

November 2023

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News

Plant health and biosecurity

[UK Biosecurity and innovation boosted with new funding award](#)

This Government press release reports that Defra and UKRI have opened a new fund to improve UK Biosecurity and tackle the threat of regulated plant pests and diseases.

[Non-native plants migrate north as climate change advances, study finds](#)

The Global Plant Council highlights a study showing that as climate change progresses, the chance of invasive, southern plant species spreading to northern regions increases.

[Investment in Wheat Pathogen Surveillance](#)

A new Wheat Disease Early Warning Advisory System (Wheat DEWAS) has been launched, designed to help safeguard wheat productivity and advance sustainable agricultural practices in collaboration with international partners, reports the Sainsbury Laboratory.

[Extreme weather may help invasive species outcompete native animals – new study](#)

Writing for the Conversation, Harry Shepherd, Postdoctoral Research Associate at King's College London, discusses a study showing that non-native species appear to be better able to resist extreme weather, threatening native plants and animals and potentially creating more favourable conditions for invasive species under climate change.

Plant breeding

[Unlocking the Power of Peas: Genetic discovery promises high-iron vegetables and cereals](#)

The John Innes Centre reports that a genetic breakthrough has opened new opportunities for iron-fortified vegetables and cereal crops to help address the global health issue of anaemia.

Construction of world-leading UK Crop Microbiome Cryobank now complete

The construction of the UK Crop Microbiome Cryobank (UK-CMCB) – the first publicly available resource of its kind anywhere in the world – is now completed, reports the John Innes Centre.

Genetically engineering associations between plants and nitrogen-fixing microbes could lessen dependence on synthetic fertilizer

The Global Plant Council reports on a study which discusses the possibility of using genetic engineering to facilitate mutualistic relationships between plants and nitrogen-fixing microbes called diazotrophs.

Agriculture

Farmers and growers to be given continued access to crucial plant protection products

According to this Government press release, British farmers and growers will continue to have access to important pesticides to support resilient and profitable food production and cut input costs.

The future of vegetable production on lowland peat report launched

A new report has for the first time mapped agricultural uses of lowland peat, from vegetables to cereal crops to grassland for beef and dairy production, reports NIAB.

Food security

Warfare threatening environmental health crisis in Syria

The James Hutton Institute in Aberdeen reports that it is supporting research suggesting 12 years of warfare in Northwest Syria is contaminating soils, posing risks to agriculture and food security in a region already under critical stress.

Biodiversity and conservation

Survey shows public support for trees and wildflower meadows in urban areas

A UK survey by the UK Centre for Ecology & Hydrology and Bangor University has shown significant public support for more nature in their towns and cities.

Forestry

Improved funding for land managers and farmers to grow more trees

Significant funding improvements to the biggest land management schemes for forestry - the England Woodland Creation Offer (EWCO) and Countryside Stewardship (CS) - have been announced by Defra and the Forestry Commission, reports this Government press release.

Let forests grow old to store huge volume of carbon – study

The Guardian reports on a study showing that forest conservation and restoration could make a major contribution to tackling the climate crisis as long as greenhouse gas emissions are slashed.

Lightning fires threaten planet-cooling forests

BBC News reports on a study showing climate change could bring more lightning to forests in northern reaches of the globe, increasing the risk of wildfires.

Government should target tree aftercare rather than planting, say UK experts

According to the Guardian, experts have said that tree establishment should replace tree planting in government targets.

Deforestation has big impact on regional temperatures, study of Brazilian Amazon shows

The Guardian reports that deforestation has a far greater impact on regional temperatures than previously believed, with a study showing that agricultural businesses would be among the biggest beneficiaries of forest conservation in the Amazon.

Sustainability

Environmental principles duty comes into force

This Government press release reports that a new environmental principles duty - a measure to ensure the environment is at the heart of governmental policy making, has now come into force.

Other news

Plant chloroplasts promise potential therapy for Huntington's disease

The Global Plant Council reports that researchers may have found a way to “copy” the mechanism used to safeguard plants against pathological protein aggregation that causes Huntington's and other neurodegenerative diseases, for potential application in human cells.

Opportunities

Plant Health training available

The Royal Society of Biology has launched a new online training course to support applicants to the Plant Health Professional Register. This training is available on our online portal, myLearning, and is free to RSB members at any level. If you work with plants or plant material – whether in research, agriculture, horticulture, forestry, amenity, land management or the natural environment – this training will be valuable to your CPD. It covers topics from plant health principles and governance, to identifying and controlling pests and pathogens, good biosecurity practices, and raising awareness in the community.

To access this new training course, please click [here](#).

Visit our website to [find out more about the Plant Health Professional Register](#).

IPBES Expert Nomination Application Opportunities

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the world's foremost authority on the science of biodiversity and ecosystem services, has open opportunities for experts and early career individuals to participate in the IPBES fellowship programme ("Fellows"). This is an excellent chance to collaborate with world-leading scientists and other stakeholders, to produce assessments to inform policymaking from the local to international levels. Available positions are as follows:

1. Experts for the four IPBES Task Forces (Capacity building, Scenarios & models, Data & knowledge management, Indigenous & Local Knowledge)
2. Experts to scope the 2nd Global Assessment of biodiversity & ecosystem services
3. Experts to participate in the methodological assessment on monitoring biodiversity and nature's contributions to people assessment
4. Fellows for the methodological assessment on monitoring biodiversity and nature's contributions to people assessment
5. Fellows for the task force on scenarios & models

Find further details in the relevant notification on the IPBES website [here](#). More information on the application process can be found [here](#). To be nominated by the UK Government, you will either need to be a British National, or working in a British institution.

Closes: 19 November 2023

Microscopy & Microbiology Training, December 2023

5 December 2023, 10:00 - 14:00

Heinz Wolff building, Brunel University, Kingston Ln, London, Uxbridge

Microbiology is the study of microorganisms and analysis of bacteria is a major component of this scientific area, including in clinical laboratories. This practical will introduce the concept of aseptic techniques in a task to purify a bacterial sample using the "streaking plate" method. Further investigations will include utilising the Gram staining procedure, the Miles and Misra drop dilution method, determination of colony forming units and analysis using the light microscope. The associated calculation methods involved in these techniques will also be taught.

Consultations

Consultation on proposals for a new framework in England for the regulation of precision bred organisms used for food and animal feed

This consultation seeks stakeholders' views on proposals for establishing a new framework in England under the Genetic Technology (Precision Breeding) Act 2023 for the regulation of food and animal feed ('feed') produced from Precision Bred Organisms (PBOs) ('PBOs for food/feed').

Closes: 8 January 2024

RSB Policy Resource Library online

The RSB has created a searchable, digital library of more than 800 statements, responses, briefings and other policy resources produced by the RSB and our Member Organisations across the biosciences. This collection is freely and openly accessible to everyone, including members and non-members, through the [mySociety portal](#) (no registration necessary).

Events

[Agricultural land classification course](#)

23 November - 25 November 2023

Online

This training course, designed and presented by agricultural land classification (ALC) experts from Natural England and the Welsh Government, offers a unique opportunity to learn about the background and technical basis of the current ALC guidelines.

[Mob Grazing and Soil Health](#)

24 November 2023

12:30 - 13:30

Online

Mob grazing is a form of intensive managed grazing where large numbers of animals graze a small area of land for a short period of time. There is increasing interest in this system due to perceived productivity and environmental benefits. However, no studies have yet been able to provide robust proof of the soil health benefits of mob grazing to UK soils. This webinar will comprise of an invited guest speaker who will deliver a 30-minute talk using online slides, followed by 30 minutes of moderated Q&A with participants.

[BSSS Annual Conference](#)

4 December - 5 December 2023

Assembly Buildings Conference Centre, Belfast

The British Society of Soil Science and the Soil Science Society of Ireland's Joint Annual Conference 2023 will take place from 4 – 5 December in Belfast. The overall conference theme is Soil Management and Monitoring. The packed two-day event, set in the historic Assembly Buildings Conference Centre in the heart of Belfast, will provide delegates with a fantastic opportunity to see the latest research and developments within soil science.

[GPSEP Presents: Rootstock Live - Exploring Plant Science](#)

14 December 2023

11:00

Online (Youtube broadcast)

Join [GPSEP](#) on **December 14th, 2023**, at **11am** for their "Rootstock Livestream", broadcasting from the [Sainsbury Laboratory Cambridge](#). Immerse yourself in the fascinating realm of plant science including career opportunities through videos crafted by undergraduates. Interact with plant science researchers in real-time on [YouTube](#). It's a must-see event for all.

And finally...

[Mangrove forests: Steely gaze of young tigress wins photo award](#)

BBC News reports on the winners of the Mangrove Photography Awards, which aim to show the relationships between wildlife, coastal communities and mangrove forests, as well as the fragility of these unique ecosystems, both above and below the waterline.



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