Issue 12

BOTANICAL UNIVERSITY CHALLENGE

The Thymes

Jan. 2026

The Official Newsletter of Botanical University Challenge

Chairs for BUC in February; Choosing a Team Name; Preview 4th Student Botany Festival; Memories of BUC 2019; Interview with a botanist; Book reviews; Botany & BSBI on social media; Aber PhyteCLub; Ferns!; Fungi!; Returning Plants to Biology; Volunteering

Welcome the 2026 Botanical University Challenge!

What is Botanical University Challenge?

BUC is an annual competition between teams of university students, undergraduates & postgraduates. It embraces many aspects of botany: plant identification, plant science, plant pathology, people in plant history, plants in history and culture, amongst other themes. All the competitions are live streamed on YouTube, and recorded to view later. The **Student Botany Festival** follows the finals, with all students who entered the competition invited to attend.

BUC 2026 online rounds:

11, 18 & 25 February streaming from 14:00 GMT

Semi-final and final:

19 August: starting on YouTube at 13:30 BST

4th Student Botany Festival:

20-21 August: University of Reading

Follow us on Social media:

X @BUCBotany , TikTok buc.botany

Instagram @botanicalunichallenge

Threads @botanicalunichallenge

Bluesky @bucbotany.bsky.social

Read more about BUC on our website

https://botanicaluniversitychallenge.co.uk/

Watch past contests on BUC YouTube channel

In 2026 the online rounds, of multiple-choice questions, will take place on 11, 18 and 25 February. The semi-final and finals, of free-answer questions will be at University of Reading on 19 August. All are live streamed on YouTube - why not join in at home? The 4th Student Botany Festival follows on 20–21 August, with all students who entered the competition invited.

How to enter BUC 2026

One team of 4 BSc, Masters or PhD students (with one reserve) can enter the competition from each institution. Where there is a lot of interest (and why wouldn't there be?!) we suggest holding an internal contest to select team members and the reserve. Any questions, email j.mitchley@reading.ac.uk or follow the link to the registration form below:

To enter a team for BUC 2026 follow the link: https://bit.ly/4prg5xj

Registration Deadline:

Friday 23 January 2026.

Meet some of the chairs for BUC 2026

There are three on-line rounds in February and the top scoring teams from each round will go through to the next round, ending with four teams heading to compete in the live semi-finals at Reading in August.

Now, meet the distinguished botanists who will be asking the questions in February.

Dr Martin Barker is a Senior Lecturer in the School of Biological Sciences at University of Aberdeen. He graduated from University of Sussex and has subsequently worked at the universities of Exeter, Hertfordshire, Lancaster (where he gained his PhD), Brunei and Florida before moving to Aberdeen. He has also taught in schools.

His botanical research focuses on the ecophysiology of trees, especially tropical ones with the tricky problem of sampling forest canopies for research on nutrient cycling and effects of ambient light. Martin also studies the educational side of the student experience, particularly communication, feedback and learning styles and has written several textbooks. Read more on his university website.

Professor Yoselin Benitez-Alfonso, Professor of Plant Sciences and UKRI Future Leaders Fellow at the University of Leeds. Originally from Cuba and the University of La Habana, she completed her PhD in Biochemistry & Molecular Biology at the University of Cordoba, Spain.

She then undertook postdoctoral placements at Cold Spring Harbor Laboratory (New York, USA) and the John Innes Centre (Norwich, UK).

Her cross-disciplinary research focuses on mechanisms and regulation of intercellular communication in plants. It has made significant advances in callose metabolism & function and in understanding the regulation of plasmodesmata and symplastic signalling. She is the founder of the 'Black in Plant Sciences' network. Read more on her university website.

Dr Karen Bacon is a lecturer in Botany and Plant Sciences at the University of Galway. She was awarded her PhD in plant paleoecology by University College Dublin and then lectured at University of Leeds before her appointment at Galway.

Her research ranges from palaeobotany to modern day plant ecology and conservation and incorporates elements of plant ecology, geology and chemistry. Her research focus is on understanding how plants adapt and respond to their environment as it changes over time including through the actions of people. Her key interests include plant extinction, understanding the fossil record and invasive plants, particularly Japanese knotweed. Read more on her university website.

What do you know about Botanical University Challenge team names?

By Meriel Jones, BUC Team

One of the defining features of Botanical University Challenge is the amazing team names. Before seeing the 2026 creations in February, let's look back at some of the most impressive from previous years.

You can read about the winners of the annual team name competition, acclaimed through an online audience vote, and recorded for ever in The Thymes.

Botanical University Challenge Team Name Winners and Runners-up

Do you know where these winning teams came from? Read more about each in past issues of The Thymes. Answers at the end of this issue!

Year	Thymes Issue	Team name	University
2022	2	Phyte Club	
	2	Pistils at Dawn	
2023	3	We Don't Know the Anther	
	3	Quizanthemums.	
2024	7	The Dundee Daylilies	
	7	The House of the Rhizome Sun	
2025	13	Pain in the Grass	
	13	Plantastic Five	

You can find all the BUC teams and their team names for the last four years on the BUC YouTube channel:

All the 2025 teams

All the 2024 teams

All the 2023 teams

All the 2022 teams

Some 2021 team names and their mascots

Bastard Toadflux with The Fluxing Toad from Edge Hill

RuBis&Co with *Fittonia verschaffeltii* from Imperial

The Sutton Bonington Botanists with Mr Darcy the Carrot from Nottingham

FlavrSavrs with the Paper Cactus from Reading

Party Thyme with Long Boi the Duck from York

Some Botanical University Challenge Teams 2021!

Can you match these seven 2020 team names to their universities?

Team Names: Pignuts; Plantchester; The Whitenights Cedars; LiverLambBananas; Do It Like A Moss; Red Roses; "Unknown Name"

But which university did each come from?

University	Team Name
Edge Hill	
Lancaster	
Liverpool	
Manchester	
Manchester Metropolitan	
Reading	
York	

Answers at the back of this issue!

Anyone who can provide the "Unknown Name" and its correct university – with evidence – gets a special mention in next issue of The Thymes! Email to m.g.jones@liverpool.ac.uk

The power of 1 minute

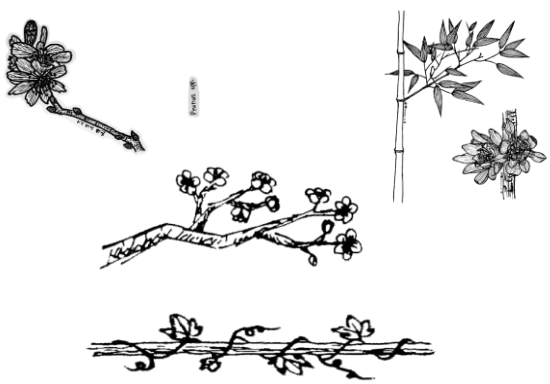
By Helena Brown, BUC Team

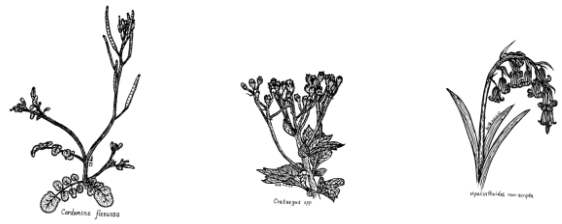
2025 was my second year of BUC and it was a joy to be a part of yet again. A lot had changed between competing in February 2024 compared to February 2025, as I had graduated from my BSc Natural Sciences and was halfway through my MSc Biodiversity and Taxonomy of Plants. I was eager to test my new plant knowledge. The buzz of excitement we felt as a team when a question came up we knew the answer to, was addictive.

The great thing about competing in BUC is you always learn something! Like how carnivory in plants has independently evolved 12-18 times. The other great benefit of BUC is the student botany festival. Both events have been highlights of my time at university. Being surrounded by other plant-enthusiasts, whilst learning through workshops, lectures, and a careers fair – I don't know how it's all packed in!

But if I had to pick the best part, it has to be the student flash talks. Awe-inspiring and motivating. It makes you realise the breadth of knowledge in the room, and it's a perfect way to allow people to start conversations. I didn't do a flash talk in 2024; I thought because I hadn't done any research there was no point, and I was scared.

But I picked up the courage in 2025, and I would recommend it to anyone. I'm quite nervous about public speaking, but the atmosphere was overwhelmingly friendly, with people even going up on the spot at the end because of how encouraging everyone was. So if you've signed up for BUC 2026, take this as your sign to throw caution to the wind and sign up for a flash talk!





BUC 2026 and the 4th Student Botany Festival: Celebrating people, plants and botanical possibilities

By Jonathan Mitchley, University of Reading

BUC 2026 coincides with the University of Reading Centenary celebrations and BUC has been awarded a Centenary Grant which allows us to invite additional staff and students to attend the competition and an exhibition celebrating a century of botanical achievement and the exciting botanical futures at Reading.

Following the competition is the **Fourth Student Botany Festival**, **20-21 August 2025. T**his will be a vibrant two-day gathering of BUC students and professional plant enthusiasts. Day One highlights include student flash talks, guided tours of the brand new Centennial Schools Education Walled Garden, an ethnobotany tour and a bryophyte walk. During the lunch break will be networking opportunities, a plant swap and botanical give-away table. The afternoon will feature two contrasting talks followed by free time for networking and interviews for our BUC documentary film charting the history, achievements, and impact of BUC. The evening buffet dinner will be followed by a social programme including the return of John Warren's acclaimed vegetable orchestra and student-led activities and a screening of the *Margaret Mee Moon Flower* documentary.

Day Two shifts focus to careers and botanical skills. A panel discussion will explore opportunities inside and outside academia, followed by one-to-one conversations with careers personnel and industry stalls during the coffee break. Following this, interactive workshops will include herbarium skills, vegetative plant ID, forensic botany and science communication. After the lunch break, the festival closes with keynote speaker **Dr Jamie Thompson** sharing his career journey with plants, providing ideas and inspirations for next generation botanists.

Memories of when Botanical University Challenge was last in Reading

By Jonathan Mitchley, University of Reading

All the teams in BUC 2019. Image credit: Jonathan Mitchley

On 20 February 2019, the University of Reading hosted the second ever **Botanical University Challenge**, a lively contest inspired by the BBC's *University Challenge*. Six teams competed: Reading, Southampton, Kew, Edgehill, Liverpool, and Manchester Metropolitan (MMU) Universities. Conceived by John Warren, Jonathan Mitchley and Paul Ashton, the event also marked the launch of Reading Botany 2019, celebrating 50 years of Master's teaching in botany.

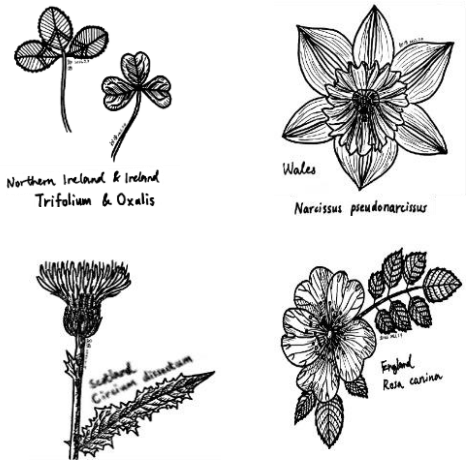
The heats, chaired by Dr Chris Preston (legendary UK botanist and staff member of the UK Biological Records Centre 1980 to 2015), tested knowledge across diverse topics including botanical terminology, Chinese medicine, Shakespeare's flowers, ecology, and commercially important plants. MMU impressed in a round on plants and alcoholic beverages, while picture rounds challenged contestants to identify apple varieties, grasses, leaf shapes, and houseplants. A novel "fragments of floras" round asked teams to recognise plant ID books from cropped cover images. Reading, Southampton, MMU, and Liverpool advanced to the semi-finals.

Semi-final questions raised the stakes with themes such as famous botanists, spices, poisonous plants, alien species, and beverages. Picture rounds included seeds, fruits, and plant families. Reading and Liverpool emerged victorious, setting up a tense final.

In the early competitions, BBC University Challenge style buzzers were included and the final began dramatically when Reading slipped into negative scores after an early miss-buzz! This allowed Liverpool to surge ahead with quick buzzer responses on cladistics, mythology, and a humorous innuendo-filled "Carry on Botany" round. Reading fought back with strong answers on fungi, sedges, *Sphagnum* mosses, and the festive #AdventBotany series. As the gong sounded, the teams were tied at **120–120**, forcing a sudden-death tie-breaker!

After both teams missed the first question, Reading clinched victory by correctly naming Cambridgeshire as the first published county flora. They were crowned **Botanical University Challenge Champions 2019**, with Liverpool oh so close runners-up. The event drew enthusiastic applause, celebrated the fascination, beauty and importance of plants, and set a vibrant tone for BUC's subsequent rise and the return to Reading for BUC 2026!

The Finalists from Universities of Liverpool and Reading. Image credit: Jonathan Mitchley



Botanical University Challenge talks with Laura Moss

Watch the whole interview on the BUC YouTube channel.

***The Thymes*:** Laura Moss, you work as a biodiversity information officer at the West Wales Biodiversity Information Centre. How did you get into plants?

***Laura Moss*:** Very circuitously I would say! I liked nature and as a teenager I started to do conservation volunteering, things like tree planting, hedge laying, footpath maintenance, and things like that. And I thought, that's the sort of career I fancied doing, and then… I'm not quite sure how it happened, but I got fascinated by forensic pathology, and I suddenly decided I wanted to be the next Quincy (from the American TV series).

So, the conservation idea was left behind and I went to medical school and became a doctor. In about my third year after qualifying, I applied for a six-month post in the cancer centre in Cardiff, got the job, and stayed for 25 years. So, I didn't become a forensic pathologist, or the UK's Quincy!

However, I worked part-time for quite a lot of my medical career, did a lot of volunteering to do surveys for butterflies and birds, nest box checks and things like that, and really started to get into nature. I got itchy feet, and took some unpaid leave when I was a consultant. I trained to be a safari guide in South Africa, which was different and fascinating, and I loved it.

I had the feeling that I'd come back to the UK and think everything was very dull in comparison to Africa, but it was the reverse. I came back, and it took the blinkers off me. I appreciated British countryside much more than I had before. It started to make more sense to me and it reignited my passion for natural history. Then I made a big decision. I'd been working in the cancer field and had seen so many people who didn't get to do what they wanted through poor health or dying at a young age. I decided I would do something different, so I left the world of medicine.

I was very lucky to get a job in a local record centre in West Wales. I started off with a six-month post as a biodiversity information assistant helping enter bird record data. Then I got taken on permanently after that, and I'm still doing that role, with extra duties thrown in!

***The Thymes*:** You're involved with The Big Meadow Search, how did that come about?

***LM*:** Well, I moved to a small holding in Carmarthenshire about 8 years ago. I joined the Carmarthenshire Meadows Group and ended up on its organising committee. We were approached by the charity Plantlife in 2021, because they were considering doing a pilot project asking meadow owners to monitor 2-metre quadrats on their land. That got the committee into a whole discussion about how lucky we were to have not just meadows but also woodland, scrub and other sorts of habitats. We decided that we would start recording plants in our holdings, but not using quadrats. We worked on a plant list, got the BSBI County Recorder involved, and he suggested additional plants that we should focus on.

We initially thought of only recording within the Carmarthenshire Meadows Group. However, about 10 days before we were due to start the project in 2021, I suddenly went very gung-ho and said, 'Oh, let's make it UK-wide. And let's not just have meadows, because a lot of people can't get to a meadow.' If we included churchyards, road verges and some amenity grasslands everyone could take part, whether they were in the countryside or in town suburbs. So, that's how it got started.

***The Thymes*:** And it's continued since then, and it seems to have grown bigger.

***LM*:** Yes. In the first year we asked people to record during a month and send their records on an Excel spreadsheet. I tried to keep the momentum going, so we set up social media, initially on Facebook (Big Meadow Search) and subsequently X (@bigmeadowsearch) and BlueSky (@bigmeadowsearch.bsky.social). I started to take photographs of the plants I came across and give ID tips. Then I ran out of new ones to photograph and wondered what else I could do.

I began to highlight the associations of plants with other organisms, such as rust fungi, insect galls and as food for moths and butterflies. This combination of interactions has now become our USP. After all, you can buy books on plants, or birds, or moths, but there aren't many that combine them all together. We ended up with a lot of material on social media, but it was difficult for people to access. Finally, the chairman of the Meadows Group said that we should get it printed. Now there are two books and we've gained a new audience.

Rust fungus, Puccinia glechomatis, on ground ivy. Image credit, Big Meadow Search

Left: Lighthouse gall made by the gall midge Rondaniola bursaria on ground ivy. Image credit, Big Meadow Search

Right: Leaf mine of Phytomyza glechomae fly. Image Credit, Big Meadow Search

The first book concentrated on about 160 grassland indicator plant species with a variety of their associated species. The second book has about 200 additional plants and their associated species. They are available through contacting me on social media or through our website. Each costs £10 plus postage.

We've now completed our fifth season. We'll re-start in 2026 and ask people to submit records between June and August. These can now be entered directly through our website. I'm in the process of cleaning up the data with a view to analysing it.

We continue with the social media all year although not quite as avidly as during the summer season. We also tried something new, botanical terms. There are often glossaries in the back of plant books, sometimes line drawings, but they don't have clear photographs. So I'm now adding that as a new theme in the social media.

***The Thymes**:* You've obviously encountered hundreds of plants doing this. What's your favourite one?

***LM*:** I would say ground ivy (*Glechoma hederacea*). I don't think it has good PR. I think it has a beautiful flower, and you can see the leaves all year round. If it was called Ground Orchid, everybody would take a closer look at it and appreciate its beauty. But the main reason I've picked it is because of its four associated species. It's got two galls that are quite easy to find, a leaf miner and a rust. Whenever I see it, I wonder if I can see the other species and record them. That's what the project has done to me! When I see a plant, I think, oh, can I also see the other things that are associated with it?

Ground ivy Glechoma hederacea. Image credit, Big Meadow Search

The Thymes: Thank you very much for talking to Botanical University Challenge!

Botany Book Reviews!

By Catherine Martinez, University of Reading

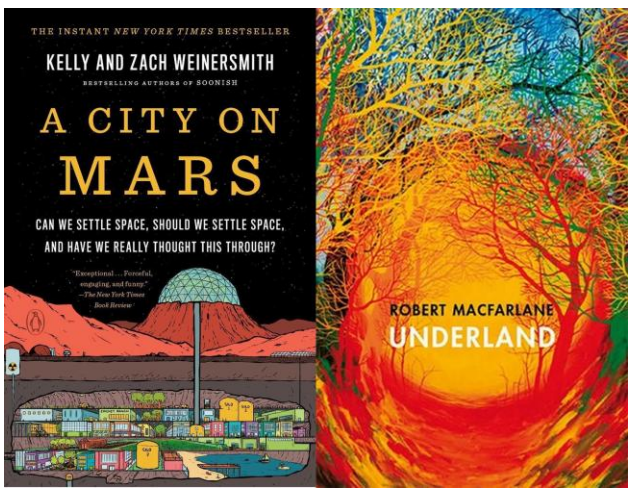
In a time where it seems like we are constantly being told to narrow our focus, I believe we should be expanding our horizons. This issue's book recommendations take botany, not as an isolated topic, but as part of our larger understanding of the world. Take the time to get inspired and step outside your comfort zone with books and other media that broaden your view of the world.

Underland

By Robert MacFarlane

Underland is a fascinating dive into the world beneath our feet. While not entirely botanical in its focus, this book is illuminating in how it links the experience of so many underground communities and environments together. Fans of *Entangled Life* by Merlin Sheldrake will particularly enjoy the chapter on the mycelial network which feels like a guided tour through the forest floor. *Underland* leaves the reader with a sense of awe at how much goes unseen when we fail to look down, and highlights the costs to ourselves and the environment of that oversight.

MacFarlane not only discusses his own experiences but relates the stories of the people and places he has encountered and interacted with, making the book feel more rounded than a single perspective. This book is perfect for those who enjoy an interdisciplinary approach, touching on botany, geology, anthropology, and more.



A City on Mars: Can We Settle Space, Should We Settle Space, and Have We Really Thought This Through?

By Dr. Kelly Weinersmith and Zach Weinersmith

Everyone who has read or watched *The Martian* by Andy Weir has thought about growing potatoes on Mars. If that's you or if you are generally interested in terraforming and astrobiology, *A City on Mars: Can We Settle Space, Should We Settle Space, and Have We Really Thought This Through?* is a must-read. In this humorous and informative book, the reader is taken through all the practicalities of settling human populations on Mars and all the strange hurdles most people would never even consider.

The sections on space composting, farming, and food security are of particular interest to botanists and environmental scientists. While dedicated to the challenges of human life on Mars, *A City on Mars* does highlight the importance of these biosystems that we take for granted on Earth. With an extensive bibliography and a writing style that encourages curiosity, this book is also a wonderful jumping off point for further reading into whatever aspect the reader wishes to explore further.

A New Space for Wild Plant Stories — and Why Botanists Hold the Key

By Lindsay-Anne Heald

BSBI Events & Communications Committee member

Across social media, plant content is everywhere - but most of it focuses on houseplants and gardening. What's missing is a place where the everyday experiences of botanists, field recorders and students can be shared easily, even by those who don't have their own online presence. That's the gap we want to fill.

Plant Awareness Disparity - the tendency for people to overlook wild plants or see them only as background - is still a major barrier to how the public understands the natural world. Many people can name their favourite houseplants, yet struggle to identify a single species growing on their local verge. For those who work with wild plants every day, this difference is striking.

Izzy Beresford (IzzyBeeBotany) and I (Lindsay-Anne Heald, LalaLovesPlants) have collaborated on this through our work on the Botanical University Challenge and BSBI social media accounts. We've realised that one of the most effective ways to address this disparity is surprisingly simple: let people hear from botanists themselves.

What's missing online is a place where everyday botanical experiences can be shared and accessed easily - especially by people who don't use social media regularly or don't want their own accounts. We're creating a hub where these small but meaningful moments can be gathered: a feature of a species you're studying, a glimpse of a plant you've been monitoring for years, or the quiet satisfaction of spotting something special in bloom.

None of this requires polished content. A short phone clip - even ten seconds - is enough to show someone a plant they've never noticed before. You can film the species, speak briefly if you'd like, or simply share the detail that made you pause.

If you send the clips to us, (via WeTransfer to commsteam@bsbi.org) we'll add captions and labels and post them through the BSBI and BUC channels, giving them a wider audience.

We mentioned this recently at the BSBI conference, and our request extends well beyond that event; when botanists share what wild plants mean to them, it becomes much easier for others to notice and value those plants too.

Lindsay-Anne and Izzy's talk. Image credit: BSBI

If you'd like to contribute, your voice and your camera are very welcome.

From Quiz to Community: How BUC is Transforming Student Botany

By Jonathan Mitchley, University of Reading

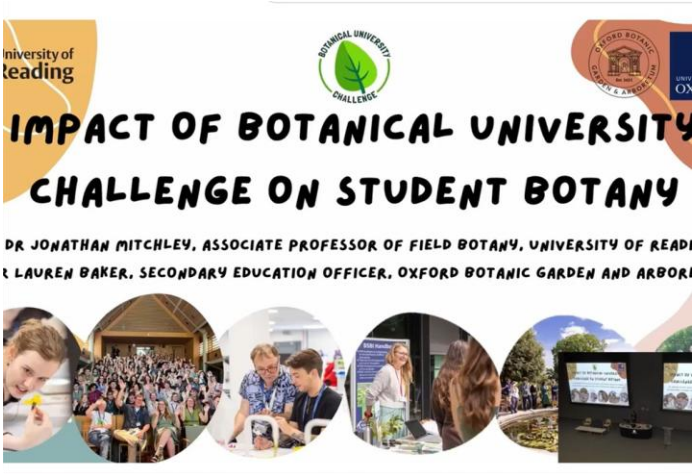


Image credit: BUC Team

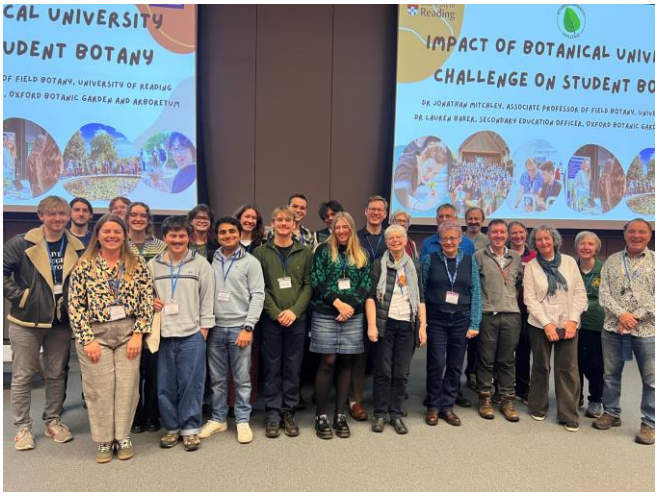
At the Annual Botanical Conference of BSBI held at Edgehill University on 29 November 2025, Dr Jonathan Mitchley (Dr M) and Dr Lauren Baker (Oxford Botanic Garden and Arboretum) gave a presentation entitled: *The Impact of Botanical University Challenge on Student Botany.*

The presentation outlined the origins, growth, and impact of the Botanical University Challenge (BUC), our national initiative designed to strengthen botanical knowledge and plant identification skills among university students. Created by university botanists Dr M, John Warren, and Paul Ashton, BUC emerged in 2015 from concern about declining botanical skills in UK higher education. The first competition was held at the Royal Botanic Gardens, Kew in May 2016, with just five teams participating. Originally conceived as a light-hearted, in-person quiz inspired by a popular BBC format, BUC has since evolved into a major fixture in the student botany calendar.

Today, BUC is an annual, free-to-enter competition open to students from across the UK and beyond. It combines online qualifying rounds with an in-person semi-final and final, alongside a two-day Student Botany Festival. This event offers careers talks, training and networking with academics, conservationists, and professionals working in plant sciences.

The core aims of BUC are to foster a sense of community, nurture botanical knowledge, and inspire the new generation of botanists.

Since its launch, BUC has reached at least 675 student participants and has received exceptionally positive feedback, with an average participant rating of 4.88 out of 5. Testimonials included in the presentation highlight the competition's role in boosting confidence, reinforcing students' passion for plant sciences, and reducing feelings of isolation often associated with studying botany. Many participants describe BUC as transformative, helping them see clearer career pathways and feel part of a supportive national and international botanical community.



So many people involved and touched by BUC at the BSBI meeting. Image credit: BUC Team

The presentation also celebrated recent successes, including the University of Aberdeen's victory as BUC 2025 champions, and acknowledged the extensive network of sponsors and supporters that make the event possible. These include universities, botanical societies, consultancies, conservation organisations, private donors and many individual volunteers, reflecting the wide professional support for botanical education.

Looking ahead, the presentation outlined plans for BUC 2026 and the Fourth Student Botany Festival, to be hosted at the University of Reading (see page 4). Overall, the presentation positions BUC as a thriving, inclusive initiative that is actively revitalising botanical education and community within higher education.

The full presentation can be viewed on the BSBI YouTube Channel: Impact of Botanical University Challenge on student botany with Jonathan Mitchley and Lauren Baker

Powered by Plants: How PhyteClub Revitalised Aberystwyth's Botanic Gardens

By James Ashford, Aberystwyth University

History of PhyteClub & the University Botanic Garden Glasshouses

PhyteClub, the Botanical Society of Aberystwyth University, was founded by several Plant Biology students in 2023 simply from love of plants. Alongside planty activities and walks, we have 'glasshouse hangout' sessions at the University's Botanic Garden. This was in need of a helping hand so we also volunteer to maintain the site.

They are truly a hidden, overlooked gem, and a significant part of the University's heritage. Founded in 1950, the current main glasshouse was constructed in 1977. It is divided into 3 areas, an arid room, temperate room, and tropical room. There have been rumours for years that the Botanic Gardens might be shut down, which is why PhyteClub felt compelled to help!

Inside the glasshouse. Image credit: James Ashford

Amazingly, PhyteClub was awarded *'Academic Society of the Year 23/24'*. A fantastic and much deserved achievement by the committee with Kate Clarke as President. Many 2023/2024 committee members then graduated and so the club needed a new committee to carry on.

PhyteClub 2024/25

The committee for a university society must have at least 3 members in core roles (President, Secretary, and Treasurer). We managed that, with Secretary Rebecca Edwards, Treasurer Yaseen Belal and President me, James Ashford. I believe we were all a little nervous about the 2024/2025 year because we had the smallest possible committee! But we each brought fresh perspectives and a passion for plants. Ideas were flying, plans were forming, and enthusiasm was through the roof!

We organised so many socials, activities, and trips. Some examples can be seen in the collage and even more on our Instagram account @aberphyteclub. We collaborate with other societies, a clever way to welcome even more people into the Botanic Gardens and show it off!

We had so many ideas, but limited funds. So, what do planty people do to raise money? Sell plants! We used a glasshouse to propagate them. Many were originally cuttings from plants in the Botanic Garden along with donations or purchases. The PhyteClub glasshouse became packed with botanical buddies for sale! We ran plant sale stalls throughout the year and raised enough money for the club to continue all our exciting activities. We also donated tools to the University's Botanic Garden.

A large part of PhyteClub is our voluntary maintenance and improvement of the University's Botanic Garden. It is an absolutely incredible place, packed with fascinating flora and overflowing with potential for education, engagement, hands-on learning, research, and conservation. The site has been used for these purposes but in recent years its potential has not been fulfilled and has been overlooked by the University. Along with lack of funding, I believe reduced interest in Plant Science and Botany may play a factor.

However, the plant enthusiasts of PhyteClub, although small in number, really appreciate a place like this.

Some of the many activities of PhyteClub in 2024/25. Image credit: James Ashford

We have a deep connection to the Botanic Gardens and truly believe in its usefulness and potential. We have focused on increasing use and visibility of the Botanic Gardens in the University, local community, and by our fellow students. These included:

- Organising sessions every Wednesday for anyone to visit or volunteer. So many people arrived, many of whom did not even know the Botanic Garden existed!

- Writing a pitch to get the Students' Union more involved that we presented at the Students' Union Senedd. Wonderfully, they voted for this so that there is now a Students' Union policy to assist with matters involving the Botanic Garden. A huge win of which we are very proud!
- PhyteClub was awarded a grant from the Welsh Historic Gardens Trust to help our work at the Botanic Gardens.
- We bought much needed new hose reels and biological pest control to tackle mealybug and scalebug infestations.
- We cleared an overgrown glasshouse bed, arranged to have the area slabbed over, and then designed, painted and installed a PhyteClub bench! This allows people to relax in a tranquil environment.

These are just a few examples of what we achieved over the year.

All our hard work, passion, and dedication to PhyteClub and the Botanic Gardens has not gone unnoticed. We were shortlisted for four separate awards this year. And we are still in disbelief that we were awarded the most coveted one of *'Society of the Year 2024/2025'.*

What a surreal moment it was, hearing this announced then walking onto the stage to accept the award while still stunned. It was only when we were back in our seats that we were able to process what had just happened. We are so incredibly grateful for this award and would like to thank all our PhyteClub members, affectionately call 'Phyters', as well as the Students' Union, UndebAber, for supporting us throughout the year. The fantastic work they do is so important for the student experience at this university!

Future of PhyteClub & the Botanic Gardens

For the academic year 2025/26, our committee includes Stanley Scott as President, Lysandra Hollister as Secretary, Yaseen Belal as Treasurer, and myself as Glasshouse Manager. The bar might have been set high, but the 2025/2026 committee has been doing a brilliant job! PhyteClub continues to host planty activities and welcome visitors and volunteers to the Botanic Gardens each Wednesday. Though the future of the Botanic Gardens may still be uncertain, we wholeheartedly believe in this spectacular site and sincerely hope we have made a positive impact for its future.

Discovering the Fern Community at RBGE

By Kieran Heggs, Edge Hill University, 3rd year B.Sc. Plant Science

Ferns are one of my primary botanical interests. They're fascinating in their unique life cycle and interesting genetics. They're neglected in research when compared with angiosperms making them even more mysterious and fascinating. They were completely off my radar until my first year of undergraduate study when Alison Evans infected me with the 'fern-bug'. I was warned that "they can be addictive". Little did I know…

Pursuing this interest, on 25th October 2025 I attended the British Pteridological Society (BPS) meeting at the Royal Botanic Garden, Edinburgh. This consisted of talks by researchers and conservationists including Michael Sundue, Sandy Heatherington and Aline Finger. There were tours of the incredible herbarium and glasshouses. There were specialist book sales too. We finished off with a meal to get to know each other better. There were even some friendly faces from BUC's Student Botany Festival that had travelled up from Kew!

Events like this always excite me and I'd recommend them to anyone interested in plants in any context. The BPS in particular covers everything about ferns and lycophytes from conservation to garden horticulture to ecological and taxonomic research so you get a fantastic range of interesting people.

Alan Hannah at the BPS meeting at RBGE. Image credit: Kieran Heggs

This event benefitted me through conversations about my dissertation project *"How ecological factors influence the intensity of mycorrhizal colonisation in Dryopteris dilatata (Broad buckler fern)"* with people that have different perspectives making interesting suggestions. I also met a potential postgraduate supervisor.

Dryopteris dilatata (Broad buckler fern).
Image credit: Kieran Heggs

Organisations like this are crying out for young people to get involved. Everyone is lovely and wants to pass on their knowledge but increasingly are limited in their ability to do so. From my experience there are usually around 5 (at most) 18-30 year olds and around 80% of the others are retirement age which may seem off-putting and difficult to fit in at first.

However, if you put yourself out there, even just a small amount, it's really easy to connect on your common interests. (Ferns in this case!). My two years of membership in the BPS has already led me to become the youngest member of the national committee, give a talk for the Northwest regional group and help on educational stands like the one at BUC in Cambridge this summer and at Southport Flower Show. I've gained incredible mentorship and made friendships for life.

I implore anyone interested in plants to get involved in societies like the BSBI, BPS, British Bryological Society and local botany groups (I'm a member of two, one at home and one at uni!). For the BPS it's easy to get involved, you can start by looking at our Instagram (@britishpteridologicalsociety/) or the calendar on the British Fern Society website for events to attend (we're more than happy for people to come along even before they're a paid member). You have to put yourself out there, but you'll be rewarded for it!

The Small, the Weird, and the Ones Hiding in Plain Sight

By Helena Brown, The BUC Team

We've just had a bumper year for fungi this autumn, and as the temperature has dropped I've still managed to spot some of my favourite fungi; the small, the gross, and the ones hiding in plain sight.

The small fungi take you into a faerie world, looking closer at patches of moss, often on trees. They are tiny bonnet fungi, often *Mycena* spp., and they brighten up any drab winter's day. Tiny specks of light colours against the green carpets, evoking images of a tiny forest hidden in fissures of bark.

Mycena spp. found in moss – Image credit: Helena Brown

The weird aren't quite as common, and you have to look for dead wood and fallen branches. I'm always excited when I find the weirder fungi forms, like Witches butter (*Exidia glandulosa*) and Yellow brain (*Tremella mesenterica*). Both start disc/lobed shape but slowly form into a brain-like structure when mature. They're both easier to spot in wet or damp winter weather as the rain creates a shiny surface, and when dried they both form a hard crust on the bark.

Witches butter (left) and Yellow brain (right) on dead branches. Image credit: Helena Brown

The ones hiding in plain sight are also found on dead wood and fallen branches, but blend in much better than the weird brains above.

Common jellyspot (*Dacrymyces stillatus*) is easier to spot, with bright orange circles plastered against brown and grey bark. It can be confused with Coral spot (*Nectria cinnabarina*) but Common jellyspot is lighter in colour and 2-5mm across and more jelly-like, with Coral spot being harder and more pink/red-orange and 0.5-1.0mm.

The more inconspicuous example is Beech barkspot (*Diatrype disciformis*), with a similar form but black discs embedded in the bark in a uniform pattern.

Common jellyspot (left) and Beech barkspot (right) on dead branches. Image credit: Helena Brown (left) and aldercat92 on INaturalist (right)

One of my favourite and most whimsical fungi is Candlesnuff or Stag's Horn fungi (*Xylaria hypoxylon*). It is one of the most common wood-rotting fungi. In a very damp, dark winter wood the white tips become easy to recognise once you've spotted them enough times.

There is also the Beechmast Candlesnuff (*Xylaria carpophila*) which grows among leaf litter on old beech fruits! I've not spotted it yet, but I'll be on the hunt this winter now…

Candlesnuff fungus growing off dead wood. Image credit: Helena Brown

Putting Plants Back at the Heart of Biology

By Lauren Daly, University of Oxford Botanic Garden and Arboretum

Walk into almost any undergraduate biology programme today and you'll find an abundance of optional modules: cancer biology, neurogenetics, immunology. But one subject crucial to life on Earth is increasingly side-lined: plant science. Despite plants producing the oxygen we breathe, the food we eat, and the ecosystems we depend on, many universities treat plant biology as an elective. This is more than an academic oversight; it is a strategic error with consequences for food security, climate resilience, biodiversity conservation, and biotechnology.

We need biological degrees in which plant science is not a niche add-on, but a core component.

Seeing 3D X-ray imaging in plant and soil research at the University of Nottingham, Sutton Bonington, during 1st Student Botany Festival. Image credit: The BUC Team

The argument for embedding plant science in the core curriculum is straightforward: **plants underpin every major biological system**. Evolution, physiology, biochemistry, ecology, climate science; all hinge on plant processes. Yet many students complete biological degrees without ever studying how plants grow, reproduce, adapt, or interact with their environment. It is difficult to claim a degree offers a *"broad foundation in biology"* when it leaves out an incredibly significant kingdom.

The urgency becomes even clearer when we consider the UN Sustainable Development Goals. Nearly all of them, from Zero Hunger and Climate Action to Life on Land and Good Health, rely on plant science. Meeting food security demands needs improved crops and resilient agricultural systems. Mitigating climate change depends on photosynthesis, carbon storage, and sustainable land management. Conserving biodiversity rests on understanding plant communities, their responses to environmental pressures, and preserving soil health. Without graduates who grasp these fundamentals, progress toward the SDGs becomes harder to achieve.

What's striking is that, when given the chance, students **DO** engage deeply with plants. This is what sparked Botanical University Challenge in the first place, and BUC has shown this year after year: when plant biology is presented with curiosity, creativity, and fun, students respond with enthusiasm. I also see it happen in my day job, with every group of secondary students I welcome to the Oxford Botanic Garden – if you present the material in an exciting, innovative and relevant way, students will look at plants differently. It's not rocket science!

Students in Oxford Botanic Gardens listening to Chris Thorogood, Deputy Director and Head of Science during 2nd Student Botany Festival. Image credit: Laura Bennetto

Embedding plant science into the foundations of all biological degrees is not about turning every student into a botanist. It is about giving them the tools to understand the systems crucial to humanity's survival. It broadens their scientific perspective, strengthens their ability to solve complex environmental problems, and aligns higher education with global priorities.

If we want future biologists equipped to help build a sustainable world, plant science cannot remain optional, it must be central, where it has always belonged.

Plant Volunteering: Why (or Why Not)?

By Meriel Jones, The BUC Team

We all do things about plants that benefit ourselves simply for our own enjoyment and love of plants. For example, going for a walk, looking at the plants around and identifying them for our own satisfaction. However, maybe you want to do something that benefits others as well as yourself. For example, adding occasional records of what you saw to a recording website, or reviewing records submitted by others, such as to the BUC iNaturalist group (now contributed around 54,500 new records), your local environmental records centre or the BSBI's records. All very casual.

You could consider doing something more structured in annual short projects like the Big Meadow Search or BSBI's New Year Plant Hunt. Perhaps correcting or expanding an entry in the Wikipedia Plants Project? Interpreting poor handwriting in an on-line project to digitise herbarium records? All these are valuable contributions to increasing the range and accessibility of botanical information, but may not involve much interaction with others or public acknowledgement.

What about volunteering with the idea of a continuing commitment with a more public visibility? There are so many organisations in the UK and Ireland that rely on volunteers. It is obviously important to find something that you find worthwhile and satisfying. It also has to fit with your other life commitments.

In addition, volunteering is unpaid so you have to feel that you can forgo any payment that you might otherwise have for your knowledge and time, and that the organisation is not exploiting you in a role that should really be for a paid employee. Volunteering, as in the name, is voluntary, so you should feel able to say that you will not be available at a particular time or for a particular activity.

In the UK, you may get a volunteer agreement outlining what training, supervision and support you can expect, health and safety requirements, whether you are covered by the organisation's insurance. You are not paid for your time as a volunteer, but you may get money to cover expenses.

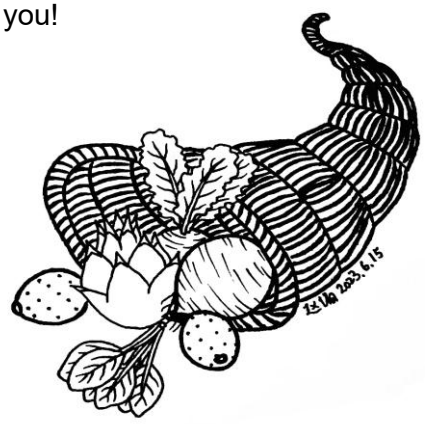
Expenses are usually limited to food, drink, travel or any equipment you need to buy. If you get any other payment, reward or benefit in kind, including any promise of a contract or paid work in the future, this can mean that you are officially a worker or employee and so have rights such as being paid at least the minimum wage.

Why would you do it? Moving on from pure personal pleasure and altruism, there is also the reality that experience of both sides of volunteering can be useful for your career. It lets you be within an organisation or role and see what these are like. It gives you something to add to your CV and can provide you with contacts and references. It also means that if you are later employed in a role that involves working with volunteers, you have personal knowledge of the constraints when working with them.

What sorts of volunteer roles are there with plants? Looking around your local area, and on the internet, are obvious places to seek ideas. In addition, your university or institution may have a student botany, ecology or conservation group you could join, or start (see page 10)!

There are many charities that work with the environment, conservation, gardens, food and community support from large (for example National Trust, Wildlife Trusts and the Conservation Volunteers) to small local organisations (like Down to Earth Stroud).

The Countryside Jobs Service lists a wide range of commercial and charity volunteer roles specifically in the countryside, conservation, ecology and wildlife sectors. CharityJob is the UK's largest and most specialised job board for the voluntary sector with both volunteer and paid roles as well as some career advice. There are many organisations out there looking for volunteers, and it is up to you to choose whether any are for you!



A Botanical Brain-Teaser Quiz

1. *Cymbalaria muralis*, ivy-leaved toadflax, is a Lithophyte. Where might you expect to find it growing?

a. On a wall.
b. On another plant.
c. In a bog.
d. At the seaside.
e. On newly disturbed ground.

2. Sometimes used for pesto, what is the name of this common woodland plant?

a. *Allium oleraceum*
b. *Allium ursinum*
c. *Allium triquetrum*
d. *Allium vineale*
e. *Allium roseum*

3. Which of these plants regularly flowers latest in the year in UK and Ireland?

a. Lime (*Tilia europaea*)
b. Blackthorn (*Prunus spinosa*)
c. Hawthorn (*Crataegus monogyna*)
d. Horse Chestnut (*Aesculus hippocastanum*)
e. Ivy (*Hedera helix*)

4. I'm a TV character with a plant themed name. Which plant is it?

a. Ivy
b. Iris
c. Rose
d. Lily
e. Veronica

5. Which of these plants is the food plant of the Cinnabar Moth caterpillar?

a. Rosebay Willowherb (*Epilobium angustifolium*)
b. Privet (*Ligustrum vulgare*)
c. Box (*Buxus sempervirens*)
d. Ragwort (*Senecio jacobaea*)
e. Sycamore (*Acer pseudoplatanus*)

Botanical Joke

Which is the most difficult field of botany?
Eruca vesicaria, because it is rocket science!

Picture made with assistance Craiyon and Paint.

Celebrating the Support of the BUC 2025 Sponsors

BUC flourishes thanks to financial and in-kind support ensuring that students can take part without financial barriers, strengthening our commitment to widening participation and the vibrant, inclusive atmosphere that defined BUC 2025.

Core funders and supporters include The Gatsby Foundation, New Phytologist Foundation, The Company of Biologists, the Botanical Society of Scotland, The Botanist Foundation, The Wild Flower Society, and our many university partners across the UK and Ireland.

We also thank those who enriched BUC 2025 through prizes, workshops, operational support, and discounts: Cambridge University Botanic Garden, University of Reading Development Office, Field Studies Council, BSBI and CIEEM.

A final thank-you goes to Dr Raphaella Hull, whose leadership of BUC 2025 in Cambridge made this year's event not only possible, but exceptional.

A full listing of supporters can be found here: Past BUC competitions – Botanical University Challenge

ABOUT *THE THYMES TEAM:*

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WANTED
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Do you have an eye for detail and are a whizz at formatting, design, and layout? We would love to hear from you!

Contribute to *The Thymes*

Got a botanical story or other content to contribute? Are you interested in editing or design? We need your skills and enthusiasm!

Contact us via Dr M at: j.mitchley@reading.ac.uk

Date of Next Issue: April 2026

Answers to the BUC taster questions.
All have featured in previous BUC contests:

1. On a wall (a)
2. *Allium ursinum* (b)
3. Ivy (*Hedera helix*) (e)
4. Rose (c)
5. Ragwort (*Senecio jacobaea*) (d)

Answer: Names of all 7 teams in BUC 2020

University	Team Name
Edge Hill	Unknown
Lancaster	Red Roses
Liverpool	LiverLambBanana
Manchester	Plantchester
MMU	Pignuts
Reading	The Whiteknight Cedars
York	Do It Like A Moss

Answer: All past winners and runners-up in BUC Team Name competition

Year	Thymes Issue	Team name	University
2022	2	Phyte Club	Durham University
	2	Pistils at Dawn	University of Warwick
2023	3	We Don't Know the Anther	University of Nottingham
	3	Quizanthemums.	University of Exeter
2024	7	The Dundee Daylilies	Dundee University
	7	The House of the Rhizome Sun	University College Dublin
2025	13	Pain in the Grass	University of Portsmouth
	13	Plantastic Five	University College Dublin