





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

**July 2018** 

#### **News**

#### **Top story**

#### CRISPR plants now subject to tough GM laws in Europe

Gene-edited crops should be subject to the same stringent regulations as conventional genetically modified organisms (GMOs), Europe's highest court ruled today.

#### RSB Fellows respond to ECJ decision on genetically modified organisms

The European Court of Justice has announced that organisms produced by directed mutagenesis techniques are considered genetically modified organisms (GMOs) in EU law, and will be subject to the same regulatory obligations.

### Plant health and biosecurity

# Flying cameras can spot lethal disease sweeping through world's olive groves Fast-spreading Xylella fastidiosa is devastating species from citrus to oak trees, but

Fast-spreading *Xylella fastidiosa* is devastating species from citrus to oak trees, but can now be detected from the air.

#### Yes! We have no bananas: Why the song may come true again

### Agriculture

#### The great nutrient collapse

The atmosphere is literally changing the food we eat, for the worse. And almost nobody is paying attention.

#### Crop failure and bankruptcy threaten farmers as drought grips Europe

Abnormally hot temperatures continue to wreak devastation across northern and central parts of the continent.

#### **Food security**

#### Food production sufficient for 2050, if diet and waste changed

Current crop production levels could feed a population of 9.7 billion people in 2050, according to a recent paper, but only in a future in which there are socio-economic changes, significant shifts in diets towards plant-based foods, and limited biofuel production.

#### Syrian seeds could save US wheat from climate menace

Ancient Syrian grass rescued from Aleppo is resistant to pests devastating American farms.

#### The trick that turned seven bags of cocoa into 25

#### **Biodiversity and conservation**

#### Holyrood Committee calls for improvements to biodiversity reporting

A Holyrood Committee has outlined ways to improve biodiversity activity and reporting, after more than half of Scotland's public bodies failed to report on their biodiversity efforts.

#### Palm oil 'disastrous' for wildlife but here to stay, experts warn

The deforestation it causes is decimating species such as orangutans and tigers - but the alternatives could be worse, finds authoritative report.

#### Biodiversity is the 'infrastructure that supports all life'

Dr Cristiana Paşca Palmer, UN assistant secretary general and executive secretary of the convention on biological diversity, discusses Half Earth, a future biodiversity agreement and where to find the money to save life on Earth.

# 'Like losing family': time may be running out for New Zealand's most sacred tree

Tane Mahuta (Lord of the Forest) is about 2,500 years old. But its days will be numbered if it succumbs to kauri dieback.

### **Forestry**

# <u>Forestry Commission puts Sheffield Council's tree-felling scheme under investigation</u>

#### New accord launches to enhance National Parks and woodland

National Parks Minister backs new agreement to create new woodland, protecting wildlife and connecting people with nature.

#### **Tropical Forests Suffered Near-Record Tree Losses in 2017**

In Brazil, forest fires set by farmers and ranchers to clear land for agriculture raged out of control last year, wiping out more than 3 million acres of trees as a severe drought gripped the region.

### Sustainability

#### Researchers race to make bioplastics from straw and food waste

New bioplastics are being made in laboratories from straw, wood chips and food waste, with researchers aiming to replace oil as the source of the world's plastic.

#### Urban 'forests' can store almost as much carbon as tropical rainforests

Most people would never think of London as a forest. Yet there are actually more trees in London than people. And now, new work by researchers at University College London shows that pockets of this urban jungle store as much carbon per hectare as tropical rainforests.

#### Grasslands more reliable carbon sink than trees

Forests have long served as a critical carbon sink, consuming about a quarter of the carbon dioxide pollution produced by humans worldwide. But decades of fire suppression, warming temperatures and drought have increased wildfire risks -- turning California's forests from carbon sinks to carbon sources.

## **Opinion**

#### **ECJ ruling on GE crops: A disappointing verdict**

The European Court GMO directive, published in 2001, makes it extremely challenging to have genetically modified (GM) crops approved for growth in EU member countries.

#### Botany may be dying ... but somehow the plants survive

Suburban London is filled with greenery and lush growth; record crop harvests appear possible across Europe, and nothing too scary has been reported on the UK plant health risk register for some time either – so why the doom and gloom about plants?

## **Opportunities**

#### **RSB** policy Internships

The RSB has two internship positions available for current PhD students who are funded by BBSRC, MRC or NERC.

Successful applicants will spend three months working at the RSB in Charles Darwin House, during the first half of 2019. Start and end dates can be negotiated as appropriate.

Closes 13 August 2018.

#### Fellows' Lunch - Cardiff

13 September 2018, Cardiff

A small informal lunch to provide Fellows of the Society with the opportunity to discuss current biological issues and the Society's overall direction.

### **Consultations**

#### New environment law to deliver a Green Brexit

Environmental Principles and Governance Bill announced as consultation launches on new body to hold government to account.
Closes 2 August 2018.

#### Air quality: draft Clean Air Strategy 2018

Closes 14 August 2018.

#### Committee asks for views on the rural economy

The Select Committee on the Rural Economy has published its call for evidence and invites submissions from all interested individuals and organisations. Closes 10 September 2018.

# Balance and effectiveness of research and innovation spending inquiry launched

In May 2018, UK Research & Innovation (UKRI) published its Strategic Prospectus, which represents "the beginning of the process to develop a detailed Research and Innovation Strategy". 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 28 September 2018.

#### **Technologies for meeting Clean Growth emissions reduction targets inquiry**

The Science and Technology Committee is undertaking an inquiry into the technologies needed to meet Clean Growth emissions reduction targets. Closes 26 October 2018.

#### **Events**

#### **Metaldehyde Conference**

It is estimated that losses of £45m - £100m per annum could occur in agriculture if molluscicides were not used. The meeting's aim is to better understand these multifacetted challenges to industry, farmers, regulators and the water industry, and to discuss the science required to give better and safer slug control. 13 September 2018, FERA Science Ltd, York

# Food Waste in the Supply Chain: What are the problems and how can we fix them?

The key goal of this early career researcher workshop is to understand where and why waste occurs within the food system and identify ways to provide innovative solutions to reduce food waste. The workshop will bring together early career researchers (ECRs) from institutions across the UK to learn more about the issues surrounding food waste through a series of talks and breakout discussion sessions.

13 September 2018, Cambridge

#### State of the World's Fungi Symposium

Join scientists and policymakers for our first ever two-day symposium on the State of the World's Fungi.

13 – 14 September 2018, Kew

#### **HVCfP 2018 Annual Meeting**

The final HVCfP (High Value Chemicals from Plants) Annual Meeting will take place at the Royal College of Physicians. This free event includes exclusive access to the RCP Garden of Medicinal Plants. The deadline to book your place is 6th September (subject to availability as places are limited). This is a great networking opportunity and is open to anyone who is a member of HVCfP on a first-come, first-served basis. 1 October 2018, London

# Workshop opportunity for post docs: Towards the production of improved seeds of exportable vegetables of Peru through next-generation DNA sequencing

The British Council Researcher Links programme provides opportunities for early career researchers from the UK and Perú to interact, learn from each other and explore opportunities for building long-lasting research collaborations. As part of this programme, we are now recruiting early career researchers (up to 10 years post PhD) to participate in the above workshop. The workshop will provide a unique opportunity for sharing research expertise and networking.

October 24th-26th 2018, Lima, Perú

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

# And finally...

#### Nation's botanical treasures to go on display

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