





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

August 2018

News

Plant health and biosecurity

Restrictions on oak imports introduced to guard against pests

Regulation banning movement of certain oak trees into and around England unless strict conditions are met.

Ash dieback found on three new host species of tree in the UK

Landscapers, gardeners and tree practitioners urged to report findings via Tree Alert.

Science's search for a super banana

A fruit bowl favourite and a staple food to millions, the banana is under threat from a formidable foe.

Agriculture

Wheat gene map to help 'feed the world'

£90 million to help feed the 9 billion

The first funding from a £90 million fund that aims to revolutionise how food is produced and dramatically reduce its environmental impact launches later this month.

'Green revolution' crops bred to slash fertilizer use

Researchers have identified a molecule that increases plant growth while reducing the need for nitrogen.

The Wonder Plant That Could Slash Fertilizer Use

An indigenous Mexican corn gets its nitrogen from the air.

'Like nicotine': Bees develop preference for pesticides, study shows

Insects' acquired taste for pesticide-laced food is similar to nicotine addiction in smokers, say scientists.

An alternative to controversial pesticides still harms bumblebees

Exposure to a sulfoximine-based pesticide has substantial adverse effects on bumblebee colonies. This finding suggests that concerns over the risks of exposing bees to insecticides should not be limited to neonicotinoids.

Monsanto ordered to pay \$289m damages in Roundup cancer trial

New research could help farmers mitigate impact of ozone pollution on crop vields

A multinational study, led by the UK's Centre for Ecology & Hydrology, quantifies the negative impact of ozone pollution on crop yields and identifies practical short- and medium-term action that could make crops more resilient.

UK researchers create sustainable feed solution for farmed salmon

For the first time in the UK, Atlantic salmon will be fed a new fish feed produced from GM plants over the vast majority of their farmed life.

Food security

Race to contain destructive march of armyworm as pest spreads to India

Voracious caterpillar that cost Africa billions of pounds in lost crops now threatens food security across Asia, scientists warn.

Climate change will make hundreds of millions more people nutrient deficient

Crops grown in a high CO2 atmosphere are less nutritious, containing less protein, zinc and iron.

Crop losses to pests will soar as climate warms, study warns

Rising temperatures make insects eat and breed more, leading to food losses growing world population cannot afford, say scientists.

Biodiversity and conservation

New method could save our iconic chalk grasslands

A three-year experiment by ecologists from The University of Manchester, the Centre for Ecology & Hydrology and Lancaster University has revealed how our iconic chalk grasslands - damaged by intensive farming - could be regenerated.

£8.6m boost to restore Wales' Celtic rainforests

£6 million to explore impact of hazardous chemicals on UK ecosystems

NERC has awarded £6 million to investigate the effects that potentially hazardous chemicals used by humans are having on UK habitats and wildlife.

Palm oil: A new threat to Africa's monkeys and apes?

Sustainability

Forests crucial for limiting climate change to 1.5 degrees

Trying to tackle climate change by replacing forests with crops for bioenergy power stations that capture carbon dioxide (CO2) could instead increase the amount of CO2 in the atmosphere, scientists say.

To keep more carbon on the ground, halting farmland expansion is key

The conversion of forests to farmland is recognized as a major contributor to rising levels of greenhouse gases.

Groundbreaking poplar study shows trees can be genetically engineered not to spread

The largest field-based study of genetically modified forest trees ever conducted has demonstrated that genetic engineering can prevent new seedlings from establishing.

Other news

Eden Project seeks funds for Morecambe attraction

The great African regreening: millions of 'magical' new trees bring renewal

Farmers in Niger are nurturing gao trees to drive Africa's biggest environmental change.

Why young people are filling their homes with plants

Opportunities

The Pitch: ideas to positively change research culture

This competition is an exclusive opportunity to pitch an idea or scheme to improve research culture in the UK and potentially receive a small grant to support its implementation.

Closes 7 September 2018.

Places of science

Supporting communities to engage with science through museums and their collections.

Closes 26 September 2018.

Consultations

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

The Science and Technology Select Committee of the House of Commons is undertaking an inquiry on the balance and effectiveness of research and innovation spending. The RSB response to this consultation is currently in draft. Please contact consultation@rsb.org.uk for more information and if you would like to contribute. Closes 28 September 2018.

Draft guidance and criteria set out detailed arrangements for REF 2021

The UK's four higher education funding bodies have published the draft guidance and criteria on making submissions to the Research Excellence Framework (REF) 2021, for consultation.

Closes 15 October 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.

Agriculture and Horticulture Development Board (AHDB): Request for views

The Government is seeking views on the Agriculture and Horticulture Development Board (AHDB). What should its priorities and key services be? Which services are most valued? Should levy payers continue to pay money on the same basis in future? Closes 9 November 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...

Love vine sucks life from wasps, leaving only mummies

An evolutionary biologists have discovered a new trophic interaction -- the first example of a parasitic plant attacking a parasitic insect on a shared host plant.

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