

## EU certification scheme fruit plants

# Explanatory guide to black currants, red currants, white currants and gooseberries (*Ribes*)

December 2017

### Contents

|                                                                               |   |
|-------------------------------------------------------------------------------|---|
| 1. Introduction.....                                                          | 1 |
| 2. Applications .....                                                         | 1 |
| 3. Labelling / sealing / supplier and variety registration .....              | 1 |
| 4. Grades and stock eligibility .....                                         | 1 |
| 5. Freedom from quarantine diseases .....                                     | 2 |
| 6. Soil sampling requirements .....                                           | 2 |
| 7. Isolation distances for field grown material .....                         | 3 |
| 8. Spacing.....                                                               | 4 |
| 9. Aphid proof gauze house production and isolations .....                    | 4 |
| 10. Roguing.....                                                              | 5 |
| 11. Bulking up .....                                                          | 5 |
| 12. Gapping up .....                                                          | 5 |
| 13. Number of inspections .....                                               | 5 |
| 14. Validity of certificates .....                                            | 5 |
| 15. Summary of pest and disease tolerances, sampling and testing .....        | 6 |
| 16. Record keeping (critical points plan) .....                               | 8 |
| 17. Requirements for pre-basic plant material .....                           | 8 |
| 18. Required methods of testing for diseases for pre-basic <i>Ribes</i> ..... | 9 |

# 1. Introduction

This document is a guide to *Ribes* certification taken from the implementation of Council Directive 2008/90/EC and its Commission Implementing Directives 2014/96/EC, 2014/97/EC and 2014/98/EC.

## 2. Applications

The scheme is open to any grower in England and Wales who can meet the general conditions for entry and comply with the specific conditions of entry. Applications for entry of material to be submitted through the approved administrator, presently the Nuclear Stock Association Limited. Visit <http://nsa-plants.co.uk>

Growers will need to apply to APHA and be registered as producers under the scheme.

## 3. Labelling / sealing / supplier and variety registration

Refer to separate documents covering labelling, sealing, supplier and variety registration.

## 4. Grades and stock eligibility

### New plantings:

| GRADE                  | PARENT MATERIAL                                             |
|------------------------|-------------------------------------------------------------|
| Pre-basic mother plant | Any variety certified at Pre-basic or a candidate Pre-basic |
| Basic 1                | Pre-basic                                                   |
| Basic 2                | Pre-basic, Basic 1                                          |
| Basic 3                | Pre-basic, Basic 1, Basic 2                                 |
| Certified              | Pre-basic, Basic 1, Basic 2, Basic 3                        |

### Established stool beds:

| GRADE   | PARENT MATERIAL                                                                         |
|---------|-----------------------------------------------------------------------------------------|
| Basic 1 | Basic 1 grade in the previous year<br>Beds eligible for a maximum of 6 years at Basic 1 |

|           |                                                                                                                                             |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Basic 2   | Basic 1 or Basic 2 grade in the previous year<br>Beds eligible for a maximum of 6 years at Basic 2                                          |
| Basic 3   | Basic 1, Basic 2 or Basic 3 in the previous year<br>Beds eligible for a maximum of 6 years at Basic 3                                       |
| Certified | Basic 1, Basic 2, Basic 3 or Certified in the previous year<br>Beds have unlimited life at Certified provided all scheme conditions are met |

## 5. Freedom from quarantine diseases

Crops must not be grown on land known to be infected with the following soil-borne diseases: Rhizomania, Strawberry red core or Verticillium wilt disease of hops or which is under notice for Potato Wart disease or Potato Cyst Nematode.

Growers who become aware of or suspect the presence of any quarantine disease must notify the Plant Health Inspector immediately.

## 6. Soil sampling requirements

Application for soil sampling should be made through the approved administrator.

### **Basic 1, Basic 2 and Basic 3**

Soil sampling of the proposed field is required for freedom from the soil living virus vector nematodes prior to planting.

*Longidorus elongatus*

*Longidorus macrosoma*

*Xiphinema diversicaudatum*

Fields found to be infested cannot be used for planting unless one of the following requirements has been complied with:

- a) Field treated with an approved soil fumigant
- b) A soil bait test has been carried out for the relevant viruses. If the result is negative for virus the site can be utilised.

An alternative to soil sampling is crop rotation where no nematode host crop has been grown at the intended planting site for the last 5 years. For *Ribes* the relevant host crops are:

Grapevine, *Fragaria spp.*, *Ribes spp.*, *Rubus spp.*, cherries, plums, apricot, peach, almond and Japanese plum and their rootstocks, poplar, walnut and olive trees, hops and elder/elderberry.

**Certified** Soil sampling is not required.

## 7. Isolation distances for field grown material

Stocks entered must be isolated by at least the distance shown in the following table. (metres)

|                   | Basic 1 | Basic 2 | Basic 3 | Certified | Approved - Health # | CAC  | Fruiting |
|-------------------|---------|---------|---------|-----------|---------------------|------|----------|
| Basic 1           | 2       | 2       | 2       | 10        | 50                  | 1500 | 1500 *   |
| Basic 2           | 2       | 2       | 2       | 10        | 50                  | 1000 | 1000 *   |
| Basic 3           | 2       | 2       | 2       | 2         | 50                  | 1000 | 1000 *   |
| Certified         | 10      | 10      | 2       | 2         | 2                   | 1000 | 1000 *   |
| Approved-Health # | 50      | 50      | 50      | 2         | 2                   | 50   | 400 *    |
| CAC               | 1500    | 1000    | 1000    | 1000      | 50                  | 1    | 400      |
| Fruiting          | 1500*   | 1000*   | 1000*   | 1000*     | 400*                | 400  | 0        |

\* Gooseberries and jostaberries 100 metres from all other *Ribes*

# For further information visit <http://nsa-plants.co.uk>

## 8. Spacing

Stool beds: Not less than 2 metres between rows.

Nursery rows: Not less than 1 metre between rows.

For glasshouse production separation must be sufficient to ensure varieties of the same grade do not mix. Field isolation distances apply between different grades; exceptionally approval to reduce isolation distances may be granted from PHSI requiring additional precautions and standard operating procedures.

## 9. Aphid proof gauze house production and isolations

Specific conditions apply to the construction of an aphid proof structure for certification. Contact PHSI for full details. All material grown in the structure must be entered for certification. The propagator must, with consultation with PHSI, have a Standard Operating Procedure in place detailing the operation of the gauze house.

|                                 |                       | Isolation for plants outside the gauze house (metres) |                       |                    |     |          |
|---------------------------------|-----------------------|-------------------------------------------------------|-----------------------|--------------------|-----|----------|
|                                 |                       | Basic 1 and Basic 2                                   | Basic 3 and Certified | Approved -Health # | CAC | Fruiting |
| Plants grown inside gauze house | Pre-basic             | 100                                                   | 100                   | 200                | 200 | 500      |
|                                 | Basic 1 and Basic 2   | 2                                                     | 2                     | 100                | 100 | 250      |
|                                 | Basic 3 and Certified | 2                                                     | 2                     | 50                 | 50  | 100      |

# For further information visit <http://nsa-plants.co.uk>

## 10. Roguing

Limited roguing is permissible after inspection with prior approval of the APHA Plant Health Inspector. Records must be kept and made available of the stocks rogued, the reason for roguing and numbers of plants removed.

## 11. Bulking up

Stool bed extension (bulking up) is permissible providing the material used is eligible and bulking up takes place within the same field. Where stool bed numbers are increased using cuttings from the original planting then the whole stool bed must take the same age as the original planting. Growers must keep records of these procedures and make them available to inspector upon request.

## 12. Gapping up

Gapping up is permissible providing that the material used is eligible and prior approval from APHA Plant Health has been obtained. Growers must keep records and make them available if requested to do so.

## 13. Number of inspections

Pre-basic      Two inspections per year

Basic          One inspection only

Certified      One inspection only

Conduct the inspection at the optimum time depending on the season, usually between mid-June and mid-July.

## 14. Validity of certificates

Plants from certified crops may be described as being certified at the appropriate grade until 31 May in the year following certification.

# 15. Summary of pest and disease tolerances, sampling and testing

## TESTING

### Pre-basic

Each pre-basic mother plant shall be sampled and tested four years after acceptance as a pre- basic mother plant and with subsequent intervals of four years for pests in Annex II and in the case of doubt for pests in Annex I.

### Basic and Certified

Sampling and testing shall be carried out in the case of doubts concerning the presence of pests listed in Annexes I and II

## INSPECTION

**Pre-basic, Basic and Certified** plant material shall be visually inspected and found free from pests and diseases listed in Annex I Part A and Annex II. Freedom can be met by removal of infected plants and /or by biological, physical or chemical treatments if applicable.

**Pre-basic, Basic and Certified** plant material infested by pests and diseases in Annex I Part B shall not exceed the tolerance levels indicated. Sampling and testing will be required if in doubt to the presence of those pests and diseases. Tolerances can be met by removal of infected plants and / or by biological, physical or chemical treatments if applicable.

## ANNEX I

| Annex I Part A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Pre-basic, Basic and Certified                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| <p><b>Insects and mites</b></p> <p><i>Dasyneura tetensi</i>                      Black currant leaf midge</p> <p><i>Ditylenchus dipsaci</i>                      Stem and bulb eelworm</p> <p><i>Pseudaulacaspis pentagona</i>                      White peach scale</p> <p><i>Quadraspidiotus perniciosus</i>                      San Jose scale</p> <p><i>Tetranychus urticae</i>                      Two spotted spider mite</p> <p><i>Cecidophyopsis ribis</i>                      Black currant gall mite</p> | <p style="text-align: center;">} Nil tolerance</p> |

| <p><b>Fungi</b></p> <p><i>Sphaerotheca mors-uvae</i>      Gooseberry mildew</p> <p><i>Microsphaera grossulariae</i></p> <p>Diaporthe strumella (Phomopsis ribicola)</p>                                                    | <p>Nil tolerance</p>       |                                     |                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------------|----------------------------------|
| Annex I Part B                                                                                                                                                                                                             | Pre-basic                  | Basic 1 - 3                         | Certified                        |
| <p><b>Nematodes</b></p> <p><i>Aphelenchoides ritzemabosi</i></p> <p><b>Viruses</b></p> <p>Aucuba mosaic and black currant yellows combined</p> <p>Vein clearing and vein net of black currant, Gooseberry vein banding</p> | <p>0</p> <p>0</p> <p>0</p> | <p>0.05</p> <p>0.05</p> <p>0.05</p> | <p>0.5</p> <p>0.5</p> <p>0.5</p> |

## ANNEX II

| Annex II                                                                                                                                                                                                                                                                                                                 | Pre-basic, Basic and Certified       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <p><b>Viruses</b> as appropriate for the species concerned</p> <p>Arabis mosaic virus (ArMV)</p> <p>Black currant reversion virus (BRV)</p> <p>Cucumber mosaic virus (CMV)</p> <p>Gooseberry vein banding associated viruses</p> <p>Strawberry latent ringspot virus (SLRSV)</p> <p>Raspberry ringspot virus (RpRSV)</p> | <p>} Nil tolerance at all grades</p> |



## 16. Record keeping (critical points plan)

The supplier must maintain relevant information to monitor the key points in the production process of all stocks entered for certification.

These include:

- Location and number of plants
- Timing of their cultivations
- Propagation operations
- Packaging, storage and transportation operations.

The information should remain available for at least three years and made available to PHSI upon request.

## 17. Requirements for pre-basic plant material

### 17.1 Eligible material

Any new or established variety or candidate material of potential new varieties can be entered. The progeny of pre-basic stock is eligible as parent material to produce basic grade cuttings or for planting stool beds for entry at basic 1.

### 17.2 Growing conditions

Candidate pre-basic mother plants must be kept under insect proof conditions and physically isolated from pre-basic mother plants until all tests have been successfully completed.

Pre-basic plants must have been maintained in a suitably designed insect proof gauze house containing only *Ribes* pre-basic plants. See section 9.

Strict precautions should be taken to prevent the introduction of any pest or disease in Annexes I and II.

All mother plants must be grown singly in sterilised growing medium and in individually labelled containers.

### 17.3 Pests and diseases

Mother plants must have been individually tested and found free from the diseases listed in section 18 every four years using the indicator plants or test methods described.

New plants to be entered into the pre-basic house must have been tested and found free from all diseases listed in section 18.

Any plants found to be infected with the diseases listed in section 18 or exhibiting suspicious symptoms should be removed immediately.

#### 17.4 Documentation

The Person Responsible for the production of the plants must provide documentary evidence to show that the material has been produced under the conditions described above and that all the necessary tests were carried out and no evidence of infection was found.

This evidence must be provided to the purchaser of the pre-basic material before it can be used as parent material to produce basic 1 stool bed.

#### 17.5 Trueness to type

Pre-basic material will be subject to trueness to type verification.

## 18. Required methods of testing for diseases for pre-basic *Ribes*

|                                                                                                                                                   |                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Black currant (<i>R. nigrum</i>):</b></p> <p>Reversion agent</p>                                                                            | <p>Graft inoculation to black currant cv. Baldwin or Ojebyn</p>                                                                                                                          |
| <p>Vein banding agent</p>                                                                                                                         | <p>Graft inoculation to red currant cv. Jonkeer van Tets, black currant cv. Amos Black, hybrid <i>Ribes</i> EM 1385/81 or on gooseberry cv. Leveller</p>                                 |
| <p>Strawberry latent ringspot nepovirus</p> <p>Arabis mosaic nepovirus</p> <p>Cucumber mosaic cucumovirus</p> <p>Raspberry ringspot nepovirus</p> | <p>Mechanical inoculation to test plants of <i>Chenopodium quinoa</i>, <i>Cucumis sativus</i> or <i>Nicotiana clevelandii</i> as applicable. They should be confirmed serologically.</p> |
|                                                                                                                                                   |                                                                                                                                                                                          |

|                                                                                                    |                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Red currant (<i>R. rubrum</i>) and white currant (<i>R. sylvestris</i>):</b><br>Reversion agent | Graft inoculation to black currant cv. Baldwin or Ojebyn                                                                                                                           |
| Vein banding agent                                                                                 | Graft inoculation to red currant cv. Jonkeer van Tets, black currant cv. Amos Black, hybrid <i>Ribes</i> EM 1385/81 or on gooseberry cv. Leveller                                  |
| Strawberry latent ringspot nepovirus<br>Raspberry ringspot nepovirus<br>Arabis mosaic nepovirus    | Mechanical inoculation to test plants of <i>Chenopodium quinoa</i> , <i>Cucumis sativus</i> or <i>Nicotiana clevelandii</i> as applicable. They should be confirmed serologically. |
|                                                                                                    |                                                                                                                                                                                    |
| <b>Gooseberry (<i>R. uva-crispa</i>):</b><br>Vein banding agent                                    | Graft inoculation to red currant cv. Jonkeer van Tets, black currant cv. Amos Black, hybrid <i>Ribes</i> EM 1385/81 or on gooseberry cv. Leveller                                  |
| Arabis mosaic nepovirus<br>Raspberry ringspot nepovirus                                            | Mechanical inoculation to test plants of <i>Chenopodium quinoa</i> . They should be confirmed serologically.                                                                       |

Notes:

1. For graft inoculation tests, one indicator plant should be used for each virus being tested for. Tests for reversion should be observed for two years and tests on several shoots from large bushes are necessary because of the uneven distribution of this agent in the plant. For other pathogens tests should be continued until the following spring. Alternative indicator plants may be acceptable depending on the country of origin of the material, APHA should be consulted in such cases.

2. For mechanical inoculation tests on herbaceous indicators, plants should be observed for up to 4 weeks. Identification of specific viruses will require serological tests applied to extracts from the herbaceous indicators.

Explanatory guide to black currants, red currants, white currants and gooseberries (*Ribes*)  
(12/17)



© Crown copyright 2016

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v.3. To view this licence visit [www.nationalarchives.gov.uk/doc/open-government-licence/version/3/](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/) or email [PSI@nationalarchives.gsi.gov.uk](mailto:PSI@nationalarchives.gsi.gov.uk)

Any enquiries regarding this publication should be sent to APHA.

<http://www.gov.uk/apha>