

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

Accomplishments

Botany welcomes **Josua Seitz** who has recently joined us as a **PhD student** on the **modelling of carbon fluxes in grasslands** (using the **QUINCY model**), supervised by **Dr. Silvia Caldararu** and funded by **iCRAG**. Josua has got a **Bachelor's in Physical Geography** at FAU Erlangen Nuremberg, Germany and a **Master's in Biogeochemistry** at Umea University in Sweden, where he studied the **impact of reindeer on soil carbon quality in Finnish boreal forests**.



And welcome back to **Diego Bianchi** who has returned to his PhD after a pause of 10 months during which he has been working in **Cropbiome Ltd** (Nova UCD). The objectives for the year include the testing of his collection of fungal endophytes on the **promotion of barley's fitness under drought stress** and, separately, the **anti-fungal activity** of these fungi **against barley's pathogens**.

Accomplishments

Congratulations to **Ian Clancy** who was accepted to attend the 6th edition of the **ICOS Summer School** (Integrated Carbon Observation System), at the Hyytiälä forest field station in **Finland**, from 24th May until 2nd June 2023. This training will be a full week of **ecosystem fluxes and measurements, atmospheric composition** with *in situ* and **remote sensing measurements, global climate modelling** and carbon cycle, **atmospheric transport and chemistry**, and data management and cloud ('big data') methods. And yes, we wish him to spend and enjoy some time in the extremely hot Finnish sauna too.

Old but (not) gold

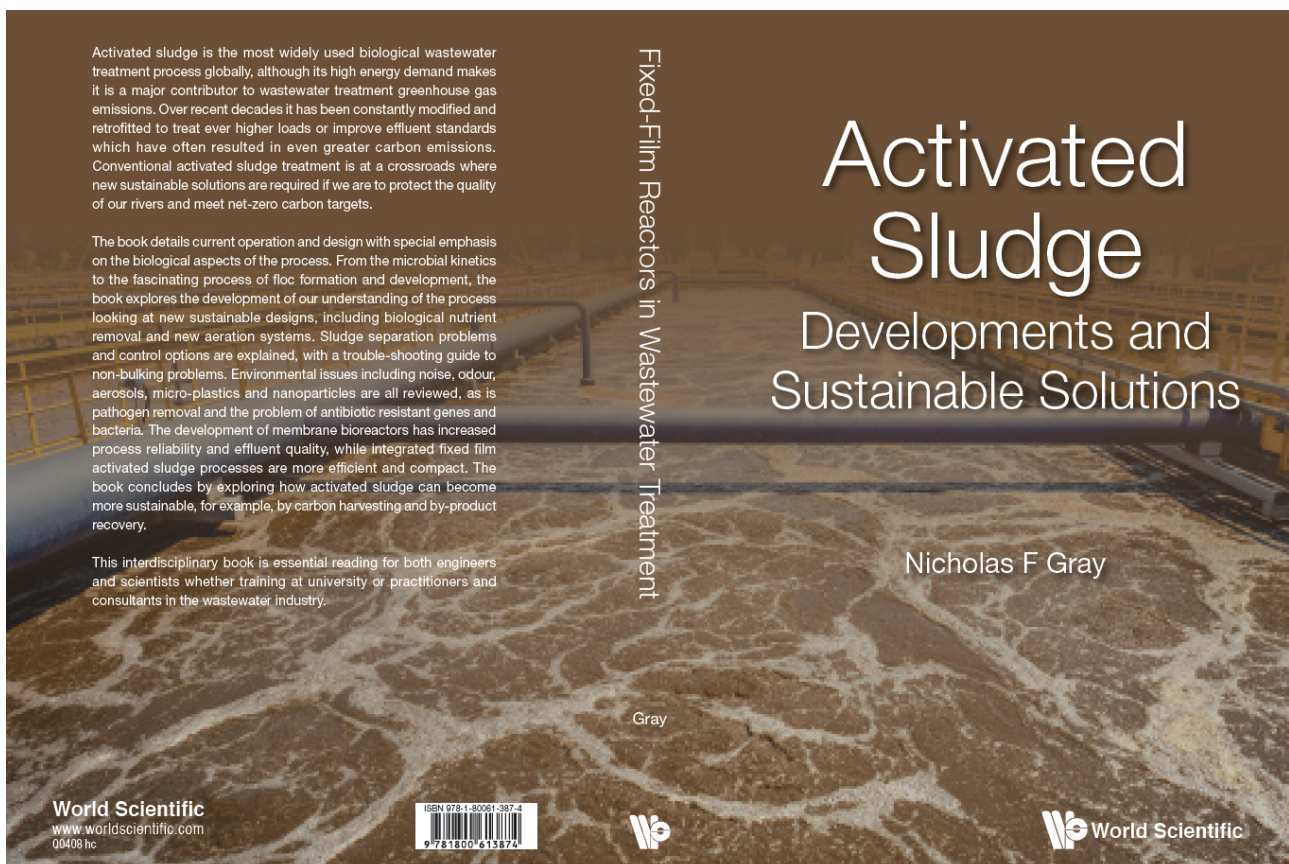
The good old days and history repeating itself. We all enjoy the garden in front of the Botany Building. Botany also opened out onto a garden in the early years after its construction in 1907. In the 1970s a prefabricated building was constructed on the garden to house the electron microscope. This eyesore was eventually removed thirty-five years later to give way to the new garden.



Publications

Click on the title to read the full article!

- A new research monograph **Activated Sludge: Developments and Sustainable Solutions** will be published on March 1st by **World Scientific Publishing**. This is the third in a new series of major monographs by **Nick Gray** on key wastewater treatment processes with the emphasis on sustainability.



- Jarmain, C., Cummins, T., Jovani-Sancho, A.J., Nairn, T., **Premrov, A.**, Reidy, B., Renou-Wilson, F., Tobin, B., Walz, K., Wilson, D., Byrne, K.A. (2023) **Soil organic carbon stocks by soil group for afforested soils in Ireland.** *Geoderma Regional* 32, e00615.

Publications

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- Almeda, F. & Pacifico, R. (2023). **A new *Miconia* (Melastomataceae) from Cusuco National Park, Honduras**. *Phytotaxa* **578** (2): 199–206.

Congratulations to **Daniel Kelly**, to whom **another plant** (*Miconia kellyana*) **has been named in his honour** - for the second time. The first plant was *Eugenia kellyana* Proctor, a tree in the Myrtle family (Myrtaceae).

Miconia kellyana is described as a new species that is known only from a limited area of montane tropical forest in **Cusuco National Park** in northwestern **Honduras**. This is a shrub 2-3 m high, with pretty flowers, white flushed pink. **The first specimen was collected in June 2011**, by **Daniel Kelly & Anke Dietzsch** (then a research assistant in TCD Botany Department). The plant belongs to the Melastomataceae – a vast family of trees, shrubs, herbs and climbers. Mainly tropical, the family and genus find their centres of diversity in South America. The local (Spanish) name for *Miconia kellyana* is '**Sirín tamoso**', meaning 'downy Melastome' or 'fluffy Melastome': the leaves are softly furry, covered with an indumentum composed of three distinct kinds of hair (Why?)

Apparently no botanist has yet seen fruits (or seeds).

One wonders will we ever get to see this plant in cultivation...

This is the eighth published flowering plant species new to science collected by the **Operation Wallacea Forest Botany team in Cusuco and the 11th flowering plant species from this Park that is known from nowhere else in the world!**



Publications

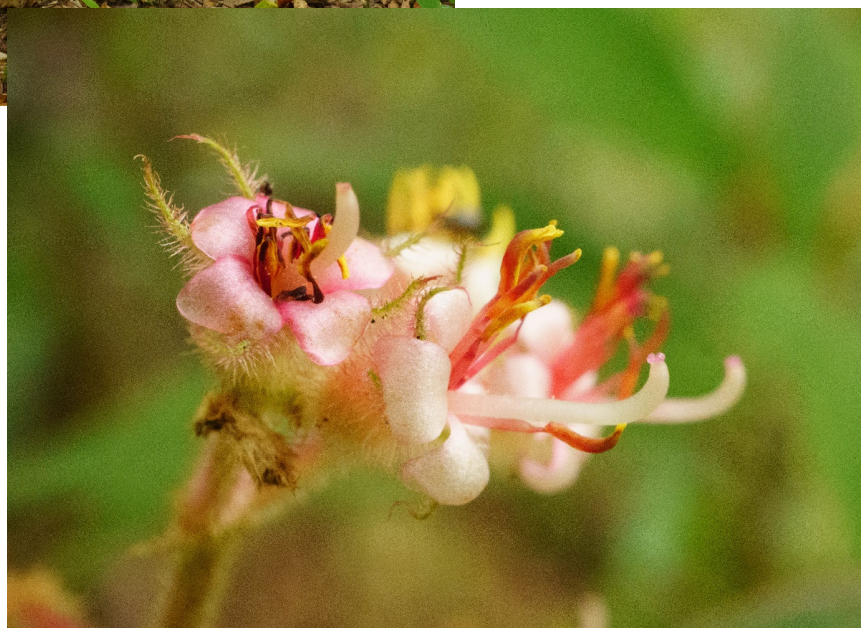


Miconia kellyana.

Shrub beneath the forest canopy.

Miconia kellyana.

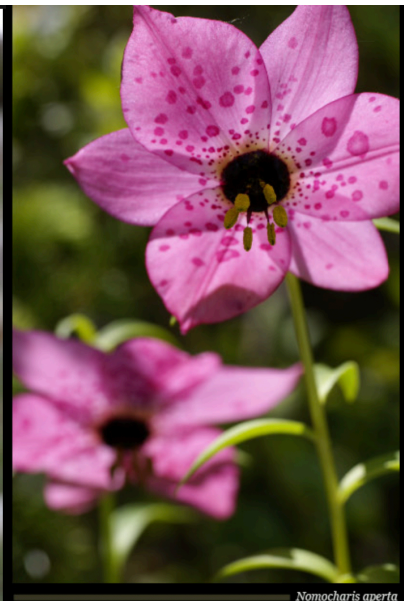
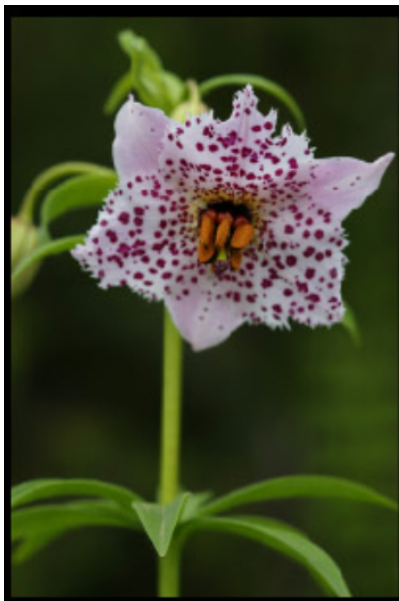
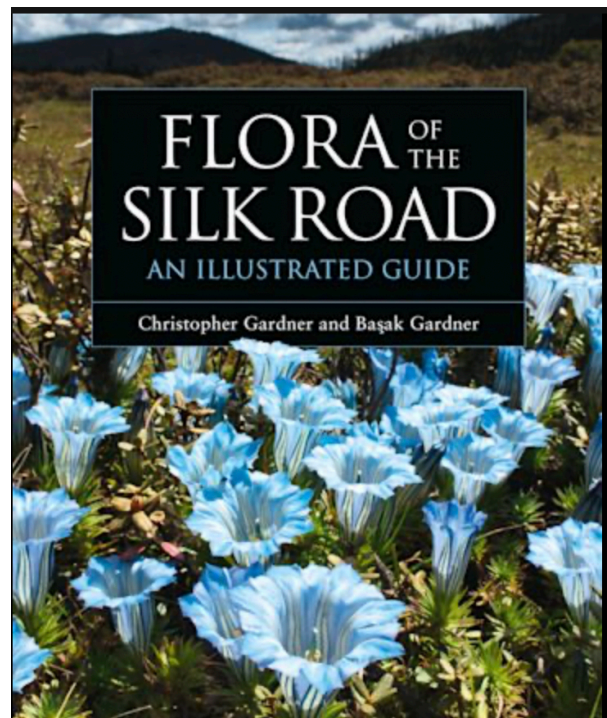
Flowers close up.



Phytobooks

Flora of the Silk Road

This fabled route, linking Europe with Asia, passes through some of the most spectacular scenery on earth. In this sumptuous large-format 416-page book, **Chris and Basak Gardner** offer a unique pictorial celebration of the plants and scenery to be found along the 5,000 miles of the Silk Road. Embracing Turkey, Syria, Lebanon, Iran, Central Asia and China, more than 500 captivating wild flowers are depicted in superb photographs, together with the beautiful landscapes in which these botanical wonders are found.



Phytoart - Botanical drawing with Mary Dillon

Visual artist and Botanical art teacher **Mary Dillon** will be running a **two-day practical course** in botanical drawing and watercolour illustration based in the **Trinity Botanic Gardens at Dartry**, Dublin 6 (nearest Luas Station, Milltown).

A botanical drawing session occupies the first part of day one and participants produce preparatory drawings to work from in the watercolour course in the afternoon and day two. **Plants are sourced in the extensive gardens and glass houses on site and all drawings are done from life.** Please email Mary at marydillonbotanicalart@gmail.com to confirm your participation. The course will cost to be confirmed for two days and materials will be supplied. Full payment in advance by 17th April 2023 for the Spring course is essential and required to secure your place.



All sessions start at 10.30am and end at 4pm (4th & 5th May). Course fee is 220euro excluding materials, if materials need to be supplied an additional charge of 30 euro can be paid in cash on the first morning of the course.

! WE ARE ALL PHYTOBYTES !



Thank you for your contributions!

If you think that you have any news that should be posted in our newsletter,

please send an email to the **editor**

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