Form 105 Horticultural Plant Disease Diagnosis

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|  | A | | Contact details of party responsible for all charges | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | |  |
|  |  | Submitter name | | |  | | | | | | | Phone | |  | | | | |  |
|  |  | | | | | | | | | | | | | | | | | |  |
|  |  | Address | |  | | | | | Suburb | | | |  | | | Postcode | |  |  |
|  |  | | | | | | | | | | | | | | | | | |  |
|  |  | Trading name | | |  | | | | | | ABN | | | |  | | | |  |
|  |  |  | | | | | | | | | | | | | | | | | |
|  |  | DPIRD Project Cost Code | | | |  | | | | |  | | | | | | | | |
|  |  |  | | | | | | | | | | | | | | | | | |
|  |  | E-mail | |  | | | | | | CRIS ID / Property ID Code | | | | |  | | | |  |
|  |  | | | | | | | | | | | | | | | | | | |
|  |  | Mobile | |  | | | Signature |  | | | | | | | Date | |  | |  |
|  |  | | | | | | | | | | | | | | | | | | |

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| B | Duplicate copy to another party | | | | | | | | Collected by | | | | |
|  | | | | | | | | |  | | | | |
|  | | | | | | | | |  | | | | |
| Name | |  | | | | | |  | Name | |  | |  |
|  | | | | | | | | |  | | | | |
| E-mail | |  | | | | | |  | E-mail | | |  |  |
|  | | | | | | | | |  | | | | |
| Phone | |  | | | | | |  | Phone | |  | |  |
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| C | Type of sample | | | |  | | | | | | |  | | | | | |  | | |  | | | |  |  | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seed | | Whole Plant | | | | Leaves | | | | | | | | Roots | | | Soil | | | Fruit | | | Water | | | Stem | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Plant species | | |  | | | | | | | | Cultivar | | | |  | | | | Nearest town | | | | |  | | |  |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sample ID | | |  | | | | | | | | | | | | | | | | | | | For best results despatch sample on Mon-Wed | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | |
| Number of samples | | | |  | | | |  | | Sampling date | | | | | |  | | | | | |
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| D | Describe the problem (include descriptions of different samples, e.g. affected / unaffected) | | | | | | | | | | | | | | |
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|  | | | | | | | | | | | | | | | |
| Distribution is: | | Uniform across whole area | | | | | | | | | Scattered | |  |  |  |
|  | | | | | | | | | | | | | | | |
| Proportion of area affected | | |  | | |  | | | Value of crop production (optional) | | | | | $ |  |
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|  | **Protecting horticultural industries**  Free test (**x**)  I believe this pest is a new threat  to Western Australia  to this region of the state |  |

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| E | | Production details | | | | | | | | | |
|  | |  | | | | | | | | | |
|  | **Soil type** | | | | **Site / Plant / Seed treatment (current season)** | | | | |  | |
|  | | | | | | | | | | | |
|  |  | | | | Treatment (Fertiliser, spray etc.) |  | Date |  | Rate / ha | |  |
|  | | | | | | | | | | | |
|  | Light (sand / sandy loam) | | | |  |  |  |  |  |  | |
|  | | | | | | | | | | | |
|  | Medium (loamy) | | |  |  |  |  |  |  |  | |
|  | | | | | | | | | | | |
|  | Heavy (clay / clay loam) | | |  |  |  |  |  |  |  | |
|  | | | | | | | | | | | |
|  | Potting mix | | | |  |  |  |  |  |  | |
|  | | | | | | | | | | | |
|  | Free draining | | |  |  |  |  |  |  |  | |
|  | | | | | | | | | | | |
|  | Prone to water logging | | |  |  |  |  |  |  |  | |
|  | | | | | | | | | | | |
|  | pH in CaCl2 | |  |  |  |  |  |  |  |  | |
|  | | | | | | | | | | | |
|  | pH in H2O | |  |  |  |  |  |  |  |  | |
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| F | Indicate any weather conditions that may be relevant to the disorder | |
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| G | Irrigation | | | | | | |
|  | | | | | | |
|  | Type |  | Frequency |  | Volume |  |  |
|  | | | | | | | |

Delivery Instructions

Samples can be delivered in person or addressed to:

DPIRD Diagnostics and Laboratory Services  
DDLS Specimen Reception, Interim Lab, Building 102  
Department of Primary Industries and Regional Development  
3 Baron-Hay Court  
South Perth WA 6151

This form is available on the DDLS Plant Pathology home page  
<https://www.agric.wa.gov.au/bacteria/ddls-plant-pathology-services>

Sampling for Horticultural Disease Diagnosis

Please follow these guidelines to ensure you send the most appropriate plant or soil samples for accurate and timely disease diagnosis.

* Take fresh samples, keep them cool and out of direct sunlight.
* Label sample bags clearly with a permanent marker.
* Submit affected and unaffected plants packaged and labelled separately (e.g. inside, outside and boundary of affected areas).
* For plants up to 1 m high, submit at least three whole plants, complete with soil, or 20 seedlings. For plants over 1 m high, separate into top and bottom components before submitting.
* Send samples as per instructions below.
* Avoid sending samples on a Thursday or Fridayotherwise refrigerate until despatched the following week.
* Label the parcel‘Urgent plant samples - keep cool’.
* Complete the Horticultural Plant Disease Diagnosis Submission Form.
* Complete a separate form for each species.

**Whole plant or root samples**

Nursery plants

* Submit whole plants in pots and tubes.
* Submit both healthy and unthrifty plants.

Field plants

* Submit whole plants, unless it is clearly a leaf, stem or fruit disease.
* Dig up plants so that the roots remain intact. Do not pull the plants from the soil.
* Leave the soil on the roots to keep the plants alive during transit. Washed roots will rot while in transit.
* Seal roots and soil in a plastic bag near the base of the plants. Enclose the whole sample inside another plastic bag.

**Leaf samples**

Fungal / bacterial diseases

* Wrap leaves in dry paper towel and then in a ziplock plastic bag.

Viral diseases

* For vegetative plants collect new growth or whole shoots.
* For potatoes, shoots are preferable to tubers.
* For grapevines collect dormant canes instead of leaves.
* Seal leaf samples wrapped in dry paper towel immediately in a plastic bag to prevent wilting.
* Package to avoid leaves getting squashed.

**Soil samples for detection of nematodes**

Pre-planting (moist soils)

* Use a soil corer (e.g. pogo stick) to sample 0-20 cm (0-8").
* Remove surface debris in the area to be sampled.
* Sample soil for nematodes on a grid pattern, taking 20 samples per hectare, 500 g per sample.
* If a result for each sample is required seal samples separately in plastic bags. Label each bag. Otherwise mix all soil samples thoroughly but gently and take a 500g sample from this mix, seal sample in a plastic bag and label.
* Soil samples from tropical and subtropical areas should be stored at 10°C, but soil samples from other areas can be refrigerated.
* Do not allow temperature of any samples to rise above 25°C during transit.

Existing plants

* Use a soil corer or narrow shovel to sample to a depth of 20 cm.
* Remove surface debris from around the base of the plant.
* Collect 500 g of soil from the root zone of the plant.
* Take soil from three unthrifty plants and from one healthy plant.
* Seal samples separately in plastic bags. Label each bag.

**Soil samples for detection of *Phytophthora* (Dieback)**

Pre-planting

* Follow sampling procedure outlined above for nematodes (pre-planting). However, samples can be refrigerated.

Existing plants

* Follow sampling procedure outlined above for nematodes (existing plants).
* Sample from three plants showing dieback symptoms and from one healthy plant.

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