





# PlantSci Newsletter – a monthly round-up of plant science policy headlines and stories

### February 2020

This newsletter provides links to published news articles, preserving the original title and summary line. Views or opinions presented are those of the original author(s) and do not necessarily represent the views of the Royal Society of Biology.

### **News** and debate

### **Royal Society of Biology news**

### **Plant Health Undergraduate Studentships**

The Royal Society of Biology (RSB) invites applications from researchers wishing to host undergraduate studentships in plant health over the summer of 2020. Ten awards are available. Funding for the 2020 programme is provided by Defra, BSPP, Crop Protection Association, SCI Horticulture Group and David Colegrave Foundation.

Full details are available at: www.rsb.org.uk/plant-studentships

Closing date for applications: 17 March 2020

### Plant health and biosecurity

### Lords debates threats to native trees

The House of Lords debated the threats posed by pests and diseases to native trees in the UK on Thursday 13 February.

### France's entire tomato stock under threat from deadly virus

### First release of genetically engineered moth could herald new era of crop protection

A newly published study reports a successful, first-ever open-field release of a self-limiting, genetically engineered diamondback moth, stating that it paves the way for an effective and sustainable approach to pest control.

**Update: Ash dieback** 

### Plant breeding

#### Scientists prove high fibre white loaf is possible

Group identifies parts of the genome that control fibre content of white flour, raising hope that products will be in shops within five years.

### Mutagenesis techniques must be subject to GMO regulation, says French court

The French government has been ordered to adapt its policy on plants developed using certain new plant breeding techniques (NPBTs), namely gene editing and in-vitro mutagenesis, in order to adhere to stricter rules for genetically modified organisms (GMOs), a French court ruled on Friday (7 February).

### EU health chief wants more information on gene editing

The new EU Health Commissioner Stella Kyriakides wants more information about the controversial issue of gene editing and for now, she seems less enthusiastic than her predecessor.

New survey results reveal the experts and public's attitude towards gene-edited crops

### **Agriculture**

#### **Eustice unveils plans for future greener farming**

New details of flagship Environmental Land Management (ELM) scheme unveiled in Environment Secretary's vision for future farming.

Rules around human waste in farming are 'out of date'

Europe has banned neonicotinoid insecticides. Action is needed in Africa too

### Firms making billions from 'highly hazardous' pesticides, analysis finds

Use of harmful chemicals is higher in poorer nations, according to data analysed by Unearthed.

#### In Paris, organic farming takes over fallow parking lots

In Paris, as in many European cities, the number of cars is declining, which is leaving a vast amount of underground car parks empty. With its start-up project called "La Caverne", Cycloponics is reclaiming these urban territories and using them as a way of growing plenty of organic vegetables. EURACTIV France reports.

### **Food security**

Locust swarms: South Sudan latest to be hit by invasion

### **Biodiversity and conservation**

### China takes centre stage in global biodiversity push

A major United Nations summit could see China push for ambitious targets and spotlights the country's own conservation efforts.

### UK to lead global fight against illegal logging and deforestation

Plan to form coalition of developing countries at COP 26 to help support efforts.

### Newly waterproofed Arctic seed vault hits 1m samples

Rapid climate change forced urgent upgrade of 'failsafe' doomsday storage facility.

#### Seagrass meadows get £2.5m for restoration work

### Amazon trees write autobiographies - preserving human history in their wood

### **Forestry**

#### Most of 11m trees planted in Turkish project 'may be dead'

Agriculture and forestry union says up to 90% of saplings they have looked at so far have died.

### More than 50,000 urban trees to be planted in England

MPs question ministers on tree-planting plans

### Fir's fair: UK must embrace conifers in climate fight, says forestry chief

Non-native species must be part of the mix if the UK is to meet its tree-planting targets, says outgoing Forestry Commission head Sir Harry Studholme.

### Sustainability

### How peat could protect the planet

Across the globe, drained peatlands are emitting billions of tonnes of carbon dioxide each year. Scotland has emerged as a leader in efforts to restore bogs to health.

### Losing coastal plant communities to climate change will weaken sea defenses

Coastal plant communities are a crucial element of global sea defences but are increasingly threatened by the human-induced effects of climate change, according to new research.

**Deforested parts of Amazon 'emitting more CO2 than they absorb'** 

Soil carbon is a valuable resource, but all soil carbon is not created equal

Green ammonia could slash emissions from farming – and power ships of the future

### Other news

### Horticulture apprenticeships: the UK growers tackling a skills shortage from the ground up

For a £9bn industry that can struggle to recruit talented young workers, apprenticeships are vital to many in the sector.

The clever glass box that reshaped the world

### **People**

### **Martin Mortimer obituary**

Martin Mortimer's work was of prime importance in overcoming crop production problems in countries such as India, Bangladesh and the Philippines.

#### Gigi Crompton obituary

Gigi Crompton, who has died aged 97, was a botanist and author of the work Cambridgeshire Flora Records Since 1538.

### **Opinion**

## Science shouldn't be for sale – we need reform to industry-funded studies to keep people safe

We must be able to trust the integrity of scientific research as we work to protect our families and our planet.

### Adopt a carbon tax to protect tropical forests

A levy on fossil fuels can support and restore ecosystems that help to stem climate change.

### **Opportunities**

# Improving food production with agricultural technology and plant biotechnology; free online course

Learn how to address challenges in growing, harvesting, and processing food and build your knowledge of food production challenges and technology with this FutureLearn online course for 16-19 year olds studying biology.

#### £500 student & early-career member travel grants

Student and early-career members of the Royal Society of Biology can now apply for a travel grant of £500 to support future overseas travel in connection with biological study, teaching or research. Closes: 1 March 2020

#### **Bacterial Plant Diseases – Coordination Team**

The Strategic Priorities Fund Bacterial Plant Diseases programme aims to support high quality multidisciplinary research to understand the complex interactions between bacterial pathogens of UK plants, their hosts, the vectors which transmit them, and the wider environment. Applications are invited for a coordination team to manage, coordinate and integrate activities within the programme.

Closes 16 March 2020

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Closes 17 March 2020

# WRITE NOW! A three day residential practical workshop on popular writing about plant health

WRITE NOW! is aimed at postgraduate students and early career researchers. We welcome applications from plant pathologists and others with a shared interest in communicating the successes, challenges and future of plant health. The workshop is inspired by the International Year of Plant Health and is part of the BSPP's on-going drive to provide practical training. 7-9 April 2020, Kent

### Applications open for STEMM-CHANGE Changemaker Placement Programme

An innovative programme to promote diversity in STEMM careers is searching for technicians from underrepresented and minority groups.

Closes 2 March 2020

### **Consultations**

### **UKRI Open Access Review Consultation**

UKRI is reviewing its open access policies for peer-reviewed research articles and academic books that result from research supported by UKRI. UKRI will review and develop its open access policies to ensure policy is joined up across UKRI constituent bodies, encourage the development of new models of open access publishing and support the adoption of open access through collaboration and alignment with national and international partners. The RSB response to this consultation is currently in draft. Please contact <a href="mailto:consultation@rsb.org.uk">consultation@rsb.org.uk</a> for more information and if you would like to contribute.

Closes: 17 April 2020

### The future for food, farming and the environment: policy statement (2020)

Defra is requesting views on its initial proposals for designing an Environmental Land Management scheme.

Closes: 5 May 2020

### **Events**

### "Al For Wheat" Workshop

This two-day workshop will explore the potential for innovative applications of data science and artificial intelligence to address problems relevant to the UK wheat community.

Participation is encouraged from members of the wider data science community and the UK wheat community, including stakeholders from industry and government.

Spaces are limited. Please complete the <u>short questionnaire</u> to register your interest, your expertise and the reasons for wanting to participate.

London, 9 March 2020

#### **Our Plants, Our Future**

'Our Plants, Our future' is a 2-day scientific conference at the Royal Society to mark the International Year of Plant Health 2020 and showcase the best of UK plant health science to a national and international audience of invited scientists and key influencers. 20-21 April, Royal Society, London

#### **Genetics Society Arabidopsis Meeting**

After a 10 year hiatus, the Genetics Society Arabidopsis Meeting is back with a two-day meeting in Durham on the 21st and 22nd of April, 2020 at the department of Biosciences. Scientific sessions will cover: Development, Abiotic Interactions, Teaching Plant Biology, Natural Variation, Biotic Interactions, Computational Biology.

21-22 April 2020, Durham

#### **Plant-Microbe Interactions**

This event will take a comprehensive view of the multi-disciplinary field of plant-microbe interactions, to demonstrate how it offers solutions to fundamental questions in biology and provides potential applications in agriculture, biotechnology, and conservation.

12 June 2020, RBG Kew, London

### 45th New Phytologist Symposium: Ecological and evolutionary consequences of plantfungal invasions

The 45th New Phytologist Symposium will explore how human activities increasingly alter plant and soil fungal communities and the consequences of these changes. Eighteen leading scientists will share insights into the biogeographic patters, ecological/evolutionary dynamics, and ecosystem/biogeochemical consequences of plant-fungal co-invasions. 20–23 June 2020, Campinas, Brazil

### **Next generation scientists 2020**

New Phytologist next generation scientists meetings are fully-funded events with the unique aim to provide the next generation of plant scientists a chance to share their work with their peers and outstanding international scientists in a stimulating, supportive and exciting environment. The meeting is organised by and for early career researchers, including undergraduate or masters students, PhD students, and individuals with up to five years' experience after gaining their PhD. Career breaks don't count towards this five year total.

August 3-6, University of Tartu, Estonia

### **Arboricultural Association Amenity Conference 2020**

Conference 2020 is to be on the main theme of Trees & Society. This is a wide subject area which incorporates many questions of interest and relevance to everyone who works in arboriculture and urban forestry, as well as other professions.

6-9th September 2020, University of Exeter

#### 46th New Phytologist Symposium: Stomata 2020

There have been dramatic developments in our understanding of stomata in recent years. This symposium will provide a forum for stomatal scientists to hear the latest developments in stomatal research and to discuss and decide on a road map for the future. It will also place stomatal research in the overarching context of global environmental change.

11-14 September 2020, Kaifeng, China

For the full events list, please see the **UKPSF website** 

### And finally...

#### Pollinating opossums confirm decades-long theory

In Brazil there is a plant so strange that researchers predicted -- and 27 years later, proved -- that opossums are key to its pollination.

### Growing the future – a report from the UK Plant Sciences Federation (UKPSF)

UK Plant Sciences Federation Royal Society of Biology Science Policy Team 1 Naoroji Street London WC1X 0GB policy@rsb.org.uk Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Royal Society of Biology.

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