



The Food and Environment  
Research Agency

## Plant Health Propagation Scheme

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- The Plant Health Propagation Scheme (PHPS) is a voluntary scheme run by The Food and Environment Research Agency (Fera)
- It aims to promote the production and use of healthy, proven planting stock.
- It covers: soft fruit – strawberries, berry fruit, currants;  
top fruit – apples, pears, cherries, plums;  
hops;
- This leaflet describes **how** the PHPS works. It should be of interest to those wishing to grow certified material, or wanting to know about the **benefits** of using PHPS stock in commercial plantations. Your Fera Plant Health and Seeds Inspector will be happy to provide further details (there are 'special conditions' leaflets for each category of material) and to discuss the PHPS with you. Contact details for all our offices are available on the Fera website at [www.defra.gov.uk/fera/contactUs/contactPIh.cfm](http://www.defra.gov.uk/fera/contactUs/contactPIh.cfm)



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

## **Purpose of the Scheme**

1. The Scheme aims to provide commercial growers with planting material descended from stock that is proven both in terms of health and vigour.

## **How does the PHPS work?**

2. Material entered into the Scheme must be of known lineage, except that entered at the very lowest grade (*Approved-Health*). All material must be grown under specific conditions with regard to site and isolation from other crops. During the course of the year, the crop will be inspected at least once by the local Fera Plant Health and Seeds Inspector. The frequency and timing of inspections vary and are set out in the special conditions leaflets, as are levels of tolerances for the different diseases. Assessments are normally made on the basis of visual examinations, but samples may be taken for laboratory analysis in order to provide a definitive diagnosis.
3. The highest grade material is produced under very strict conditions. It is then multiplied up through the various grades (see paragraph 10) until it is available for use by commercial growers.

## **Certification**

4. If the crop meets all the required conditions, a numbered certificate will be issued. The period of the certificate's validity is given in the special conditions leaflets.

## **What are the advantages of buying PHPS material?**

5. Material certified under the Scheme is issued with a certificate endorsing its health status and, if appropriate, its trueness to variety. We cannot guarantee that every plant certified under the PHPS will be completely free from pests or diseases – no practical, cost effective certification scheme could do that. However, PHPS plants are grown under strict conditions which provide valuable plant health assurances.

## **Scheme Conditions**

6. There are minimum husbandry standards which are generally applicable, such as the need to keep material entered into the Scheme reasonably free from weeds, pests and diseases, and to maintain hedges properly (in order to reduce the risk of fireblight or plum pox infection, in the case of top fruit). In certain cases, soil sampling for virus vectors is a pre-planting requirement; and conditions are imposed on the growing medium used for plants propagated under cover. If you need further clarification, your local Fera Plant Health and Seeds Inspector will be happy to discuss with you the suitability of proposed sites.

7. Land that is known to have been infected by Rhizomania, red core disease of strawberries, or verticillium wilt disease of hops or is under notice for potato cyst nematode and wart disease of potatoes may not be used to produce PHPS material.

8. Further advice on the hygiene measures to be followed by PHPS participants is attached at the Annex to this leaflet.

## **Eligible material**

9. The categories eligible for entry into the Scheme are described on the front page of this leaflet. In addition, rootstocks and ornamental varieties associated with top fruit may be submitted for certification. Micropropagated material (of any crop) is also eligible. If there is a category of material you would be interested in having certified under the PHPS that is not mentioned here, please contact your local Fera Plant Health and Seeds Inspector.

## **Grades**

10. Crops are entered to produce a specific grade and will normally be certified in that grade if all the conditions of the Scheme are met. In descending order, the main grades are:
  - Foundation
  - Super Elite
  - Elite
  - A

11. These grades are normally inspected for trueness to type i.e. for conformity with varietal and clonal characteristics. Where this is not possible, a Nominal (N) grade may be available for some categories.

12. In certain circumstances, there is also available an *Approved-Health* (A-H) grade, which is inspected for health and vigour only.

## **Who can enter crops?**

13. Any grower in England and Wales who can meet both the general conditions for entry and the specific conditions for the crop concerned. Your local Fera Plant Health and Seeds Inspector can supply copies of the special conditions leaflets and application forms, and will be happy to advise you about the Scheme.

14. You do not have to enter all the material grown on your holding for certification, but all material entered must meet all the Scheme's requirements in relation to such as isolation distances, and be clearly identifiable from material that is not entered into the Scheme.

## **Applying to join**

15. Your local Fera Plant Health and Seeds Inspector can supply an application form for the material you wish to enter into the Scheme.

## Acceptance of Conditions

16. Applications to enter crops for certification are accepted on the understanding that the grower agrees to both the general conditions of the Scheme and to the conditions set out in the appropriate special conditions leaflet. A complaints procedure, if necessary is described in the Fera Customer Charter, which is available at [www.defra.gov.uk/fera/news](http://www.defra.gov.uk/fera/news).
17. Normally, the same general and specific conditions will apply each year. Whenever possible, any proposed major changes will be discussed first with representatives of the industry, although it may be necessary to make some changes at short notice.

## Records of disposal of Certified Stock

18. Growers are required to maintain records of the disposal of stock covered by certificates and make these records available to Fera on request. They should show the date of disposal, consignee, grade, variety, certificate number and quantity.

## Advertising

19. Growers are asked to take due care when advertising stock: for example, material that has not yet been certified should be described as "entered for certification". Where certified and uncertified material is being supplied from the same holding, potential purchasers **must** be made aware of the status of what they are buying.

## Disclosure

20. The information you provide will be used for the processing of your application. Details will be held in our computer system and may be used to compile statistics on activity in your sector and to inform Fera Plant Health and Seeds Inspectors, Defra, other Government Departments or their appointed agents of the location of growing crops in emergency situations, such as a pest outbreak. It may also be used by Fera for scientific research.
21. Fera may be required to release information, including personal data and commercial information, on request under the Environmental Information Regulations, the Code of Practice on Access to Government Information or the Freedom of Information Act 2000. However, Fera will not permit any unwarranted breach of confidentiality nor will we act in contravention of our obligations under the Data Protection Act 1998.
22. Fera, Defra or its appointed agents may use the name, address and other details on your application form to contact you in connection with occasional customer research aimed at improving the services that Fera provide to you.

23. We may produce a register of growers and stocks entered in the Scheme for certain types of crop (e.g. soft fruits) taking information from the application forms. The register, and information from it, would be made publicly available on request. The register would give the grower's name and address, the grade and area (or number of plants) entered, and, where appropriate, the variety of the crop. Details may also be made available of stocks certified under the Scheme.
24. Register(s) are produced to provide PHPS participants and their customers with comprehensive details of stocks entered/certified in the scheme and you are encouraged to allow your details to be included. However, if you do **not** want this information to be entered on a register, please tick the box on the application form.

## Charges

25. A standard hourly rate (£81.00 + VAT) is charged, based on the time inspectors spend on your premises. The minimum initial charge is for half an hour of the Fera Plant Health and Seeds Inspector's time. Any additional time on the premises is charged in units of a quarter of an hour.
26. Invoices must be paid promptly. If necessary, legal action will be taken to recover unpaid charges.

## Serious pests and diseases

27. **Important:** Participation in the Plant Health Propagation Scheme does not affect the grower's responsibilities under, in England, the Plant Health (England) Order 2005, or in Wales, the Plant Health (Great Britain) Order 1993 (as amended). Growers who become aware of, or suspect the presence on their premises of, any quarantine pests or diseases **must** notify their local Fera Plant Health and Seeds Inspector **immediately**.

## Plant Breeders' Rights

28. Plant breeders' rights are not affected by the terms and conditions of the PHPS.

## Liability

29. It is a condition governing acceptance of applications by Fera and the Welsh Assembly Government (WAG) that no liability shall attach to Fera or the WAG or any of their officers in connection with any inspection carried out, or in respect of certificates or reports which are based on the result of the examination of material or in any other way in connection with the operation of these arrangements, for inspection and classification, and the act of application for a certificate shall be deemed to imply acceptance by the applicant of this condition.

## Advice on hygiene measures for PHPS soft fruit propagation nurseries

This advice has been prepared for PHPS growers to help prevent the introduction or spread of soft fruit diseases into propagation nurseries as far as practically possible. In particular, it is aimed at minimising the spread of strawberry blackspot and soil-borne diseases such as strawberry red core, verticillium wilt and raspberry root rot.

### ***Strawberry black spot (Colletotrichum acutatum):***

This disease is mainly transmitted by movement of people, machinery, debris or movement of latently infected plants. The spores are also known to survive on surfaces such as hands, machinery and clothing for at least a few hours. The following measures are advised:

- visitors (e.g. advisors or grower customers) or workers (e.g. de-blossoming staff etc.) should not have visited other strawberry growers on the same day;
- visitors and all staff should be restricted to necessary areas and to wash hands with soap and water between visiting different strawberry crops on the farm;
- movement of machinery or visitors and staff should be from the areas of lowest risk first (e.g. high grade propagation crops) to areas of highest risk (e.g. lower grade crops, A-H grade and fruiting crops). Fruiting crops should not be visited before going into propagation beds unless very strict hygiene measures are undertaken;
- remove soil and debris from footwear or use disinfectant pads or disposable gloves/footwear;
- machinery should preferably be cleaned of debris and washed down with disinfectant between crops, and is strongly advised after visiting fruiting crops;
- try to limit spread of debris and remove from field if possible for burning or deep burial;
- do not use paraquat or glyphosate to remove runners or weeds as this encourages sporulation of the fungus;
- avoid overhead watering, if possible irrigate from underneath;
- comply with the Fera Plant Health Code of Practice for the management of agricultural and horticultural waste (this is available in electronic format only and can be viewed on the Fera website at [www.defra.gov.uk/fera/plants/publications/plantHealth/documents/copManagementWaste.pdf](http://www.defra.gov.uk/fera/plants/publications/plantHealth/documents/copManagementWaste.pdf); Paper copies are available on request);
- gapping-up should be carried out only in accordance with PHPS requirements and with the prior approval of the Fera Plant Health and Seeds Inspectors; in particular, only eligible material of an equivalent grade must be used; and
- keep weeds to a minimum as they can act as a source of infection.

## ***Soil-borne diseases of soft fruit***

A number of important diseases of soft fruit are primarily soil borne such as strawberry red core, verticillium wilt, raspberry root rot and certain nematodes that can spread virus diseases. If these diseases or vectors are absent or restricted to certain areas within the farm measures can be taken to limit spread. Any means that will minimise spread of soil around the farm will help:

- recognise that travel between farms is a risk and do not take vehicles or farm machinery onto neighbour's fields unless necessary;
- fields known to be infected on the farm should be visited last and machinery washed clean of soil after visiting infected fields or those potentially contaminated;
- remove soil and debris from footwear or use disinfectant pads or disposable gloves/footwear;
- use only certified planting material from a reputable source;
- contractors vehicles for farm work, road building, pipe laying etc. should comply with the Environment Agency guidance on this work ( a series of guidance notes are available on their website at [www.environment-agency.gov.uk/business/default.aspx](http://www.environment-agency.gov.uk/business/default.aspx)) and any soil should be returned to the original field and not spread on other fields; and
- comply with the Fera Code of Practice for the management of agricultural and horticultural waste (this is available in electronic format only and can be viewed on the Fera website at [www.defra.gov.uk/fera/plants/publications/plantHealth/documents/copManagementWaste.pdf](http://www.defra.gov.uk/fera/plants/publications/plantHealth/documents/copManagementWaste.pdf); Paper copies are available on request).