

ROOT IDENTIFICATION (RID)

The PDDU offers a root identification service to genus and species level. Our method of identification is based on DNA extraction followed by polymerase chain reaction (PCR), Sanger Sequencing and comparison of the resulting sequences with those in the National Center for Biotechnology Information (NCBI) global database. This technique is therefore dependent on successful DNA extraction and the availability DNA sequences from the target species in the NCBI database.

Successful DNA extraction is largely dependent on the quality of the specimen we receive. We have found that living roots greater than 10mm diameter give more reliable results. Please refer to the section below for examples of good specimens. Please also be aware that more than one tree species/individuals roots may be involved and can complicate the results. Unfortunately, we must still charge for this service even if the DNA extraction is unsuccessful to cover our costs. However, we will retest another sample free of charge.



The Royal
BOTANIC GARDENS
& Domain Trust

HOW TO COLLECT & PACKAGE YOUR SAMPLES

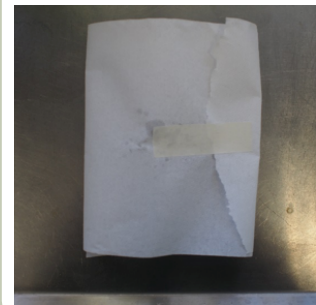
1. Wash roots under tap water to remove debris.



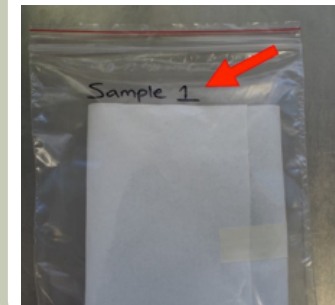
2. Select small actively growing roots that haven't undergone secondary growth.



3. Wrap in absorbent towelling.



4. Place in zip-lock bag and label bags with your sample number.

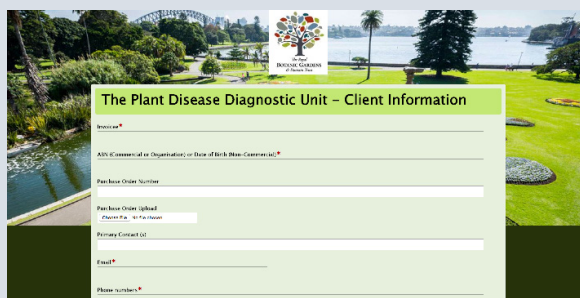


WHEN COLLECTING MULTIPLE SAMPLES, IT IS IMPORTANT TO DISINFECT ALL TOOLS BETWEEN SAMPLES (E.G. WITH 70% METHYLATED SPIRITS).

HOW TO SUBMIT YOUR SAMPLES

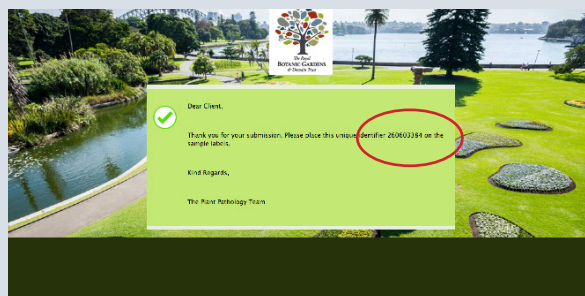
Complete and submit the online form <https://PDDU.formstack.com/forms/pddu>

1. Complete and submit form online
(Please note that fields highlighted with an asterisk are mandatory).

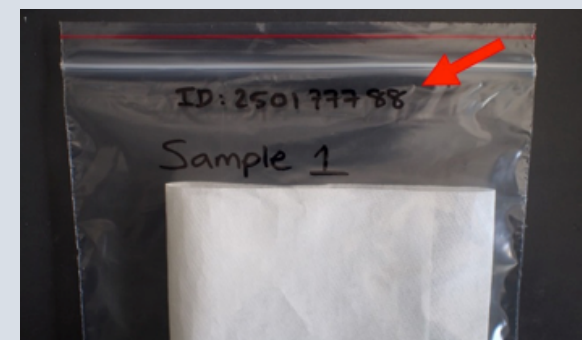


The screenshot shows a web form with the following fields: Name*, Address*, Phone Number*, Email*, and Photo Number*. The form is titled 'The Plant Disease Diagnostic Unit - Client Information'.

2. On submission of the form you will be given a Unique ID Number
(The number will also be included in your email confirmation).



3. Please label your sample with the Unique ID Number in addition to your Sample Number.



4. Post or hand deliver to:

Plant Disease Diagnostic Unit
The Royal Botanic Gardens & Domain Trust
Mrs Macquaries Rd
Sydney NSW 2000

CHARGES AND INVOICING

The fee for Root Identification (RID) is in the table below and is **per sample**. The invoice will be sent to the 'invoicee' field in the form submitted. Please allow for up to 60 days to receive the invoice. Payment can be made by all standard methods.

TEST CODE	SERVICE	COMMERCIAL RATE
RID	Root Identification	\$205 (Inc. GST)

Please note that we offer a 20% discount for non-commercial clients and 40% for members of the Foundation & Friends.