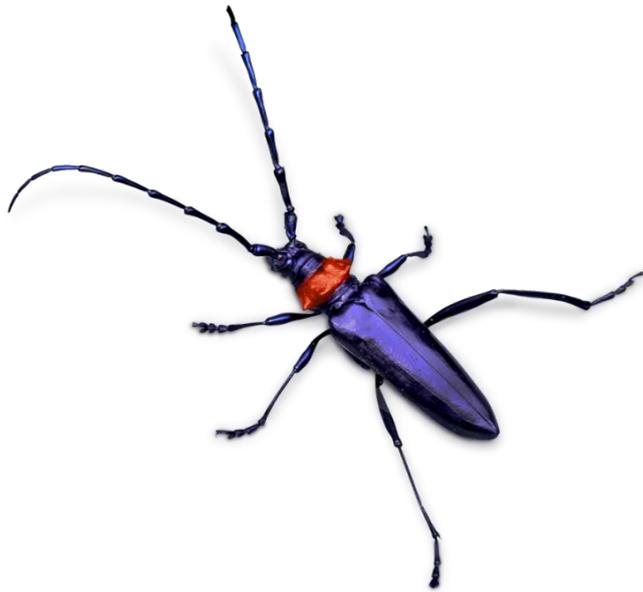




Plant Healthy

Certification Scheme



Plant Health Management Standard

Version 1.3.1

1st July 2025

Updated from version 1.3 to version 1.3.1 on 26th March 2026 – see appendix 2 for details

How the Plant Health Management Standard works

The Standard is broken down into sections. At the top of each section you will find the 'purpose' of that section. The requirements are then detailed into two columns, followed by an outline on how the requirement will be assessed. You will find more guidance after some requirements regarding their specific purpose and where to find more help in meeting them.

Some requirements are outlined as 'Critical'. This means that a non-conformance can be raised as either 'major' or 'minor'. If a requirement is not marked as 'Critical' any non-conformance will be considered 'minor'. A non-conformance will be considered major against a critical requirement if no or little effort has been made to meet the requirement e.g. if there is no Site and Operations Pest Risk Analysis completed for the site. A minor non-conformance against the same requirement would be where efforts had been made to meet the requirement but there are still minor elements outstanding, e.g. key pest pathways are missing from the analysis.

Plant Health Management Standard – the Requirements

Note: In the following requirements and guidance, and in line with definitions from the International Plant Protection Convention's (IPPC) and retained European Union Regulations:

- The term **pest** includes **pathogens** (i.e. **plant diseases**) and the term **infest** includes **infect**.
- The term **notifiable pest** includes: **quarantine pests, pest-free area quarantine pests (protected zone quarantine pests in EU) and regulated non-quarantine pests**.
- An **outbreak** is defined as a recently detected notifiable pest population, including an **incursion**, or a sudden significant increase of an established pest population in an area.
- An **incursion** is defined as an isolated individual or population of a notifiable pest recently detected in an area, not known to be established, but expected to survive for the immediate future.
- The term **interception (of a pest)** includes: The **detection** of a pest during an inspection or testing of an imported consignment or plants and relevant plant products moved within a country.

1. Regulatory Requirements

REQUIREMENTS		HOW THIS IS ASSESSED
PURPOSE: To ensure the business/organisation complies with all relevant (or applicable) plant health regulations		
1.1 Registration as a Professional Operator Professional operators that deal with plants or plant products must be registered with the UK Plant Health Service (or equivalent) as required CRITICAL	<ul style="list-style-type: none"> • The required registration with the UK Plant Health Service (or equivalent) is complete, based on the operations of the business or organisation • If needed, authorisation with the UK Plant Health Service (or equivalent) to issue plant passports is complete 	<ul style="list-style-type: none"> ▪ All registration and authorisation documentation are in place and current for the responsible personnel and/ or the business or organisation.
GUIDANCE Registration as an operator - If you deal with plants professionally you need to be registered with the UK plant health service: https://planthealthportal.defra.gov.uk/trade/plant-passports/registration-and-plant-passports/#		

<p>1.2 Plant Passports Plant Passport legislative requirements must be followed according to the rules applicable to the relevant country or countries CRITICAL</p>	<ul style="list-style-type: none"> • UK Plant Passports are required when plant material is traded between Professional Operators • UK Plant Passports are required when plant material is sold via distance selling to final users • Movements from GB to NI must be covered under the Northern Ireland Plant Health Label (NIPHL) scheme* or be accompanied by a Phytosanitary Certificate (see 1.3). • EU Plant Passports are required when plant material is traded between businesses in the EU • EU Plant Passports are required when sending traded plant material from NI to GB 	<ul style="list-style-type: none"> ▪ Plant Passports kept for three years
<p>GUIDANCE UK Plant Passports - https://planthealthportal.defra.gov.uk/trade/plant-passports/ See: Movements to GB from Northern Ireland - UK Plant Health Information Portal EU Plant Passports requirements must be followed – seek guidance for the relevant areas where plants are being moved. * In certain limited cases, such as for some cut flowers, movement is governed by the Northern Ireland Retail Movement (NIRMS) scheme and further details are at: https://www.gov.uk/guidance/northern-ireland-retail-movement-scheme-how-to-register-and-seal-consignments</p>		

1.3 Phytosanitary Certificates Legislation with respect to Phytosanitary Certificates must be followed CRITICAL	<ul style="list-style-type: none"> Phytosanitary certificates are required if plant material is imported from or exported to third countries 	<ul style="list-style-type: none"> Phytosanitary Certificates kept for three years
	<ul style="list-style-type: none"> Phytosanitary certificates are required when sending traded plant material to Northern Ireland from GB if not covered by the Northern Ireland Plant Health Label (NIPHL) scheme 	

GUIDANCE

Imports into GB: <https://planthealthportal.defra.gov.uk/trade/imports/>

Exports from GB: <https://planthealthportal.defra.gov.uk/trade/exports/>

For all other countries follow the Phytosanitary Certificates legislation for importing and exporting plants.

1.4 Forest Reproductive Material (FRM) FRM legislation must be complied with for the marketing of seed and planting material for forestry purposes CRITICAL	<ul style="list-style-type: none"> Supplier is registered with the Forestry Commission 	<ul style="list-style-type: none"> Inclusion on the online supplier list (FRM Supplier Search (arcgis.com)) Master certificates Suppliers' documentation OECD certificates
	<ul style="list-style-type: none"> Master certificates are available for all FRM collections 	
	<ul style="list-style-type: none"> Suppliers' documentation accompanies all material marketed for forestry purposes 	
	<ul style="list-style-type: none"> OECD certificates are required if plant material is imported from or exported to OECD countries 	

GUIDANCE

The Forest Reproductive Material (Great Britain) Regulations 2002 apply in Great Britain. Outside of GB, where similar legislation or regulation exists this should be followed.

For the species covered by FRM legislation, the rules relating to OECD (Organisation for Economic Co-operation and Development) Forest Seed and Plant Scheme are complied with for the marketing of seed and planting material for forestry purposes:

<https://www.oecd.org/en/topics/sub-issues/forest-seed-and-plant.html>

<p>1.5 Notifiable Pest Interceptions or Outbreaks There must be a procedure in place to identify and manage any suspected notifiable pest interceptions, incursions or outbreaks CRITICAL</p>	<ul style="list-style-type: none"> • The procedure includes (as a minimum) <ul style="list-style-type: none"> ○ Informing the relevant authority immediately if a notifiable pest is suspected ○ Isolating and containing the affected plants and suspected pests ○ Clearly marking the affected product to ensure that it is not inadvertently moved or sold ○ Acting on the instructions of the relevant authority; no treatment or disposal actions to take place without the authorisation of the relevant authority 	<ul style="list-style-type: none"> ▪ Notifiable Pest Interceptions or Outbreaks Procedure
<p>GUIDANCE Contact the appropriate authority in your region as determined by the relevant National Plant Protection Organisation or plant health service authorities</p>		

<p>1.6 Other Statutory Requirements All Statutory Plant Health Notices and Special Conditions must be complied with CRITICAL</p>	<ul style="list-style-type: none"> • When importing trees and plants from third countries to GB, The Plant Health (Phytosanitary Conditions) (Amendment) (EU Exit) Regulations 2020 are reviewed to assess if special conditions are required to be met • All Statutory Plant Health Notices are complied with 	<ul style="list-style-type: none"> ▪ Evidence that imported plant material has been assessed against Schedule 7 of The Plant Health (Phytosanitary Conditions) (Amendment) (EU Exit) Regulations 2020 ▪ Records of compliance with any statutory plant health notices
<p>GUIDANCE Special requirements (additional declaration) guide tool, plants for planting: https://planthealthportal.defra.gov.uk/trade/imports/imports-from-the-eu/import-requirements/import-special-requirements/imports-special-requirements-tool-and-user-guide-for-plants-for-planting/ Great Britain - special requirements regulations: https://www.legislation.gov.uk/uksi/2020/1527/schedule/7/made Outside of GB, where similar requirements exist, these should be followed.</p>		

<p>1.7 Wood Packaging Material (WPM) The import or export of any goods using WPM or supply of WPM to businesses must follow the rules to meet ISPM15 international standards. This applies to the movement of WPM between Great Britain (GB) – England, Scotland and Wales – and other countries, including EU member states and Switzerland CRITICAL</p>	<ul style="list-style-type: none"> • Pallets and other WPM imported from or exported to third countries comply with ISPM15 • Pallets and other WPM comply with ISPM15 when sending traded plant material and other products to Northern Ireland from GB 	<ul style="list-style-type: none"> ▪ Evidence of imports supplied with ISPM15 pallets ▪ Evidence of exports supplied with ISPM15 pallets ▪ Personnel awareness and implementation of the management processes
<p>GUIDANCE ISPM15 applies to imports into GB as to goods exported from GB. Ensure ISPM15 marking is present, clear and not damaged. If unsure, do not use the pallet or WPM for export, just use for internal GB movement.</p> <p>ISPM15 applies to international movements, although the EU is treated as a single country for these purposes. See: ISPM 15. Regulation of wood packaging material in international trade</p>		

2. Plant Biosecurity Policy

REQUIREMENTS	HOW THIS IS ASSESSED
<p>PURPOSE: Demonstrating the business or organisation's awareness of the threat posed by notifiable pests and their commitment to plant biosecurity</p>	
<p>2.1 Plant Biosecurity Policy A plant biosecurity policy must be in place and communicated to all relevant personnel CRITICAL</p>	<ul style="list-style-type: none"> • The plant biosecurity policy includes: <ul style="list-style-type: none"> ○ a statement recognising the threat from notifiable pests to the business/organisation and the wider environment ○ The business/organisation's approach to plant health and biosecurity ○ a commitment to conducting and maintaining an up-to-date Site and Operations Pest Risk Analysis to minimise the plant biosecurity risks to an appropriate level ○ a commitment to keep up to date with plant health legislation and best practice guidance ○ a commitment to training personnel in plant biosecurity procedures ○ the designated person(s) for plant health and their responsibilities • The plant biosecurity policy is communicated internally to all relevant personnel • The plant biosecurity policy and relevant procedures are communicated to all relevant external parties • The plant biosecurity policy is signed and dated by the most senior person within the business or organisation <ul style="list-style-type: none"> ▪ Plant Biosecurity Policy in place ▪ Personnel awareness of the rules and implementation of the management processes ▪ The policy is signed by the most senior person in the business or organisation

<p>2.2 Plant Biosecurity Policy Review</p> <p>The Plant Biosecurity Policy must be reviewed at least annually as part of a continuous improvement process</p>	<ul style="list-style-type: none"> • The review is signed and dated by a senior manager within the business as part of the process of continuous improvement 	<ul style="list-style-type: none"> ▪ Evidence that the Plant Biosecurity Policy is reviewed at least annually
<p>GUIDANCE</p> <p>‘Relevant personnel’ are, as a minimum, those people engaged with the growing, husbandry, treatment, packing and dispatch of plants including administration of issuing and attaching plant passports. One way of demonstrating that relevant personnel are aware of the Plant Biosecurity Policy is for the Policy to be signed and dated e.g. as part of an induction process.</p> <p>‘Designated person(s)’ are those who have specific responsibilities within the business/organisation for plant health and biosecurity (see Section 3).</p> <p>One of the most common pathways for notifiable pests to be introduced into a new area is by the movement of live plant material. In recent years there have been numerous examples from around the world of exotic pests being introduced into new areas and causing considerable damage to industry, communities and the natural environment.</p> <p>Most live plants are moved through supply chains which can include an array of businesses and organisations that grow, handle and / or manage live plant material. A policy statement is a document that enables a business or organisation to demonstrate that they are aware of the threats from notifiable pests and that they acknowledge their responsibility for the plants they source, grow, manage and supply.</p> <p>The structure and content of the document will depend on the type of business/organisation, however the requirements above provide the key aspects that must be covered.</p> <p>An example of other items that a Plant Biosecurity Policy could include can be found on page 44 of the Arboricultural Association's Application of Biosecurity in Arboriculture. A few of the bullet points covered relate to arboriculture, however the majority are generic and can apply to any business or organisation within the supply chain.</p>		

3. Plant Health Responsibility

REQUIREMENTS		HOW THIS IS ASSESSED
<p>PURPOSE: There is a clear understanding within the business/organisation of where plant health responsibilities lie</p>		
<p>3.1 Plant Health Responsibility Plant health responsibility within the business/organisation must be clearly defined and designated to named personnel CRITICAL</p>	<ul style="list-style-type: none"> • The roles of personnel with plant health management responsibilities are clearly defined, including delivering the requirements of this Standard throughout the business/organisation 	<ul style="list-style-type: none"> ▪ Evidence of plant health management responsibilities outlined in job descriptions/organisational structure charts/detailed responsibility in the plant health policy
<p>GUIDANCE The roles and responsibilities of any personnel designated with plant health management are clearly defined and include delivering the requirements of this standard throughout the business. This could be a single person, or more than one, designated with the responsibility to manage the plant biosecurity systems within the business or organisation.</p> <p>In small businesses or organisations, the plant health manager duties can be an additional responsibility of existing personnel. A contractor/consultant may be used to assist/advise on keeping up to date with changes associated to plant health e.g., recent threats, treatments, etc.</p> <p>In larger or group businesses or organisations, it may be appropriate to have a senior member of staff with overall responsibility, who may designate specific responsibilities to site managers and/or other personnel. In the event of personnel absence, there should be provision for a trained deputy to be in place to ensure all responsibilities are met.</p>		

4. Site and Operations Pest Risk Analysis (SOPRA)

REQUIREMENTS	HOW THIS IS ASSESSED
<p>PURPOSE: To ensure an Appropriate Level of Protection for a business/organisation's site(s) and related operations is in place by analysing and identifying the relevant notifiable plant pest pathways and implementing control measures.</p>	
<p>4.1 Site and Operations Pest Risk Analysis Areas of plant health risk must be identified and assessed, and specific plans in place to minimise these risks to an Appropriate Level of Protection (ALOP) CRITICAL</p>	<ul style="list-style-type: none"> • The plans shall detail: <ul style="list-style-type: none"> ○ Site and operations - the site(s) boundaries and relevant operations are defined ○ Susceptible host plants - A list of host plants that are grown or managed and susceptible materials ○ Notifiable pests – A framework that details the relevant notifiable pests ○ Pest Pathways - An assessment of relevant pathways for pests to potentially arrive, move around or leave the site(s) ○ Establishment of risk levels - A systematic risk assessment method for the plants and other relevant materials handled that commences with the highest risk notifiable pests ○ Controls - Measures are implemented that aim to mitigate the specific pest risks identified ○ Managed risk – How the controls minimise the levels of risk ○ Appropriate Level of Protection (ALOP) - Justification of how ALOP is comprehensively achieved and maintained for all aspects of the site(s) and operations ○ Monitoring of the site - A monitoring regime is in place that is linked to the SOPRA ▪ A current site and operational pest risk analysis framework (spreadsheet or document)
<p>GUIDANCE See Appendix for information on how to produce a Site and Operations Pest Risk Analysis (SOPRA)</p>	

<p>4.2 Site and Operations Pest Risk Analysis Review Reviews of the Site and Operations Pest Risk Analysis must be conducted annually as a minimum or more frequently as required, e.g., when new plant species are grown / stocked, or a new notifiable pest risk becomes evident.</p>	<ul style="list-style-type: none"> • Reviews are recorded, dated and signed by the person responsible for plant health 	<ul style="list-style-type: none"> ▪ A record of the versions with additions and adjustments to the notifiable pest framework (spreadsheet or document)
--	---	--

5. Supply Chain Management

REQUIREMENTS		HOW THIS IS ASSESSED
<p>PURPOSE: To reduce the risk of new plant pests being introduced onto a site by checking that all suppliers' plant biosecurity systems minimise risk to an appropriate level</p>		
<p>5.1 Supply Chain Management The business/organisation must risk-assess all their suppliers and approve only those that meet their plant health requirements CRITICAL</p>	<ul style="list-style-type: none"> • There is a supplier risk assessment checklist that is completed by all new suppliers and details any specific compliance requirements and any control measures that are applicable • A list of all approved suppliers is in place and is accessible by relevant staff 	<ul style="list-style-type: none"> ▪ Supplier risk assessment checklist ▪ A list of all approved suppliers (that are reviewed on an annual basis)
<p>GUIDANCE The supply chain can include any plant material (living or dead), growing media and other items that may harbour pests such as wood packaging material, reusable packaging or boxes; timber boxes; plastic trays and transport containers.</p> <p>Details of businesses and organisations that are certified members of the Plant Healthy Certification Scheme can be found on the Plant Healthy web-based directory: https://planthealthy.org.uk/directory</p>		

6. Plant Health Hygiene and Housekeeping

REQUIREMENTS		HOW THIS IS ASSESSED
<p>PURPOSE: To reduce the risk of plant pests spreading by implementing effective housekeeping and hygiene practices</p>		
<p>6.1 Plant health hygiene and housekeeping Plant hygiene and housekeeping rules and practices, that have been assessed and developed through the Site and Operations Pest Risk Analysis processes, must be in place and communicated to all relevant personnel</p>	<ul style="list-style-type: none"> • There are plant hygiene and housekeeping rules in place that are informed by the Site and Operations Pest Risk Analysis • The rules are communicated to relevant personnel 	<ul style="list-style-type: none"> ▪ Fit-for-purpose plant hygiene and housekeeping rules ▪ Personnel awareness of the rules and implementation of the management processes
<p>GUIDANCE Site cleaning, maintenance and disinfection regimes, such as steam cleaning, brushing, wash down and end of season or post crop cleaning can be recorded to demonstrate housekeeping rules are in place and being implemented</p>		

<p>6.2 Growing media, soil, manures and mulches In the production or procurement of plants, the use of growing media, soil, manures and mulches must be assessed for the potential to harbour and transmit plant pests</p>	<ul style="list-style-type: none"> • There are systems in place to reduce the risk of plant pests being transmitted via brought in bagged and bulk batches of growing media, soils manures and mulches • There are management processes in place to minimise the risk of plant pests being harboured or spread on the site via growing media, soils manures and mulches 	<ul style="list-style-type: none"> ▪ Product specifications and list of all approved suppliers of growing media, soils, manures and mulches ▪ Personnel awareness and implementation of the management processes
<p>GUIDANCE Supplied growing media has the potential to contain plant pests. The aim of an assessment is to minimise this risk to an appropriate level. This can be by means of various treatments in the production process by the growing media supplier. Ask the supplier to provide evidence that the growing media ingredients (e.g. coir, bark, wood fibre), soil, manures and mulches (including pot toppers) have been produced and handled in a biosecure manner.</p> <p>On-site management procedures must be in place to ensure that growing media, soil and organic manures are stored and handled in a biosecure manner. This can include the use of designated storage areas for holding substrates and organics manures. Segregating areas where new substrate is used from waste areas will help ensure cross-contamination does not occur.</p>		

<p>6.3 Weed management Weeds and volunteer plants must be assessed for their potential to harbour and transmit plant pests</p>	<ul style="list-style-type: none"> • There are management processes in place to minimise the risk of plant pests being harboured or spread on the site via weeds and volunteer crops 	<ul style="list-style-type: none"> ▪ Personnel awareness and implementation of the management processes
<p>GUIDANCE Weed species or volunteer crops (plants that persist beyond the crop lifecycle) can harbour pests and diseases. These plants should be managed so as to minimise the risk of spreading plant pests and diseases on and from the site.</p>		

<p>6.4 Water usage Water sources, irrigation and drainage systems used in the cultivation and management of plants must be assessed for the potential to harbour and transmit plant pests</p>	<ul style="list-style-type: none"> • The management processes in place minimise the risk of plant pests being harboured or transmitted from water sources 	<ul style="list-style-type: none"> ▪ Evidence that an assessment has been conducted and where necessary controls have been implemented.
	<ul style="list-style-type: none"> • The management processes in place minimise the risk of plant pests being harboured or transmitted via irrigation systems 	
	<ul style="list-style-type: none"> • The management processes in place minimise the risk of plant pests being spread on the site and off the site via drainage systems 	
<p>GUIDANCE Water is an effective carrier of many pathogens. Mains or borehole water supplies tend to be low risk. Sourcing water from open reservoirs, ponds, rainfall butts or extracting from rivers can carry a higher risk, unless the water is treated using a method proven to kill damaging microorganisms.</p> <p>Puddles and excess run-off can spread waterborne pathogens. Containerised plants should be grown on a free-draining surface, preferably raised above ground. Persistent puddles in areas where plants are grown, sold or stored can assist the spread of some damaging microorganisms.</p>		

6.5 Cleaning and sterilisation Plant cultivation and management processes must be assessed, and safe cleaning and sterilisation practices are implemented.	<ul style="list-style-type: none"> • Cleaning and sterilisation procedures are in place where assessed to be required 	<ul style="list-style-type: none"> ▪ Personnel awareness and implementation of the management processes
	<ul style="list-style-type: none"> • Any effluent or debris that is produced as part of cleaning and sterilisation procedures is suitably managed 	
GUIDANCE Plant pests can be spread from one plant to another via personnel, tools and equipment. This can be directly, e.g. on pruning equipment, or indirectly, e.g. on water or soil carried on machinery. Routine cleaning and sterilisation of footwear, tools, machinery and other items used in the production or management of plants will reduce the spread of pests.		

6.6 Waste treatment and disposal All residues or waste materials must be assessed for the potential to host, harbour and transmit pests and treated accordingly	<ul style="list-style-type: none"> • There are management processes in place to minimise the risk of plant pests being harboured or spread from the site via residues and waste material 	<ul style="list-style-type: none"> ▪ Personnel awareness and implementation of the management processes
	<ul style="list-style-type: none"> • There are management processes in place to minimise the risk of plant pests being spread via onsite composting systems 	
GUIDANCE Plant pests and diseases can be transmitted onto, around or from a site on live plant material and other media that have come into contact with plant pests. Many of these pests (e.g. microorganisms) are not visible to the naked eye. All plant residues (e.g. clippings and prunings) and other waste materials (e.g. spent substrates, used pots and packaging material) should be assessed and managed accordingly. There is increasing evidence that waste heaps (e.g. growing media and plant material) can spread plant pests if not well designed and managed. Reusing or spreading residues such as spent growing media that has not been appropriately treated is a high-risk practice as it can spread pests on the site and the into wider environment. There are several viable options for plant waste disposal, with the cost, ease of use and efficacy of pest-kill differing between them. Some can be employed on-site e.g. composting or incineration (with relevant permits and/or exemptions in place). Others involve collection by a registered waste carrier followed by landfilling or treatment by waste management companies. While incineration on the nursery can be effective in killing pathogens, it can also be difficult with relatively wet wastes and can create smoke which is unacceptable to nursery workers and those living and working in surrounding areas.		

On-site composting is only effective where the process is well understood, well managed and results in all parts of the waste pile being subjected to high temperatures, at an appropriate moisture content for a sufficient length of time. Records (e.g. duration and temperatures reached) will help ensure and demonstrate that composting processes are effective.

Collection and treatment of horticultural wastes by a registered waste carrier followed by appropriate treatment by specialist waste management companies (through PAS100 accredited composting or incineration) is likely to prove the most effective way of removing disease threats

<p>6.7 Wider environment (including landscape plantings within the site) The wider environment and its potential impact on the health of plants on the site must be assessed.</p>	<ul style="list-style-type: none"> • An assessment of plant species planted on (non-cropped vegetation) and surrounding the site's boundary (including new and transient sites) is conducted periodically for pests and diseases 	<ul style="list-style-type: none"> ▪ Record of assessments
--	---	---

GUIDANCE
Plant pests can be transmitted to or from nearby vegetation. Plant pests can inadvertently be transmitted from plant material that has been cultivated on or is moved onto a site for growing on or planting. Knowing the pest threats to plants and trees growing on or in the immediate proximity to a site provides an opportunity to identify notifiable pests quickly and potentially control them before they spread further.

<p>6.8 Visitors The relevant rules related to plant health hygiene and housekeeping must be communicated to and complied with by visitors</p>	<ul style="list-style-type: none"> • Proportionate measures, based on the level of risk, are in place to minimise the risk of spreading pests on, around and off the site by visitors 	<ul style="list-style-type: none"> ▪ Appropriate measures such as signage, disinfection footbaths (where practicable) or prior information to visitors about the site rules are communicated in advance (e.g. website, contracts etc.)
	<ul style="list-style-type: none"> • Areas that are restricted for plant health reasons are clearly delineated and signposted 	

GUIDANCE
It is well known that visitors can bring plant pests onto a site. This can occur, for example, by visitors bringing plant material onto the site, on their footwear or on the vehicles they arrive in. The plant health rules for the site, where practicable, must be communicated to visitors before they reach the site, or when they arrive on site. Other proportionate measures must be implemented as required.

7. Plant Health Controls

REQUIREMENTS		HOW THIS IS ASSESSED
<p>PURPOSE: To prevent or identify and control quickly the spread of pests on a site or within supply chains with the aim of eradication</p>		
<p>7.1 Goods in There must be a procedure in place to ensure that incoming goods that have the potential to be infested or harbour pests are checked upon receipt CRITICAL</p>	<ul style="list-style-type: none"> • There is a procedure that details how a consignment or consignment in transit is checked upon receipt (on a main site or satellite sites) 	<ul style="list-style-type: none"> ▪ Personnel awareness and implementation of the procedure ▪ Sampling system methodology
	<ul style="list-style-type: none"> • If a sampling system is used, the rationale and methodology is documented 	
	<ul style="list-style-type: none"> • A procedure is in place to ensure that, where deemed necessary, plant material is quarantined in an isolated area and monitored 	
<p>GUIDANCE Where it is not practical or feasible to check every plant/product then a sampling system must outline and ensure the method is fit-for-purpose as to which plants/products are checked.</p> <p>Quarantine areas can be used (where deemed necessary) to ensure externally sourced plant material is well separated from other plants and monitored for a suitable time. The monitoring period will be determined by plant pest lifecycles, i.e. the time required for either tests to be conducted or for symptoms to emerge.</p>		

<p>7.2 Traceability (chain of custody) Traceability must be provided for all plant material sourced, grown and handled CRITICAL</p>	<ul style="list-style-type: none"> • The traceability system provides details and sources of all plant material 	<ul style="list-style-type: none"> ▪ Records available to identify where plant material has originated ▪ Records available to identify the commercial party the plant material has been supplied to
	<ul style="list-style-type: none"> • The traceability system allows a consignment or consignment in transit to be traced back to the original source to identify all commercial parties that have handled the plant material 	
	<ul style="list-style-type: none"> • The traceability system allows a consignment or consignment in transit to be traced forward to identify all commercial parties to which the plant material has been supplied 	

GUIDANCE

The traceability system in place should enable the business/organisation to identify key data in a timely manner in the event that infested plant material has been identified within the supply chain. The system should identify where plant material is sourced from (e.g. seed or mother plants) and if and when batches of live plants have been split for either the purposes of production or dispatch.

In Great Britain there is a GB Plant Passporting E-learning modules that provides traceability

7.3 Plant Protection Treatments

Records of all plant protection treatments, whether routine or following an interception or outbreak, must be kept

- Records outline all treatments that may either suppress or kill a notifiable pest

- Plant protection treatment records

GUIDANCE

Ensure records of all plant protection treatments are available to assist with any investigation regarding potential detections and spread of notifiable pests on a site.

Records of all treatments, such as pesticides, bio controls for native pests & diseases are useful as they help Defra Outbreak advisors understand what's been used – e.g. methods of application, frequency, concentration, if Extension of Authorisation for Minor Use (EMAUs) products are used, physical control methods. This information can help delimiting the area of statutory control.

7.4 Dispatch

Plant material must be checked prior to dispatch for plant health issues

CRITICAL

- There is a procedure that details how a consignment is checked prior to dispatch
- If a sampling system is used, the rationale and methodology is documented

- Personnel awareness and implementation of the procedure
- Sampling system methodology (if used)

7.5 Complaints, issues and returns

There must be a complaints management procedure for plant health issues.

- There is a record of complaints related to plant health issues and if it relates to a notifiable pest
- The complaints record details any withdrawal/recall/disposal procedures
- Records of any complaints and actions taken are reviewed at least annually

- Complaints Management Procedure
- Complaints record

8. Monitoring and Ongoing Plant Health Assessment

REQUIREMENTS		HOW THIS IS ASSESSED
PURPOSE: To identify and assist with the timely control and containment of notifiable pests		
8.1 Monitoring Plant material must be regularly monitored for plant health issues	<ul style="list-style-type: none"> Monitoring records are kept 	<ul style="list-style-type: none"> Monitoring records
GUIDANCE The monitoring regime and recording should be informed by the Site and Operations Pest Risk Analysis. This will help personnel understand what notifiable plant pest symptoms are being monitored for on individual species.		
PURPOSE: To internally assess the business/organisation's plant health and biosecurity		
8.2 Self-assessment A self-assessment against the Plant Health Management Standard must be completed at least annually	<ul style="list-style-type: none"> A record of the self-assessment is kept and details any non-conformances and corrective actions 	<ul style="list-style-type: none"> Self-assessment report
GUIDANCE There is a self-assessment tool available at: www.planthealthy.org.uk . This system can be used to conduct a self-assessment or assist in an internal audit of an enterprise against the Plant Health Management Standard.		
8.3 Continual Improvement Areas for continual improvement must be identified and acted upon	<ul style="list-style-type: none"> Details of identified improvements are recorded and implemented 	<ul style="list-style-type: none"> Evidence of implementation of improvements
GUIDANCE A commitment to continual improvement (procedural and/or practical) is part of the Site and Operations Pest Risk Analysis. As the threat posed by plant pests and diseases evolves, awareness and pro-action are necessary to help keep the risk of introducing or spreading infested plant material to a low and appropriate level.		
8.4 Detection of Notifiable Pests All notifiable pest interceptions and outbreaks (including incursions) must be recorded and a Root Cause Analysis conducted CRITICAL	<ul style="list-style-type: none"> A record of all notifiable pest detections and responsive actions is kept A root cause analysis with details of corrective actions 	<ul style="list-style-type: none"> Records of all detected notifiable pests and evidence of implementation of corrective actions Details of all statutory notices and outcomes in regard to plant health regulations

GUIDANCE

In the event that a notifiable pest is detected it is necessary to record: the plant pest species, the host plant(s) or plant material, where and when the pest was identified and who detected the pest. In addition, detail when and how Government inspectors were informed and record all steps taken in response to each notifiable pest detection.

Perform a Root Cause Analysis to determine how the interception or outbreak (including incursions) occurred. Log the process to demonstrate the analytical steps to identify the root cause of each pest issue and the changes made to the business or organisation to prevent the incursion occurring again.

9. Training and Recognition

REQUIREMENTS		HOW THIS IS ASSESSED
PURPOSE: To ensure suitably informed personnel are in place to manage the business/organisation's plant biosecurity systems		
9.1 Plant health competencies Training records of internal and external training must be maintained	<ul style="list-style-type: none"> • In the absence of formal qualifications, training is carried out to ensure all relevant personnel understand the principles of the Plant Health Management Standard • Continuing professional development (CPD) to maintain awareness of current plant health issues is undertaken and recorded for relevant personnel 	<ul style="list-style-type: none"> ▪ Training records ▪ Certificates of relevant courses
GUIDANCE https://planthealthy.org.uk/resources/plant-healthy-e-learning-modules Plant Passporting e-learning module - UK Plant Health Information Portal (defra.gov.uk) Royal Society of Biology Plant Health Professionals		

9.2 Legislation and keeping up to date The relevant person(s) responsible for plant health must demonstrate how they keep up to date with legislation and the latest plant health risks	<ul style="list-style-type: none"> • The relevant person stays up to date through National Plant Protection Organisation (NPPO) updates or similar 	<ul style="list-style-type: none"> ▪ Evidence that new plant pest information is accessed and acted upon
GUIDANCE If available, register for phytosanitary updates from the NPPO or access their website on a regular basis to ensure all new legislation is understood and implemented.		

<p>9.3 Information sharing Information and knowledge must be shared within the business to ensure all relevant personnel are aware of plant health issues and their management</p>	<ul style="list-style-type: none"> • The person(s) responsible for plant health are responsible for disseminating key information on plant health throughout the business/organisation 	<ul style="list-style-type: none"> ▪ Personnel awareness of plant health and how to report suspected issues
	<ul style="list-style-type: none"> • There are processes in place for any suspected plant health issues to be reported to the appropriate member of personnel 	
<p>GUIDANCE Information sharing may include use of reference material or information systems from the Plant Health Portal, induction checklist, personnel handbook, noticeboards, shared drives, team meetings, training workshops, end of season review.</p>		

Appendix 1 - Guidance for conducting a SOPRA – PHMS 4.1

Site and Operations Pest Risk Analysis (SOPRA)

This guidance will help you complete the SOPRA that is required under section 4.1 of the Plant Health Management Standard (PHMS).

The SOPRA supports you in assessing the risk of introducing and/or spreading notifiable plant pests. These are the plant pests that must be notified to the relevant plant health authorities as, if left uncontrolled, they could have devastating impacts to the economy and environment.

The aim of the SOPRA is to protect your site(s) and operations, as well as the people you trade with, and to minimise the chance of spreading notifiable plant pests to the wider environment.

Your goal is to reduce the risk to an appropriate level by putting in place effective management systems and controls.

The SOPRA will help you identify those notifiable pests that infest the plant species (hosts) that you grow, trade or handle, and other associated materials, that could be unwittingly moved on to, around and off your site.

Potential pathways that enable such pests to move include the movement of live plants, growing media, people, machinery, vehicles and packaging material.

Implementation of a Site and Operational Pest Risk Analysis (SOPRA)

The SOPRA can be applied to any size or number of sites where live plants are received, grown or dispatched.

Analysis process:

Step 1: Define the boundaries of the site(s) concerned and describe the operations. The site may be a permanent site, for example, the perimeter of a nursery, or a transient site such as a rented field or a client's garden.

Operations might include cultivation systems, intended markets, the people involved, materials used and equipment moving on and between sites. Maps showing the infrastructure and boundaries of the site(s) are useful, as are operational process flow charts. This will help identify critical points where pests could be introduced and spread.

Step 2: Compile a list of host plants with, as a minimum, the riskiest candidate of a species selected to represent each genus. The riskiest candidate is likely to be the largest specimen that a plant is grown or traded as, and /or based on the rooting format (for example, bare root plants are generally less risky than roots with growing media or soil attached, although there may be exceptions).

In certain cases, you may need to list more than one species from a genus, for example where a notifiable pest is unique to a single or subset of species within a genus. Materials that pests can travel on should also be listed and assessed.

Your focus should be on plants and materials that are moved onto and off the site. Plants and trees that are already growing on or around a site, for example within the garden or as part of an organisation's landscaping scheme, are covered in section 6.7 of the PHMS - Wider environment (including landscape plantings within the site).

Step 3: Based on the list of plants and materials compiled in step 2, identify the notifiable pests relevant to your organisation. The [Plant Healthy Certification Scheme \(SOPRA – requirement 4.1\) template](#) provides the basis for you to do this as it includes a group of high risk pests to GB. Once you have considered these pests you can add to the list as necessary so that you have covered all the

notifiable pest threats of concern to your organisation. You could consider approaching your local Plant Health Inspector for help in identifying any important pests associated with your stock and operations that you may have missed.

Step 4: Coupled with the identification of notifiable pests are the pathways on which such pests can potentially arrive, be spread within or moved from your site. These pathways could include, for example, the movement of water, growing media and soil, wood packaging material, machinery, equipment or footwear as well as on infested plants. You will need to identify and risk assess the key pathways that have the potential to transmit plant pests.

Step 5: You can now set out a table/framework (which may include risk matrices) that cross-relates the plant species / materials handled and the pathways with the highest-risk pests to the site(s) and operations. Risk ratings used should be adjusted to consider your organisation's unique situation. For example, if a host plant is grown or traded in large quantities then the risk rating for the associated pests may be increased as the potential risk will be significantly higher. This step is key as it enables the specific pests and pathways to be understood and levels of risk categorised.

Step 6: You now need to identify what existing control measures are in place, and where any new control measures can be applied, to minimise these pest risks. Your controls could include for example, not sourcing high-risk plants from regions where a pest is present or establishing quarantine areas and periods, depending on the life cycle of the identified pests.

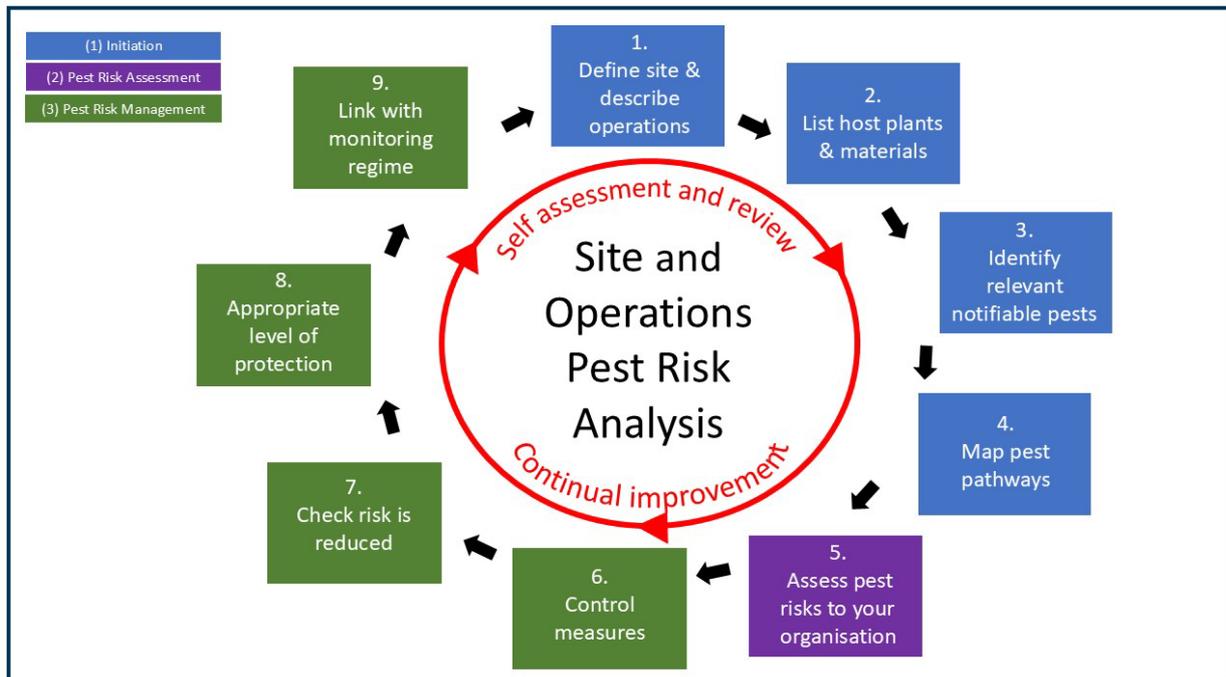
Step 7: Check and show how well the control measures you put in place work to reduce the chance of plant pests being introduced or spread. Your control measures should be reasonable and practical for your organisation.

Step 8: Summarise how an appropriate level of protection for your site(s) and related operations has been reached. Considering how all the control measures implemented, when combined, lead to an effective pest risk management approach.

Step 9: Link your pest monitoring regime (PHMS requirement 8.1) to your SOPRA. In this way you will make sure that the relevant personnel know about the notifiable pests and their symptoms that are relevant to your organisation.

NB: Lists of examples given in the above steps are not exhaustive.

SOPRA – Diagram of process flow



The use of risk assessment matrices in the SOPRA

A risk matrix is a tool used to determine:

1. The likelihood of the risk affecting the organisation.
2. The potential impact of that risk on the organisation.

As such, it is a useful aid to managing risk. In the case of the SOPRA we are looking at the likelihood and impact of notifiable pests.

Examples of risk matrices are demonstrated below in Table 1 and Table 2.

Table 1: Risk matrix - likelihood and consequences

Likelihood		Highly Likely	Likely	Unlikely	Highly Unlikely
Impacts of pest entry establishment and spread	High	High	High	High	Medium
	Medium	High	High	Medium	Low
	Low	Medium	Medium	Low	Low

Table 2: Risk table – assessing the risk associated with situations – examples

Risk situation (examples)	Likelihood of pest introduction	Impact of pest spread	Likelihood X Impact = Assessed Risk	List of controls to minimise risk	Re-assess risk with controls in place
Supply chain – plant pests introduced from other regions on live plants (national / international) - Awareness of supplier locations and the pests present in the area.	Highly unlikely ⇕ Highly Likely	Low ⇕ High	Low ⇕ High	A. B. C. Etc.	<u>Low</u> ⇕ High
Contractors / Machinery – risk associated with the introduction of plant pests on tools and machinery that are used on other sites.	Highly unlikely ⇕ Highly Likely	Low ⇕ High	Low ⇕ High	A. B. C. Etc.	<u>Low</u> ⇕ High
Growing media and soil – risk associated with the introduction of plant pests onto a site in growing media or soil.	Highly unlikely ⇕ Highly Likely	Low ⇕ High	Low ⇕ High	A. B. C. Etc.	<u>Low</u> ⇕ High

Useful link for Pest information - UK Plant Health Risk Register

The publicly available UK Plant Health Risk Register is a tool that government and industry can use to prioritise action against pests and diseases which threaten our crops, trees, gardens and countryside.

Plant pests not yet on the Risk Register may still be subject to plant health controls. The Plant Health Risk Register does not represent a comprehensive record of all pests of plant health concern; it is an evolving document to which more pests are added every month.

<https://planthealthportal.defra.gov.uk/pests-and-diseases/uk-plant-health-risk-register/>

Background information

The SOPRA process is based on two key risk management concepts that are applied to plant health and biosecurity:

Appropriate Level of Protection (ALOP) – World Trade Organisation.

Pest Risk Analysis (PRA) – International Plant Protection Convention.

These concepts are normally applied nationally, and in the case of PRA to a specific plant pest. The Plant Health Management Standard has adapted the principles of ALOP and PRA and applied these concepts to an organisation’s site or sites and its operations.

Appendix 2 – Details of updates to the Plant Health Management Standard v. 1.3.1

The following is the full list of the updates included in the Plant Health Management Standard - version 1.3.1:

- Requirement 1.1 - text added to include plant products.
- Requirements 1.2 and 1.3 – clarification on trading arrangements between Northern Ireland and Great Britain.
- Requirements 1.4 – (i) text added to provide details of the full name that the initialism OECD represents, i.e. Organisation for Economic Co-operation and Development. (ii) Link to the relevant OECD website added.
- Appendix 1 - Guidance for conducting a SOPRA – PHMS 4.1 – Clarifications and improvements made to the guidance and the associated tables and images.