

Australian Reference Collections

| Collection | Collection Name | Jurisdiction | Description | Contact |
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| Australian National Insect Collection (ANIC) | | | | |
| Agricultural Scientific Collections Unit (ASCU) | NSW DPI Insect & Mite Collection | NSW | <p>This invertebrate collection represents the primary occurrences of pests in NSW since 1890's. ASCU holds representatives of most invertebrates, particularly those impacting man. This collection holds about half a million specimens but only 74% are databased. The specimens are held in Trust (Agricultural Scientific Collections Trust) on behalf of NSW DPI.</p> <p>The groups for which we show the greatest diversity include the Hemiptera, particularly the Auchenorrhyncha and Sternorrhyncha and mites (predatory and plant feeding mites). Our data richness is enhanced through extensive records of host associations. Our CITES code for specimen exchange is AU110. The collection holds about 2000 type specimens. More information.</p> | Biosecurity.collections@dpi.nsw.gov.au |
| Plant Pathology Herbarium (DAR) | NSW DPI Plant Pathology & Mycology Herbarium | NSW | <p>This collection focuses on plant disease specimens collected in NSW including fungi, bacteria and viruses. The collection was established with the department of Agriculture in 1890 and has been active ever since. We are also the state's mycology herbarium and hold several thousand specimens of non-pathogenic, beneficial and native fungi and the named repository for permitted collections in State parks. The majority of our holdings have been digitised and their collection information can be accessed via the APPD or Atlas of Living Australia. More information.</p> | Biosecurity.collections@dpi.nsw.gov.au |
| Northern Territory Economic Insect Collection and database (NTEIRC) Formerly known as Northern Territory Economic Insect Collection (NTEIC) | Northern Territory Economic Insect Collection and database Northern Territory Economic Insect Reference Collection | NT | <p>Entomology curates the Northern Territory Economic Insect Collection and database (NTEIRC). This currently has 54,486 accessions, and consists of pinned specimens, microscope slides and ethanol preserved specimens. It is housed in a dedicated air-conditioned collection room with a dehumidifier. All accessions are in a Microsoft Access database which is part of the Australian Plant Pest Database (APPD).</p> <p>NTEIRC is the official collection of specimens of either endemic species which attack economic plants in the Northern Territory (NT) or exotic species of concern for NT agricultural and horticultural industries. The collection also contains specimens of parasitoids, predators and plant feeding insects which can be utilised in biological control programs for pests and weeds.</p> | insectinfo@nt.gov.au Haidee Brown Collection Manager Phone: 08 8999 2258 Email: Haidee.brown@nt.gov.au |
| Northern Territory Plant Pathology Herbarium (DNAP) | Northern Territory Plant Pathology Herbarium and database | NT | <p>Plant Pathology curates the Northern Territory Plant Pathology Herbarium and database. This collection has about 5,800 specimens. It is housed in a room with a dehumidifier and an air conditioner (~ 20°C, 50-60% RH). The database, which is also part of APPD, is run in Microsoft Access.</p> | plant.pathology@nt.gov.au |
| Queensland Plant Pathology Herbarium (BRIP) | | | | |
| Queensland Primary Industries Insect Collection (QDPC) | Queensland Primary Industries Insect Collection | QLD | <p>The QDPC was established shortly after the appointment of Henry Tryon as the Department's first Entomologist in 1894. From modest beginnings, the collection has grown to approximately 1.8 million specimens covering the breadth of agricultural and biosecurity-relevant insect pests and their relatives. Hence, the QDPC is the primary agricultural and biosecurity reference collection for the state, with major holdings of thrips (Thysanoptera; 22,000+ accessions); scale insects (incl. Coccidae,</p> | Mark Schutze Principal Scientist-Entomology Phone: (07) 3708 8337 Email: Mark.Schutze@daf.qld.gov.au Justin Bartlett Senior Technical Officer-Entomology |

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| | | | <p>Diaspididae, and Pseudococcidae; 21,000+ accessions); aphids (3,800+ accessions); beetles (esp. borers); and is the world's largest collection of dacine tephritids (~100,000 specimens).</p> <p>DAF sub-collections maintained within the core QDPC include the Alan Fletcher Research Station Insect Collection, the Maroochy Research Station Collection, a small ex AQIS quarantine intercept collection, the Queensland Forestry Insect Collection (QFIC) and a significant proportion of the Mareeba 'Ross Storey' Collection (QPIM), the latter two in the process of being physically incorporated into the main collection.</p> <p>Non-DAF collections housed with the QDPC, but not strictly part of QDPC, include the United States Department of Agriculture-Australian Biological Control Laboratory Collection, the CSIRO Tropical Weeds Collection and the CSIRO Ecosystem Sciences Spatial Ecology Collection.</p> <p>With respect to the APPD, the vast majority (~85%) of the QPDC remains to be digitised and accessioned and therefore only a limited representation of the collection is available through the online search. Only some groups are fully represented with data available on the APPD, including: Thysanoptera; Coccoidea; Aphididae; and Aleyrodidae. Approximately 50% of the dacine tephritids are accessioned.</p> | <p>Phone: (07) 3708 8457 Email: Justin.Bartlett@daf.qld.gov.au</p> |
| Bureau of Sugar Experiment Stations (BSES) Insect Collection | | | | |
| Queensland Museum (QM) formerly known as University of Queensland Insect Collection (UQIC) | Queensland Museum | QLD | <p>Started in the 1870's, QMN's entomology collections focus on Queensland and adjacent Papua New Guinea and West Pacific regions. We target native insects with collections from all major habitats within Queensland. With the Wet Tropics World Heritage Area of Queensland having the highest insect diversity in Australia, these collections take on a special significance. The estimated number of specimens in the Queensland Museum Entomology collection is 3,900,000 including more than 30000 type specimens. Of these 270,000 are databased. The QM Entomological collection is an important collection used by researchers, university staff and students, and scientists from Australian and international organisations mainly focusing on systematics, phylogenetics, comparative morphology, biogeography, conservation management/planning, environmental assessment and ecological research. The collection strengths include:</p> <ul style="list-style-type: none"> comprehensive collections from all major tracts of rainforest, with 60,000 specimen records from 750 sites within these rainforests; internationally recognised collections of Australian parasitic wasps, dung beetles, bees, mosquitoes, fruit flies, ground beetles, ants, sucking bugs and New Caledonian insects; an estimated 1,000,000 specimens from the University of Queensland Insect Collection, a research collection begun in the 1920's by F.A. Perkins, the first lecturer in entomology at the University of Queensland; one of Queensland's most important reference collections serving as a repository for applied research voucher specimens, such as surveys of insects associated with particular crop and pollination studies; many important donated private collections. <p>More information.</p> | <p>Susan Wright Collection Manager Phone: (07) 3153 4438 Email: susan.wright@gm.qld.gov.au or entomology.inquiry@qm.qld.gov.au</p> |

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| Waite Insect and Nematode Collection (WINC) | Waite Insect and Nematode Collection | SA | <p>The WINC is an historical collection jointly owned by the South Australian Research and Development Institute (SARDI) and the University of Adelaide (UofA). It comprises almost 300,000 specimens most of which are located on the Waite Campus, with a portion held at the North Terrace Campus. Some specimens date back over one-hundred years. This agricultural collection is utilised by local and interstate students and staff, and government agencies. The nematode collection part of WINC has recently moved to CSIRO in Canberra for long term curation. Approximately 25% of the collection is databased.</p> <p>The WINC is primarily located at the Waite Campus (Waite Building) and curated by SARDI staff. A portion of the collection (primarily Hymenopteran) resides at the North Terrace Campus (Darling Building) and is curated by University of Adelaide staff.</p> <p>The modern WINC is primarily an agricultural working collection and as such has excellent host records for specimens. It includes one of the best collections of crop pest larvae. It is regularly used to assist with identification of crop pests for agricultural and horticultural industries.</p> <p>On the Waite Campus, the WINC is often used for reference by the UofA academic staff and students, students and researchers of SA and interstate organisations.</p> <p>At North Terrace, the collection is utilised for identification purposes by UofA students and staff, and as a safe deposit for material collected during student projects, post-docs, and surveys.</p> | <p>PIRSAEntomologyWINC@sa.gov.au</p> |
| Tasmanian Agricultural Invertebrate Collection (TAIC) | Tasmanian Agricultural Insect Collection | TAS | <p>The Tasmanian Agricultural Insect Collection (TAIC) contains insects and other invertebrates mainly associated with biosecurity and Tasmanian agriculture. The collection was established in 1899. Its core function is to provide a basis for Tasmania's pest records which are stored in the Tasmanian Plant Pest Database (TPPD). These are particularly important for trade and market access purposes. Specimens in the collection are also routinely utilised as important practical tools to aid routine biosecurity diagnostics, training, and professional development purposes for biosecurity staff.</p> <p>The main collection is housed at Hobart (New Town Research Laboratories). Satellite collections are located at Launceston (Mt Pleasant) and Devonport (Stony Rise). The collection includes more than 155,000 specimens (78 000+ pinned, 17 000+ slides, 55 000+ wet). Both TAIC and the TPPD are managed by entomology staff in the Plant Biosecurity and Diagnostics Branch, Biosecurity Tasmania. New specimens are routinely added to the collection from submissions originating from biosecurity surveys, interceptions, industry, and sourcing from other collections (e.g., reference specimens of pests of biosecurity concern).</p> | <p>plantdiagnosticservices@nre.tas.gov.au</p> |
| Tasmanian Forest Insect Collection (TFIC) | | | | |
| Plant Pathology Herbarium (VPRI) | Victorian Plant Pathogen Herbarium | VIC | <p>The herbarium collection which makes up most of the specimens held in VPRI are pressed plant-based specimens infected with bacteria, fungi and viruses. The VPRI accepts all types of infected plant material such as bark, fruit, leaves and stems, with bulky plant material is dried in an oven for long term storage. The VPRI holds several special sub-collections including the Daniel McAlpine collection, the Erysiphales of Australia collection and the Fungi on Australian Native Flora collection. It features:</p> <ul style="list-style-type: none"> • 43,000 databased specimens • 25,720 pressed plant material specimens • 1400 Type specimens • Sub-collections | <p>Reference.collections@agriculture.vic.gov.au</p> <p>Phone: (03) 39032 7149</p> |

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| | | | <ul style="list-style-type: none"> • Daniel McAlpine collection 1060 specimens • Erysiphales of Australia ~ 2000 specimens • Fungi on Australian native flora ~ 2500 specimens. <p>The Living Culture Collection (VPRI) currently holds over 3,000 living plant pathogenic bacterial and fungi culture collections dating back to the 1950's. This collection contains many important plant pathogens isolates for Australian agriculture and horticulture industries. These cultures are prepared and preserved in different ways depending on the organism characteristics but the majority of the VPRI culture collection are stored in freeze dried ampules or maintained on agar. Fungal and bacterial cultures are available for purchase, please refer to the Live Culture Request section.</p> <p>Although curated as a separate collection, the nematodes are treated as a subset of the plant pathogen collection. The specimens held include plant pathogenic species and a small percentage of free-living nematodes. They are generally collected from various field crops, fruits, vegetables, ornamentals, turf etc. The majority of specimens are locally detected species, but there are also exotic specimens which are of great value for quarantine purposes and for identifying new incursions. The nematode collection consists of more than 9,000 electronically databased permanent mounted slides.</p> | |
| Victorian Agricultural Insect Collection (VAIC) | | | | |
| Department of Agriculture Western Australia Plant Pathogen Collection (WAC) | Western Australian Plant Pathogen Collection | WA | The Western Australian Plant Pathogen Collection (WAC) was established in the 1950's and contains a diverse range of fungi, bacteria and virus specimens. There are currently over 16,000 accessions in the collection including representative isolates of many agriculturally significant pathogens associated with tropical and Mediterranean type environments. The Western Australian environment and isolation from agricultural regions both in Australia and the rest of the world give this collection regional importance. | Stefan Harasymow WAC Collection Manager Phone: 08 9368 3654 Email: DDLSPlantpathology@dpird.wa.gov.au |
| Invertebrate Collection Database (ICDB) | | | | |
| NAQS Biosecurity Insect Collections | | Australian Government | <p>For over three decades, the North Australian Quarantine Strategy (NAQS) has meticulously cultivated its working reference collection, a testament to its unwavering commitment to safeguarding biosecurity in the northern regions.</p> <p>Nestled within this treasure trove are taxonomic wonders that span the vast expanse of the north parts of Queensland, the Northern Territory, and Western Australia. The collection is retained at the DAFF locations in Cairns and Darwin.</p> | |
| Department of Agriculture, Fisheries and Forestry | OSS Entomology Reference Collections | Australian Government | With collections in Adelaide, Brisbane, Cairns, Darwin, Melbourne, Sydney and Perth, the DAFF invertebrate collections collectively contain approximately 65,000 specimens retained over the past four decades from border interceptions and surveillance. These collections focus on exotic invertebrates of significance to Australia with particular strengths in mites, ants, timber pest, horticultural pests, and the National Priority Plant Pests (NPPPs). | Bill Crowe - Director, Senior Principal Entomologist bill.crowe@aff.gov.au |

APPD Collections Map

