she successfully passed with only minor corrections being required! Sukontip's Ph.D. was on the taxonomy of *Henckelia*, a genus in the Gesneriaceae native to the Old World. Although *Henckelia* was first described in 1817, much still remains unknown (Sukontip discovered 5 *Henckelia* species new to science in Thailand).

Passing her viva as she did is quite an achievement as not only did Sukontip have to cope with having a viva in her second language but, due to the restrictions on travel imposed by the corona virus, she also had to cope with it being done remotely. Luckily, the time difference between Ireland and Thailand and Denmark, where her external examiner is based, proved just manageable by starting at 9am Irish time. This is the first such a remote Ph.D. viva has been held in Botany and it is a tribute to Fraser, her internal examiner, that it all went smoothly. As the remote viva went so well, it may well be considered again in future as a sensible option given the considerable savings it affords in terms of everyone's carbon footprint, time and expense.

**Sukontip** is a staff member of the **Royal Forest Department of Thailand** who financed her study and her project forms part of the long-term commitment the Department has to the Flora of Thailand project.

### Publications

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**Restoration Ecology:** **John Devaney** and **Jennifer McElwain** had a paper published entitled '[Impact of soil salinity on mangrove restoration in a semi-arid region: a case study from the Saloum Delta, Senegal](#)'. This is the first publication from the IRC and Marie Curie funded Future Mangroves project. The article details research carried out in collaboration with the Senegalese Institute for Agricultural Research that aims to identify factors that influence the success of mangrove reforestation projects.

**Physiologia Plantarum:** **Simon Hodge** contributed to a letter published continuing the debate about what happens to nitrate assimilation in C3 plants if atmospheric CO<sub>2</sub> concentration keeps increasing. '[Will rising atmospheric CO<sub>2</sub> concentration inhibit nitrate assimilation in shoots but enhance it in roots of C3 plants?](#)'

**Eos – Science News by AGU:** An article entitled '[Eight Lessons from COVID-19 to Guide Our Climate Response](#)' was written up in response to the 'Behind the Headlines' panel discussion, in which **Jane Stout** participated as mentioned in last month issue.

## Projects and Funding

**Jane Stout** is part of a team approved by SFI to progress to 'seed phase' of their [Future Innovator Zero Emissions Challenge](#) projects with '**Farm Zero C: Creating a carbon neutral resilient dairy farm**'.

The project is led by Kevin O'Connor, Director of BiOrbic Research Centre, with collaborators from UCD, the Carbery Group, AFBI, Teagasc, IT Tralee, Devenish, and Wageningen University. Jane's role is to ensure biodiversity enhancement. The team have until December 2020 to conduct baseline research and produce a business plan for implementation. The successful team will be awarded €2million to implement their proposal.

## Events and Activities

### World Bee Day May 20<sup>th</sup>

**Jane Stout** co-organised and spoke at a webinar on '**Science and policy for effective pollinator protection**'.



Led by the global government-level organisation, [Promote Pollinators](#) (The Coalition of the Willing on Pollinators), in collaboration with the All-Ireland Pollinator Plan and Leiden Biodiversity Centre Naturalis, the webinar included speakers from Scotland's Rural College, Wageningen University and Naturalis Biodiversity Center.

**Jane** also wrote a blog post for [Campus Buzz](#), the blog site for Trinity College Dublin's Campus Pollinator Plan, giving a roundup of what everyone's up in her Plant-Animal Interactions Research group.

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Our **Áras an Uachtaráin** (President's garden) **Biodiversity Audit** team (**Aoibheann Gaughran** and **Jane Stout**) got some lovely coverage for Biodiversity Day on RTE, link [here](#).

## Meetings and Conferences

### EGU2020 'Sharing Geoscience Online'

This year the European Union Geoscience General Assembly took place online, from 4th to 8th May 2020.

**Matt Saunders** was a co-convenor of a session on '*Tropical landscapes and peatlands: Biogeochemistry, ecohydrology and land use impacts*'.

**Alina Premrov** contributed with the following presentations:

— '[Insights into modelling of soil organic carbon from Irish grassland sites using ECOSSE model](#)' based on the research work under **SOLUM** project (P.I. **Matthew Saunders**)

- '[Insights into CO2 simulations from the Irish Blackwater peatland using ECOSSE model](#)' based on the research work under **AUGER** project.

**Kamila Kwasniewska** presented an initial progress on the **Tephra Bag Citizen Science** project, during the '*Social science meets geoscience*' session. The [poster](#) display was followed by a short online chat with questions and suggestions. A big emphasis was put on making the project available online for families and kids, as a form of distance learning during the lockdown

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On Friday 8th May, **Andrew Neill** joined the [BiOrbic](#) coffee morning, which is the SFI group focused on bioeconomy research. He shared a 10 minute presentation and poster about his work linking the natural capital concept to the bioeconomy and they had a great discussion about environmental sustainability across disciplines.

## Special Lockdown

**John Parnell** wanted to share with us some images of the grounds of the College, as they are currently looking really spectacular. The *Wisteria* over the doorway of our building and the first of a number of *Echium pininana* (native of the Canary Islands) are in full bloom. The wildflower areas outside of Chemistry, near the Pavillion and at the Lincoln Place Gate are also bursting into flower: a vast improvement over the difficult to keep, drab and poor-quality lawns that were there before. Such a pity that we can't be there to admire it all.



**Jennifer McElwain**, our Head of Department, loved the idea of the ‘**Showcase your Garden**’ challenge during the lockdown (see supplementary issue). It got her thinking about how we could showcase botany to a broader audience using video! In her own words:

“This 5 minute YouTube film is a trial of how we could possibly do this as a Department. Filmed by my talented husband Peter Lang (Photoic Design). **This is an idea for which I am looking for feedback from the Botany Department through Phytobytes!** Who would be interested in doing the next 5 in 5 video?”

I have learned a lot through doing it... for example a script would be a good idea rather than speaking off the cuff. Last-minute plant ID's – not a good idea. Hope I've got them right! Cheesy train scenes – not sure about those either...” see [here](#).

## EcoEvo Blog Posts

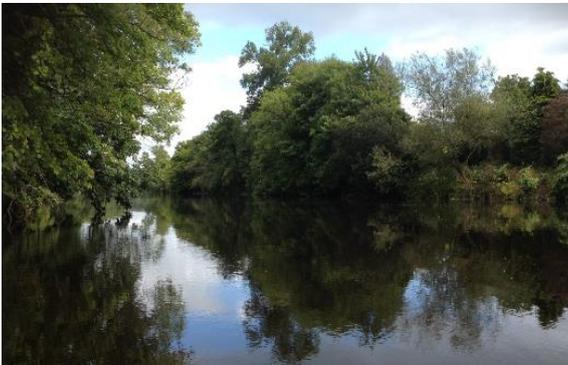
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Want to learn more? Check out the [EcoEvo Blog](#), where Trinity's Botany and Zoology departments discuss their work and reflections in research. The latest posts include...



### [Bees: common myths and misunderstandings](#)

by Jane Stout



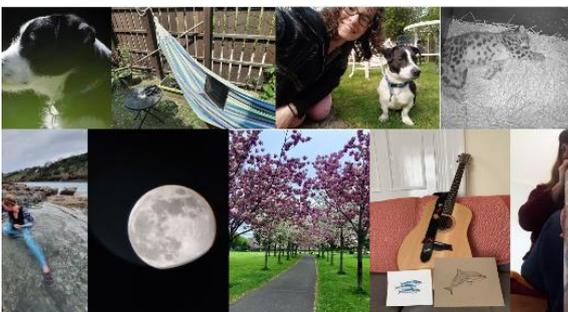
### [Disease dynamics and the impact of incompetent invaders](#)

by Paula Tierney



### [A Field Season in New Zealand: One Mesocosm Experiment to Rule them All](#)

by James Orr



### [Staying Sane in the Insanity](#)

by the EcoEvo community

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**PHYTOBYTES** needs your input! Whether you are student or staff, please send any news you have, big or small, to Marine Valmier ([valmierm@tcd.ie](mailto:valmierm@tcd.ie)) with the subject heading 'Phytobytes'. Let's share the latest news and always be aware of what is happening at Botany!