

Notes - PHMS - Site and Operations Pest Risk Analysis - July 2025_PHMS V 1.3	Links																																		
<p>This template has been set up to assist with section 4 of the Plant Health Management Standard. The requirements can be found on page 14 of the Plant Health Certification Scheme Manual, with guidance in appendix 1 (page 25).</p> <p>N.B. The completion of this template is not essential to meeting requirements 4.1 and 4.2 of the Plant Health Management Standard, i.e. a business or organisation may use their own information management system to meet all of the sub-requirements covered by 4.1 and 4.2.</p>	https://planthealthy.org.uk/assets/images/Plant-Healthy-Certification-Scheme-Manual-V1.2-1.pdf																																		
<p>The template focuses on the plants and associated materials that are moved onto, around or off a site of horticultural operations in any one year. Plants that have been planted previously and are growing on or around a site (e.g. public gardens or landscaped areas) are covered under section 6.7 of the PHMS (page 19 of the Manual).</p>																																			
<p>From a plant trading perspective, this template, once completed for a horticultural site, will detail information on the priority and highest risk notifiable pests that could affect the plants, plant products and other object concerned and demonstrate that best practice measures and other actions required to prevent the presence and spread of notifiable pests are in place. This relates to <u>article 89 of Regulation (EU) 2016/2031</u> - Authorisation of professional operators to issue plant passports - see the link for more information.</p>	https://www.legislation.gov.uk/eur/2016/2031/article/89																																		
<p>The approach that this template takes is to start with the 22 priority pests on Schedule 1 of the New Annex to Commission Implementing Regulation (EU) 2019/1702. These are highlighted in purple on tab 4 - <i>Hosts (2) vs Pests (3)</i> - of this spreadsheet.</p>	https://www.legislation.gov.uk/ukdsi/2020/9780348213775/schedule/1																																		
<p>Following on from the priority pests is a list of 17 notifiable pests with a UK Plant Health Risk Register (UKPHRR) mitigated risk rating of 60 or above. These pests are highlighted in red.</p>	https://planthealthportal.defra.gov.uk/pests-and-diseases/uk-plant-health-risk-register/																																		
<p>A business or organisation can then look at other notifiable pests and diseases on the UKPHRR that are relevant to their site and operations and that have a mitigated risk rating of below 60.</p>	<table><tr><th rowspan="2">Rating</th><th colspan="5">Colour & score</th></tr><tr><th>Blue</th><th>Green</th><th>Yellow</th><th>Orange</th><th>Red</th></tr><tr><td>Likelihood, spread, impact, value at risk, etc.</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr><tr><td>Likelihood x impact</td><td>1-4</td><td>5-9</td><td>10-14</td><td>15-19</td><td>20-25</td></tr><tr><td>Overall UK risk rating</td><td>1-14</td><td>15-29</td><td>30-44</td><td>45-59</td><td>60-125</td></tr></table>						Rating	Colour & score					Blue	Green	Yellow	Orange	Red	Likelihood, spread, impact, value at risk, etc.	1	2	3	4	5	Likelihood x impact	1-4	5-9	10-14	15-19	20-25	Overall UK risk rating	1-14	15-29	30-44	45-59	60-125
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<p>This template effectively presents a framework to identify and monitor the points of plant production or management processes, and the points concerning the movement of plants, plant products and other objects that are considered critical. This relates to <u>article 91 of Regulation (EU) 2016/2031</u> - pest risk management plans - see the link for more information.</p>	https://www.legislation.gov.uk/eur/2016/2031/article/91																																		
<p>This SOPRA is a process flow, meaning that the steps are intended to follow a sequence. The SOPRA is also an ongoing process, thereby providing a framework for continual improvement - <u>this template is intended as a starting point to enable you to adapt the SOPRA process to your site and related operations.</u></p>																																			
If you are viewing this document as a PDF - please contact us using this link to request a Excel version of this document																																			

Name of applicant – Site and Operations Pest Risk Analysis




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July 2025_PHMS V 1.3

Date: **XXXX**

Checklist against Plant Healthy Certification Scheme Manual – PHMS 4.1 and PHMS 4.2

Item	PHMS 4.1 Sub – requirements	Location in spreadsheet	Notes for updates to SOPRA PHMS 4.2	Date of update
1	<i>Site and operations - the site(s) boundaries and relevant operations are defined</i>	See and complete tab 3 of this spreadsheet- 'Site Map and Description'	Update this document as the production area expands and additional operations are implemented	
2	<i>Susceptible host plants - A list of host plants that are grown or managed and susceptible materials</i>	See tab 4 of this spreadsheet ('Hosts vs Pests'), row 8	Update spreadsheet to add new plant genera or remove any no longer applicable	
3	<i>Notifiable pests – A framework that details the relevant notifiable pests</i>	See tab 4 of this spreadsheet ('Hosts vs Pests'), rows 4-5 - grey out any columns not applicable to trees and plants handled by you	Update spreadsheet with new information on notifiable pests of the plant genera grown. See tab Ref (C) ('Sources for Updates')	
4	<i>Pest Pathways - An assessment of relevant pathways for pests to potentially arrive, move around or leave the site</i>	See tab 8 of this spreadsheet ('Pathways & measures') to identify pathways for relevant pests - amend tab 5 of this spreadsheet ('Pathways') for the pathways relevant to your business / site and add appropriate control measures (Tab Ref (B) contains examples)	Check through the list of pathways and operational areas and add any new areas of operation	
5	<i>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</i>	Tab 4 ('Hosts vs Pest) includes UK relative risk rating for each pest/disease. Tab 5 ('Pathways') has risk associated with each pathway- amend if applicable	Review risk levels each year	
6	<i>Controls - Measures are implemented that aim to mitigate the specific pest risks identified</i>	Tab 5 ('Pathways') shows general control measures by pathway and Tab Ref (B) ('pathways & measures') shows pest/disease- specific actions in coloumn AC- add to line 10 of Tab 4 ('Hosts v Pests')	Review the effectiveness of the controls each year	
7	<i>Managed risk – How the controls minimise the levels of risk</i>	Based on the controls identified in the previous step, update tab 4 ('Hosts v Pests'), row 11. (Line 12 may be used for any additional notes specific to your operation)	Review the effectiveness of the controls each year	
8	<i>Appropriate Level of Protection (ALOP) - Justification of how ALOP is comprehensively achieved and maintained for all aspects of the site(s) and operations</i>	See tab 6 of this spreadsheet ('ALOP & Monitoring')- complete the declaration	Assess systematically each year	
9	<i>Monitoring of the site - A monitoring regime is in place that is linked to the SOPRA</i>	See tab 6 of this spreadsheet ('ALOP & Monitoring')- complete the declaration	Ensure any monitoring procedure is updated to include any new host plants or pests	

Disclaimer - the aim of this template is to support professional operators who handle live plant material to understand and demonstrate key notifiable pests that are relevant to their business or organisation. The use of this template does not provide comprehensive evidence that all relevant notifiable pests have been controlled for a given site. Please note that the pest information contained in this template may not cover all hosts / pathways and users of this template should also conduct their own research and assessments into the relevant notifiable pests for their site and operations.

<u>Name of applicant</u> – Site and Operations Pest Risk Analysis	<div data-bbox="1032 164 1111 236"></div> <div data-bbox="958 244 1216 261">©Plant Healthy Limited - July 2025_PHMS V 1.3</div>	Date: <u>XXXX</u>
<p>Description of the site and operations: (Note: this, and the site plan, may be added to a separate, Word document if preferred)</p>		
<p>Insert plan of site here</p>		

Map that shows the extent of the site and the various component parts / infrastructure - e.g. glasshouses, fields, packhouses etc.

[illegible]

<i>Phytophthora ramorum</i>	<i>Agilus bilineatus</i>	<i>Acute oak decline</i>
Ramorum disease	Two-lined chestnut borer	Acute Oak Decline
Oomycete	Insect	Other
Present	Absent	Present (Limited)
<p><i>Acer circinatum</i>; <i>Acer davidii</i>; <i>Acer laevigatum</i>; <i>Acer macrophyllum</i>; <i>Acer pseudoplatanus</i>; <i>Aesculus hippocastanum</i>; <i>Arbutus menziesii</i>; <i>Arbutus unedo</i>; <i>Arctostaphylos manzanita</i>; <i>Arctostaphylos uva-ursi</i>; <i>Ardisia japonica</i>; <i>Betula pendula</i>; <i>Calluna vulgaris</i>; <i>Calycanthus occidentalis</i>; <i>Camellia</i>; <i>Castanea sativa</i>; <i>Ceanothus thyrsiflorus</i>; <i>Cercis chinensis</i>; <i>Choisya ternata</i>; <i>Cornus capitata</i>; <i>Cornus kousa</i>; <i>Corylopsis spicata</i>; <i>Corylus cornuta</i>; <i>Drimys winteri</i>; <i>Eucalyptus haemastoma</i>; <i>Fraxinus excelsior</i>; <i>Fraxinus latifolia</i>; <i>Garrya elliptica</i>; <i>Gaultheria procumbens</i>; <i>Gaultheria shallon</i>; <i>Griselinia littoralis</i>; <i>Hamamelis intermedia</i> (H. x intermedia); <i>Hamamelis mollis</i>; <i>Hamamelis virginiana</i>; <i>Heteromeles arbutifolia</i>; <i>Ilex aquifolium</i>; <i>Ilex latifolia</i>; <i>Kalmia angustifolia</i>; <i>Larix</i>; <i>Larix kaempferi</i>; <i>Laurus nobilis</i>; <i>Leucothoe axillaris</i>; <i>Leucothoe fontanesiana</i>; <i>Lithocarpus densiflorus</i>; <i>Lithocarpus glaber</i>; <i>Lonicera hispidula</i>; <i>Magnolia acuminata</i>; <i>Magnolia delavayi</i>; <i>Magnolia denudata</i>; <i>Magnolia grandiflora</i>; <i>Magnolia kobus</i>; <i>Magnolia salicifolia</i>; <i>Magnolia stellata</i>; <i>Magnolia x soulangeana</i>; <i>Nerium oleander</i>; <i>Nothofagus obliqua</i>; <i>Osmanthus decorus</i>; <i>Osmanthus delavayi</i>; <i>Osmanthus fragrans</i>; <i>Osmanthus heterophyllus</i>; <i>Parrotia persica</i>; <i>Photinia fraseri</i> (<i>Photinia x fraseri</i>); <i>Pieris floribunda</i>; <i>Pieris japonica</i>; <i>Pittosporum undulatum</i>; <i>Prunus laurocerasus</i>; <i>Prunus lusitanica</i>; <i>Pseudotsuga menziesii</i>; <i>Pyracantha koidzumii</i>; <i>Quercus</i>; <i>Quercus acuta</i>; <i>Quercus agrifolia</i>; <i>Quercus cerris</i>; <i>Quercus chrysolepis</i>; <i>Quercus falcata</i>; <i>Quercus ilex</i>; <i>Quercus kelloggii</i>; <i>Quercus petraea</i>; <i>Quercus phillyraeoides</i>; <i>Quercus robur</i>; <i>Quercus rubra</i>; <i>Rhododendron</i>; <i>Rhododendron ponticum</i>; <i>Ribes laurifolium</i>; <i>Rosa gymnocarpa</i>; <i>Rosa rugosa</i>; <i>Rubus spectabilis</i>; <i>Salix caprea</i>; <i>Schinus argentea</i>; <i>Schima wallichii</i>; <i>Sequoia sempervirens</i>; <i>Syringa vulgaris</i>; <i>Taxus baccata</i>; <i>Taxus brevifolia</i>; <i>Taxus x media</i>; <i>Torreya californica</i>; <i>Tsuga heterophylla</i>; <i>Umbellularia californica</i>; <i>Vaccinium intermedium</i>; <i>Vaccinium myrtillus</i>; <i>Vaccinium ovatum</i>; <i>Vaccinium vitis-idaea</i>; <i>Viburnum</i>; <i>Fagus sylvatica</i>; <i>Castanopsis orthacantha</i>; <i>Adiantum jordanii</i>; <i>Clintonia andrewsiana</i>; <i>Distylium myricoides</i>; <i>Dryopteris arguta</i>; <i>Osmorhiza berteroi</i>; <i>Vancouveria planipetala</i></p>	<p><i>Castanea dentata</i>; <i>Quercus alba</i>; <i>Quercus coccinea</i>; <i>Quercus ellipsoidalis</i>; <i>Quercus lyrata</i>; <i>Quercus macrocarpa</i>; <i>Quercus marilandica</i>; <i>Quercus michauxii</i>; <i>Quercus muehlenbergii</i>; <i>Quercus prinus</i>; <i>Quercus rubra</i>; <i>Quercus shumardii</i> var. <i>texana</i>; <i>Quercus stellata</i>; <i>Quercus velutina</i>; <i>Quercus virginiana</i></p>	<p><i>Quercus</i>; <i>Quercus ceris</i>; <i>Quercus ilex</i>; <i>Quercus petraea</i>; <i>Quercus pyrenaica</i>; <i>Quercus robur</i></p>
80	75	75

[illegible]

Name of applicant – Site and Operations Pest Risk Analysis					Date: XXXX
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The risk assessment matrix on page 28 of the PHCS manual had been used to assess the risk [5] for each pathway / operational area.					
Pathway / operation [4] - examples below to assist with a SOPRA (i.e. add or remove pathways as necessary)	Likelihood	Consequences of pest entry establishment and spread	Description and assessment of risk based on likelihood X consequences [5]	Control [6] (examples only - applicant / member to enter own information)	Risk re-assessed with control in place [7]
Seeds	Unlikely	Medium	Medium risk -some plant pests and diseases can be transferred on seeds	Seeds will either be sourced from pathogen-free areas or treated in a way which is known to eliminate the risk. Name of applicant sources from XXXXXX, all who have provided a plant biosecurity policy statement.	Low
Cuttings	Unlikely	Medium	Medium risk -Some plant pests and diseases can be transferred on vegetative cutting material	Cuttings are taken from stock plants are grown on site and are periodically monitored for the presence of pests and diseases.	Low
Imported plants	Likely	High	High risk - it is widely acknowledged that a high risk pathway for plant pests to moved from one region to another is via live plant supply chains.	Name of applicant only sources plants from UK businesses, all of which have been assessed as per section 5 of the Plant Health Management Standard. Or Name of applicant ensures that all special requirements for the species of plants which are being imported are met and all suppliers have been assessed as per section 5 of the PHMS.	Low
Growing Media - includes all growing media constituents e.g. sand, perlite, bark, soil.	Likely	High	High risk - some plant pests can be transferred on the ingredients of growing media.	Suppliers of growing media have provided statements relating to their biosecurity policies. Records are kept for each batch of growing media, and samples of each batch are kept at the nursery in case of the need for future testing. Suppliers have demonstrated that they have a testing regime in place and provide results to name of applicant.	Low
Wood Packaging Material (WPM)	Highly unlikely	High	Medium risk - certain notifiable plant pests can be transmitted on untreated WPM.	Check that all WPM from international sources is ISPM 15 compliant. Name of applicant buys goods in for both resale and nursery use. These goods are routinely delivered on pallets. All pallets should be heat treated (stamped HT) or be GKN blue pallets which are treated and routinely inspected. Pallets delivered to site should be visually inspected for evidence of pests/boring and that inspection recorded on the Goods In Record Sheet.	Low
Stakes	Highly unlikely	Medium	Medium - certain notifiable plant pests can be transmitted on untreated timber stakes.	name of applicant has reviewed the suppliers biosecurity policy and deliveries should be routinely inspected as a precaution and inspections recorded on the Goods In Record Sheet.	Low
Other packaging material	Highly unlikely	Medium	Low risk - Be aware of plant pests and diseases on packaging material	Checks conducted as required.	Low
Tools, equipment and machinery	Unlikely	Medium	Medium - risk of transmitting pests on tools, equipment and machinery from other sites	The manager has responsibility for ensuring that all equipment is periodically cleaned from a biosecurity perspective. Staff clean their clothing and boots and drivers clean their vehicles.	Low
People and vehicles	Unlikely	Medium	Medium - risk of transmitting pests on people and vehicles from other sites	The manager has responsibility for ensuring that all staff are briefed on the threat of transmitting plant pests on clothing and footwear and that facilities and checks are in place for staff to clean their footwear and outer clothing. Vehicles and drivers from medium to high risk sites (i.e. other nurseries or planting sites) are made aware of the risks and asked to clean their vehicles if required - checks will be carried out and staff will remain vigilant.	Low
Staff - General	Unlikely	Medium	Medium risk - plant pests carried on from footwear and clothing from other sites (e.g. other nurseries, gardens and woodlands)	Staff can control their biosecurity risk in two ways: either by having dedicated 'nursery' footwear which never leave the nursery so cannot introduce pathogens; or by cleaning footwear and clothing regularly and certainly after any visits or work on other nurseries, gardens, farms or woodlands.	Low
Staff - conducting high-risk activities	Likely	Medium	High risk - Where staff may be required to visit other nurseries or planting sites	Staff must carry a biosecurity kit in their car containing water, scrubbing brushes and disinfectant which should be used before and after every visit. FC guidance on washing should be followed. All vehicles should be washed down, preferably before returning to the nursery.	Low
Visitors	Likely	Medium	Medium risk - plant pests carried on from footwear and clothing from other sites (e.g. other nurseries, gardens and woodlands)	All visitors must report to reception upon arrival where they will receive a biosecurity and site safety brief. They will be required to wash all footwear using the water/disinfectant facilities provided IF they have recently visited another nursery or been near a forest in an area suspected of harbouring a plant pest harmful to the trees grown at NAME OF APPLICANT. They will also be required to wash if their footwear or clothing is noticeably holding a mud. The movement of all visitors' cars will be restricted to the car park so they do not move into production areas. However, any vehicle which moves into production areas will need to have all mud and debris washed off the wheels, arches and underbodies using the vehicle washbay.	Low
Surrounding Environment.	Likely	High	High risk - from spread of pests and diseases across landscapes (e.g. Ash dieback, Phytophthora ramorum and Oak Processionary Moth)	The Nursery Manager will carry out inspections of plants surrounding the site (as per PHMS requirement 6.7). An inspection record will be created and recorded. Where a specific plant species is known to harbour a plant pest harmful to species being grown at NAME OF APPLICANT, a plan will be drawn up to control that threat.	Low / medium
Water (irrigation)	Highly unlikely	Low/medium	Low / medium risk - depending on the source of water	Water tests for both pathogens and water quality, trace elements etc are periodically carried out if the results of the risk assessment indicate that water tests are a suitable monitoring measure.	Low
Water (drainage)	Unlikely	Medium	Medium risk - pests and diseases (particularly oomycetes e.g. Phytophthora species)	Monitor the site for wet areas over the course of the first growing season and assess if any changes need to be made to cultivation techniques etc. for year 2.	Low
Waste material - growing media, plant material.	Likely	Medium	High risk - plant pests can proliferate and be spread in contaminated waste material	Assess waste storage and management systems for potential to harbour and proliferate plant pests - ensure that suspect waste plant material, growing media and packaging are suitably stored and disposed of (there is a licence/permit/exemption to burn infected material on the site).	Low
Waste pots, packaging material and other items	Unlikely	Medium	Medium risk - pests and diseases can spread from the sites on waste material as eggs or resting spores.	Very limited other types of packaging material used - assess waste storage and management systems for potential to harbour plant pests - ensure that any waste materials are suitably stored and disposed of.	Low

<u>Name of applicant</u> – Site and Operations Pest Risk Analysis	 ©Plant Healthy Limited July 2025 _PHMS V 1.3	Date: <u>XXXX</u>
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[8] Appropriate Level of Protection (ALOP) - statement of how ALOP is comprehensively achieved and maintained for all aspects of the site(s) and operations

Preventing the spread of notifiable pests
The primary control method for harmful pests and diseases is to prevent their movement onto the nursery in the first place, i.e. through precautionary measures.

ALOP – **EXAMPLE** STATEMENT
Name of applicant have established a system that aims to identify high risk notifiable pests relevant to name of applicant. This aligns with regulations regarding the knowledge required for professional operators to issue plant passports see: Article 89 1. (a) of regulation 2016/2031 on protective measures against pests of plants. I.e. professional operators are required to possess the necessary knowledge to carry out the examinations concerning quarantine pests or protected zone quarantine pests and regulated non-quarantine pests that could affect the plants, plant products and other objects concerned, and concerning the signs of the presence of those pests and the symptoms caused by them.

The SOPRA for name of applicant has systematically assessed the site and all associated operations with the site – plant pest identified as high risk have been assessed and minimised to appropriate levels. All Annex 1 Priority Pests and pests with a UK Plant Health Risk Register (UKPHRR) mitigated risk rating of 60 and above relevant name of applicant have been assessed.

The controls and monitoring processes (as per the PHMS requirements) will assist in picking up observable symptoms of pests in the lower mitigated risk rating categories or pests that are (as of yet) not on the UKPHRR.

Name of applicant staff will remain vigilant and continually assess the site and operations especially when new species are handled and grown, or new operational pest pathways are identified. This will be a process of continual improvement that will lead to periodic (at least annual) updates to this SOPRA framework.

The person responsible XXXXXX is confident that all pest risks have been identified and all risks have been minimised to a LOW level where possible. The pests that have not been assessed as LOW level risks are considered as such due to either: (i) aspects of their control being beyond the control of name of applicant or (ii) the need for better information (which will be sought as part of the continual improvement process).

[9] The host pests and diseases that have been identified are monitored for on a regular basis.

Monitoring - **EXAMPLE TEXT** : A member of the name of applicant management team has the additional role of Biosecurity Supervisor with specific responsibility for monitoring all crops for signs of pests and diseases. However, all relevant staff are appropriately trained and have continual monitoring obligations.

name of applicant management team ensures that a weekly walk around of the site to observe any pest and diseases so that I can action quickly to avoid any unnecessary spread.

The following is a list of sources for keeping to up to date and for extending the range of pests to include in your SOPRA:

The Plant Health Risk Register is a live document so is worth checking periodically, and can also be used to add additional pests with a mitigated risk rating of less than 60 if you wish. It can be downloaded in its entirety to sort the data:

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

Regularly updated data on the pests actually being intercepted, and on which host plants, for you to decide if they are important to you, is at:

<https://planthealthportal.defra.gov.uk/trade/imports/alert-list/>

The new Plant Health Information Service was designed specifically for importers but can still be a useful search tool for associated pest risks and links to pest fact sheets:

<https://check-plant-health-information.service.gov.uk>

The latest plant passporting bulletins are at:

<https://planthealthportal.defra.gov.uk/resources/plant-passport-updates/>