# **PHYTOBYTES**

## The newsletter from the Botany Department at Trinity College Dublin

### **Accomplishments**

Brian Murphy and Trevor Hodkinson were nominated to receive an award in the 'Ones-2-Watch' category at the annual Trinity Innovation Awards ceremony held in Regent's House on December 19<sup>th</sup>, 2018. This award is presented to academics who are up and coming entrepreneurial academics and whose research is most likely to result in the next campus company; and/or commercial license deal; and/or industry engagement. The awards ceremony was hosted by Leonard Hobbs, Director Trinity Research & Innovation and the individual awards were presented by Provost Patrick Prendergast and were followed by an evening reception.





### **Publications**

**Thai Forest Bulletin: Caroline Byrne**, a former Ph.D. student, her supervisor **John Parnell** and **Kongkanda Chayamarit** from the Herbarium, Royal Forest Department have just published a substantial paper entitled: Byrne, C., Parnell, J.A.N. & Chayamarit, K. (2018). Systematics of the Thai Calophyllaceae and Hypericaceae with comments on the Kielmeyeroidea. *Thai Forest Bulletin*, 46: 162-216.

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**Journal of the Botanical Research Institute of Texas: Daniel Kelly** co-authored a paper documenting a new tree species in Honduras. Below is an article provided by Daniel, sharing the story behind the tree and the research that led to publication, with the citation of the paper at the end.

Styrax paulhousei P.W. Fritsch & D.L. Kelly — 'Paul House's Snowbell Tree'

Another lovely tree new to science

By Daniel L. Kelly

The appearance of this publication was celebrated in unique style. Two cakes were baked by the third author, one with a stencil of *Styrax* flowers (photo on right), the other with a silhouette of Paul House. They were submitted to the weekly 'Botany Bake-off', in which they earned the prize in the 'Taste' category! By an extraordinary piece of serendipity, the first author, Dr Peter Fritsch (Director of the Botanical Research Institute of Texas; photo below) happened to be in Dublin and to have brought reprints - hot off the press!



Cake celebrating publication of *Styrax paulhousei*. (The cocktail-sticks represented the characteristic clustered hairs.) Photo by Sukontip Sirimongkol.



Celebrating publication of *Styrax paulhousei* at Department of Botany, 5 December 2018. Peter Fritsch on left; Daniel Kelly standing. Photo by Sukontip Sirimongkol.



Styrax paulhousei. Cusuco National Park, Honduras, 31 March 2016. Photo by Fernando Fernandez.

The type specimen – on which the description of the species is founded - was collected on the Irish Botanists' Expedition to Honduras, Central America. Vegetative specimens of the species had been collected in summer visits as far back as 2004, but it was not until the spring expedition of 2016 that the tree was found in flower.

This fieldwork was carried out under the aegis of Operation Wallacea, and supported by Trinity College Dublin Association & Trust; the Percy Sladen Memorial Fund; and the Department of Botany, Trinity College Dublin.

*Styrax paulhousei* is named in honour of the late Dr Paul House, a leading authority on the plant life of Honduras.

Born in Essex (England) in 1961, Paul read Biochemistry at the University of Sussex. He spent most of his working life at the School of Biology in the *Universidad Nacional Autónoma de Honduras,* in Tegucigalpa. As Lecturer and Professor, he made major contributions in teaching, research and outreach. In 2013, Paul was diagnosed with a rare and virulent form of cancer. He was invalided home to England where, sadly, he passed away three years later. To quote his sister Dawn: 'Paul was the funniest, generous and most sincere person... Having a beautiful flower/plant named after my darling brother means so much to me personally.'



Paul House (1961-2016)

#### The genus Styrax

Styrax is a genus of some 140 species of trees and shrubs, found in the Mediterranean region, south-east Asia and the Americas. It belongs to the Styracaceae. A number of Styrax species are of economic significance, especially as sources of aromatic resins, extracted by wounding the bark of several species. In addition, several species of Styrax are grown as ornamental trees: the best-known in European gardens is S. japonica, endemic to Japan.

Remarkably, this is not the first time that a graduate of Trinity College Dublin has collected the type specimen of a *Styrax!* Arthur F.G. Kerr, born in Co. Leitrim and a graduate in medicine of TCD, was a pioneer in the botanical exploration of Thailand. On 12 November 1911 he collected a specimen near Chiang Mai that became the type of a new species, *Styrax benzoides* Craib.

### More about the new species

- The flower has a wonderful scent, like lily-of-the-valley.
- The leaves and twigs are covered by clusters of hairs up to 1.3 mm long. Soft to the human touch but to the delicate cuticle of a green-fly, they appear like a field of barbed wire! It is likely that they do indeed function in deterring certain groups of herbivores.
- We still do not know what the fruit is like, or the seed, or the seedling. We do not know what pollinates it, what feeds on it, how its seeds are dispersed...

So far, *S. paulhousei* is known solely from Cusuco National Park, a mountainous region in the north-west of Honduras.

### What are the prospects for this species?

Cusuco National Park is protected by legislation, but is nonetheless subject to illegal logging, grazing and planting of cash crops.

Like many montane plants, the range of this species is expected to shrink with climate change, as altitudinal zones shift upwards - the chances of natural long-range dispersal are probably low.

We have provisionally classified the conservation status of *Styrax paulhousei* as 'Vulnerable'. Pessimistic – or optimistic?

Fritch, P.W., Whitefoord, C. & Kelly, D.L. (2018). *Styrax paulhousei* (Styracaceae), a new species from Honduras. *Journal of the Botanical Research Institute of Texas* 12(2): 499-505.

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