

# Terms of business of diagnostic services for biological specimens at Landcare Research

From its laboratories in Auckland and Lincoln, the diagnostic service provides morphological and molecular identification, and information supply, for plants, fungi, micro-organisms, and invertebrates.

The service is provided by the taxonomists, technicians, and collection managers of Landcare Research's nationally significant collections and databases; including the Allan Herbarium (CHR); the New Zealand Fungarium (PDD); the International Collection of Micro-organisms from Plants (ICMP); and the New Zealand Arthropod Collection (NZAC). Policies for these collections can be found here.

The service is available to members of the public, commercial organisations, and government organisations.

#### Services

In general the service provides information on:

**Taxonomic Identification.** 

**Nomenclature Check.** An in-depth check about the scientific names of specific species. Such questions may include: is this the most up-to-date name for this species? What other names has this species been called?

**Presence and Distribution of species in New Zealand.** Information to help determine whether a species is present in New Zealand, and, if necessary, related biological information, such as, its habitat, or host records.

Other services include: digital images for education, publication, and diagnostics; specimen cataloguing and electronic databasing; training workshops and the development of protocols for identification.

## **Requirements & Sample Submission Process**

All requests should be detailed on the relevant Diagnostic Request Form. This form is be emailed prior to specimens being sent, in order to obtain a quote, and to advise us of incoming material.

The Diagnostic Request Form should be completed with as much information as possible. This information is important for registration of the request, labelling, invoicing, keeping track of material, and may help with diagnostics.

PLEASE DO NOT SEND MATERIAL WITHOUT COMPLETING THIS FORM AND WAITING FOR OUR RESPONSE.

Upon receipt of a request the relevant Diagnostics Services Manager will: evaluate the request and provide a quote. Upon acceptance of terms, we will provide the requested identification and/or information as far as is possible, or inform the client of any delay.

Please collect, store and send samples in accordance with appropriate protocols. There are specific requirements and permits for international consignments, please ensure all documentation accompanies samples in transit.

Specimens sent for identification are likely to be disposed of immediately following completion of the identification, unless directed by the client. In some cases specimens may be retained and accessioned into the relevant collection.

Landcare Research reserves the right to decline any request, particularly when there is inadequate notification of sample arrival, or incomplete documentation.

## **Delivery of Results**

Standard sample turnaround time is 2-10 working days; however this may vary with the nature of the request, the urgency of the request, and availability of staff. Results will be provided in written format to the client on completion of the project. Digital copies of the data are retained by Landcare Research for records purposes. Sample may be accessioned to one of the aforementioned collections in concurrence with accessioning policy.

#### **Further Information**

Further requests for identification and information on submission processes can be obtained from the relevant Diagnostics Services Manager.

For samples or projects not fitting the below costings, please contact the relevant Diagnostics Services Manager to discuss the requirements and quotes can be arranged on a case by case basis.

#### **Diagnostics Services Managers & Diagnostic Request Forms**

Plants. Plantinfo@landcareresearch.co.nz

Fungi. PDD@landcareresearch.co.nz

Microorganisms. ICMP@landcareresearch.co.nz

Invertebrates. NZAC@landcareresearch.co.nz

## **Specific Requirements**

**Plants.** Samples suitable for identification include: native and naturalised seed plants, ferns, lichens, mosses, freshwater algae and liverworts, including noxious plants, poisonous plants, weeds, and plant parts such as pollen and seeds.

**Fungi and Micro-organisms.** Samples suitable for testing can include bacteria, yeasts, fungi (including mushrooms, rusts, smuts), and fungus-like organisms. Plant disease symptoms such as leaf or fruit spots are suitable, as are pure fungal and bacterial cultures on agar plates.

**Invertebrates.** Samples suitable for identification include: invertebrates in the New Zealand region of beetles; moths and butterflies; wasps, ants, parasitoid wasps; stick insects, orthopteroids; true bugs; mites; nematodes; and earthworms. We cannot provide services for: flies; scale insects; aphids; mealybugs; thrips; booklice; freshwater invertebrates; invertebrate larvae or maggots.

#### Costs of identification

Prices are excluding GST. Price per Specimen unless indicated

**Plants**. One-off plant identifications for the general public are free. Fees are incurred for services to commercial and agency users. The current rates are \$160.00 per hour plus GST (minimum charge one hour). An annual fixed fee is recommended if the service is used frequently. Additional costs may apply if the specimens need to be vouchered and accessioned.

**Fungi and Micro-organisms.** Casual identification from a photo sent via members of the public has no charge. Single molecular sequence required from clean mushroom or fungal or bacterial cultures are charged at \$360 with each subsequent sample in the same test at \$200. More complicated identifications including multigene sequences or isolation from diseased plant symptoms will be quoted on request.

**Invertebrates.** Casual identification from a photo sent via members of the public has no charge. Fees are incurred for services to commercial and agency users. The current rates are \$250.00 per hour plus GST (minimum charge one hour). Molecular sequences are charged at \$360 with each subsequent sample in the same test at \$200. Other quotations are supplied on request.

