



## Plant Health Order (PHO) Licences

### 1. Introduction

This guidance is provided to help you understand basic requirements for work with plant pathogens and pests which cause disease or damage and are controlled under Plant Health Orders (PHO). There are many pests and diseases that can seriously damage crops and plants in the UK. To protect plant health, the government sets policy and enforces controls and restrictions on the import, movement and keeping of certain plants, plant pathogens, pests and other relevant materials such as soil. The purpose of PHO is to prevent the introduction and spread into this country of these plant pathogens, pests and related materials which if introduced could cause serious disease and economic loss. The plant health licensing controls include provisions for trials and scientific research on organisms and materials that would be otherwise prohibited. Any work with PHO pathogens, pests or relevant materials requires that a risk assessment is carried out and a PHO licence must be obtained by Schools from Plant Health.

### 2. Guidance Sources for Plant Health Order (PHO) Licences

There is regulatory guidance and information on control of work with plant pathogens and pests which is available from Plant Health and additional guidance from the Health and Safety Executive (HSE) which can be found below.

#### 2.1 Guidance

- [Science and Advice for Scottish Agriculture \(SASA\)](#)
- [HSE ACDP Management and operation of microbiological containment laboratories](#)
- [HSE SACGM Compendium of guidance](#)

#### 2.2 Websites

- [Science and Advice for Scottish Agriculture \(SASA\)](#)
- [Plant Health \(Scotland\)](#)
- [Animal and Plant Health Agency](#)

### 3. PHO Risk Assessment and Licences

PHO requires certain controls to protect the economy, agriculture, food and the environment from serious plant pests and diseases which could be caused by introduction or exposure of these designated pathogens, pests or related materials in which they may be carried or transmitted. The general requirements for risk control of work involving plant pathogens and pests are set out in SASA guidance for



the control of plant pathogens and pests and are detailed on the SASA and Plant Health websites.

- [Plant Health \(Scotland\)](#)
- [Science and Advice for Scottish Agriculture \(SASA\)](#)

Remember that compliance with the controls for work with biological agents and genetically modified organisms may also be required to protect people and the environment.

### 3.1 Plant Pathogens and Pests

The designated plant pathogens, pests and relevant materials which are prohibited and controlled under PHO are defined below.

A 'plant pest or pathogen or relevant material' means any plant pest, pathogen or relevant material listed in the Schedules of PHO.

- Prohibited plants and plant products.
- Prohibited plant pathogens or pests such as fungi, bacteria, insects, nematodes and viruses, including common pests not normally present in this country.
- Prohibited soil and growing medium including solid organic substances such as humus, peat and bark.

The legislation defines 'plant pest' very widely and means any living organism including microorganisms or pathogens, other than a vertebrate animal, in any stage of its existence, which is injurious or likely to be injurious to any plant or plant product. The term 'relevant material' means any plant, plant product, soil or growing medium.

### 3.2 Classification of PHO Pathogens and Pests

PHO pathogens, pests and other designated relevant materials are classified due to the need for prohibition and control of certain activities and materials based on their risks to plant health and the economy, agriculture, food and the environment. The detailed information can be found on the Plant Health and SASA websites and in the legislation and guidance, although it is important to remember that it is also the case that other relevant unlisted plant pathogens or pests could also be covered by the legislation and therefore require a PHO licence or other regulatory measure if they pose a relevant significant risk and might be prohibited under the legislation and regulatory requirements. Note that a plant pathogen may also be controlled and classified with a hazard group under COSHH as well as PHO.

There are a number of important regulatory resources including the plant health information portal and risk register that can be used to identify whether a plant pathogen, pest or relevant material is prohibited or controlled under the legislation. You should contact Plant Health or SASA if you want to establish whether any pathogen, pest or other relevant material is prohibited or controlled under the



legislation or wherever there is any uncertainty about this since the range of materials that is covered is potentially very large and a clear answer can only be obtained from the regulators.

### 3.3 UK Plant Health Information Portal

The Plant Health Information Portal provides information about plant pathogens, pests and diseases which can seriously damage crops and plants in the UK. The information includes government risk assessments and the data underpinning those assessments with links to other sites of interest, as well as information on the plant health controls and services provided by government.

- [Plant Health Information Portal](#)

Information provided for individual pests and diseases may vary depending on the availability of data and the risk assessments. The purpose of these government risk assessments is to help understand the threats and determine what actions and controls are required to protect plant health and the environment.

### 3.4 UK Plant Health Risk Register

The UK Plant Health Risk Register is a publicly available a tool for government, industry and stakeholders to prioritise action against pests and diseases which threaten crops, trees, gardens and countryside. You can view the full UK Plant Health Risk Register records for your pathogen or disease.

- [Plant Health Risk Register](#)

The plant health risk register contains a lot of very valuable and important information about plant pathogens and pests which are significant hazards in the UK.

### 3.5 PHO Risk Assessments

A BA / GM risk assessment should be carried out for all work involving plant pathogens, pests and relevant materials. These PHO risk assessment should deal with the scope and risks of the specific work activities and the pathogens, pests and materials involved and must determine what containment and control measures are required to enable the work to be done safely to protect people and or the environment. The principles and requirements for risk control of work involving plant pathogens and pests are set out in the Plant Health and SASA guidance and websites.

If the work involves biological agents or genetically modified organisms then compliance with the controls for these will also be required to protect humans and the environment. There is guidance on BA and GM risk assessment, containment and control which is available on the Biosafety Unit website.

The PHO risk assessments must be done in advance of the import, possession or use or licencing of any of the materials following the standard processes and they have



to be reviewed and approved by the School GM and Biological Safety Committee (GMBS). The risk assessments must be amended in advance whenever this is needed such as for changes to the scope or risks of the work and the licences updated where required.

### 3.6 PHO Containment and Control Measures

The containment and control measures required for PHO work are determined by compliance with the relevant minimum legal standards, regulatory guidance, outcomes of the specific risk assessments, standard operating procedures and PHO licence or other relevant regulatory conditions. There are three containment levels used in university laboratories which includes plant facilities, growth rooms and glass houses.

- **Containment level 1 (CL 1)** for low risk work involving biological hazards, group 1 biological agents, class 1 genetically modified microorganisms and genetically modified animals or plants.
- **Containment level 2 (CL 2)** for medium risk work involving biological hazards, group 2 biological agents, class 2 genetically modified microorganisms and genetically modified animals or plants.
- **Containment level 3 (CL 3)** for high risk work involving biological hazards, group 3 biological agents, class 3 genetically modified microorganisms and genetically modified animals or plants.

Control measures are likely to include protective clothing, pest control, physical/temporal separation, restricted access, dedicated equipment, negative pressure, hygiene and disinfection procedures and general facilities, double door access, waste inactivation and disposal and emergency procedures.

The relevant regulatory guidance and risk assessments as well as licence conditions must be referred to when making decisions on the containment levels and specific controls required for any work. These will provide details of the standard containment and control measures for work involving biological agents, genetically modified organisms, plant pathogens and pests and plant pathogens and pests, animals and plants. There are very important containment tables in these documents which summarise the minimum containment conditions and related control measures which are normally required for each containment level.

### 3.7 PHO Licences

PHO prohibits any person from importing, possessing or using plant pathogens, pests or relevant materials unless they have a licence or complied with the relevant necessary regulatory conditions. PHO licences are issued for the import, movement and keeping of prohibited plants and plant products, plant pathogens or pests (such as fungi, bacteria, insects, nematodes and viruses, including common pests not normally present in the UK), soil and growing medium including solid organic



substances such as humus, peat and bark. Plant health licences are obtained from the Science and Advice for Scottish Agriculture (SASA) regulator which is part of Plant Health Scotland. The guidance on the regulations that control work with plant pathogens and pests and how to apply for a PHO licence can be found on the SASA website.

- [Science and Advice for Scottish Agriculture \(SASA\)](#)

SASA reviews and issues plant health licences to import and retain plants and plant material, plant pests, soil or growing medium and prohibited organisms for scientific or research purposes. SASA reviews licence applications on the basis of the information supplied and an inspection of work facilities and containment areas by SASA inspectors might be required prior to issue of a licence. Please see the guidance on the SASA Plant Health Licensing website for further information.

- [SASA Plant Health Licensing](#)

The key purpose of the licence is to ensure that appropriate, proportionate and effective containment and control measures are applied, to prevent the release or escape of plant pathogens, pests or relevant materials into the environment where they may cause serious disease or damage. Licences are issued following inspection of premises and assessment of the risks associated with the activities. Particular attention is given to the containment procedures to be used when handling the licensed material and its disposal on completion of the work.

Plant pathogens, pests and other designated materials can only be held or used by those who have a PHO licence (or other relevant regulatory controls), which contains a set of conditions that must be met, and have a suitable and sufficient risk assessment and standard operating procedures. The controls should be proportionate to the level of risk and complexity of the activities and must be set out in the BA / GM risk assessments for the work.

There may be other requirements in addition to licences for certain materials. Plant health legislation also controls the import, possession, use or movement of certain plants, seeds and organic matter such as soil and certain plant products, including fruit, potatoes, vegetables, cut flowers, foliage and grain. Controls vary but could include the need for classification, phytosanitary certificates, plant passports and or inspection requirements.

Licences must be fully implemented and all conditions and controls put in place and maintained. Licences can be amended where needed and changes must be notified to SASA with a request for an amendment to the existing licence or else as a new licence application. Full details on the PHO licence application processes are provided on the SASA website.



Note also that there may be other types of plant health controls or licences that may be required to import into the UK of prohibited materials which are controlled and licenced by APHA.

- [Animal and Plant Health Agency](#)

### 3.8 Information, Training and Supervision

Managers must provide workers with the necessary information, instructions and training on the general and emergency procedures and be properly supervised to enable them to safely carry out their work.

### 3.9 Incident Reporting and Investigation

Any PHO incident must be reported to the manager responsible for the work and as soon as practicable to the Health and Safety Department using the incident reporting system. Incidents should be investigated by Schools and managers to identify the root causes and especially to help prevent the recurrence of similar incidents. PHO requires that certain types of incidents must be reported to SASA. The School and licence holder must notify the licensing authority immediately in the event of the following events.

- An unintended release or dangerous occurrence involving any of the plant pathogens, pests or other designated materials.
- Loss of a plant pathogens, pests or other designated materials during its transportation.
- Any other relevant event specified in the licence or regulatory conditions.

The incident reporting requirements under PHO are separate from and in addition to any requirements under RIDDOR.

## 4 Biological Agents and Genetically Modified Organisms

If the work also involves any biological agents or genetically modified organisms then the requirements of the Control of Substances Hazardous to Health Regulations (COSHH) and or the Genetically Modified Organisms (Contained Use) Regulations (GMOCU) would have to be applied in addition to those required under the Plant Health Orders (PHO) and the relevant licences. COSHH and GMOCU have requirements for risk assessment, containment and control measures. Note that a pathogen may be classified under COSHH as well as PHO and where this is the case then the requirements of both systems must be followed. The classification systems are not the same and a pathogen for example may have a different grouping under PHO than under COSHH. If multiple regimes apply then all requirements apply but where there are differences between them then highest standard of risk control must be implemented. There is guidance and information on safe working with pathogens and BA and GM risk assessment, containment and control available on the Biosafety Unit





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website. Please contact your School Biological Safety Adviser for advice if you are planning to do any work with plant pathogens and pests or related materials.

### Document version

Version number	Summary of change	Date and by whom
V1.0	New template	June 2023 HE
V1.1	Minor updates to text and links	January 2024 PW

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