Jawoyn Country Bush Blitz

Fungi and Lichens of Jawoyn Country, Northern Territory, Australia

Survey conducted: 30th March - 11th April 2025

Final Report Submitted: 02/04/2026



Cover Image: Wardekken ranger holding an unidentified mushroom. Photograph: S.Bruce 2025

Nomenclature and taxonomy used in this report are consistent with:
Index Fungorum (https://www.indexfungorum.org)
MycoBank (https://www.mycobank.org)

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List of contributors

Name	Institution / affiliation	Qualifications/area of expertise	Level/form of contribution
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Jawoyn Rangers	Jawoyn Association	Extensive on-Country experience in land and fire management, biodiversity monitoring, cultural site protection, and intergenerational knowledge transmission, including culturally grounded species recognition and interpretation based on habitat, seasonality, and place-based knowledge systems.	Survey participants, specimen collectors, cultural knowledge contributions, on-Country guidance
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Alexander Loughlan	Wardekken Land Management	Coordinator	Survey participant, specimen collector

Indigenous Intellectual and Cultural Property (ICIP)

Cultural knowledge associated with specimens and sites is not included in publicly accessible datasets and remains under Indigenous governance. Data governance is informed by the CARE Principles for Indigenous Data Governance (Global Indigenous Data Alliance 2019) and extended through the author's own Aboriginal governance practice, which centres Indigenous sovereignty, cultural authority, and relational obligations to Country and community as primary conditions for data collection, storage, and dissemination.

Indigenous Governance and Positionality Statement

This fungal survey was undertaken on Jawoyn Country by an Aboriginal researcher working within Aboriginal knowledge systems and western science methodologies. All field activities were conducted with an understanding that fungal species, ecological knowledge, and biological materials are situated within Aboriginal cultural authority and ongoing custodianship. This report documents scientific observations while recognising that Aboriginal knowledge relating to fungi may be culturally held, restricted, or not appropriate for inclusion in public scientific outputs. This approach is consistent with the rights recognised under the United Nations Declaration on the Rights of Indigenous Peoples (United Nations 2007).



Figure 1: Wardekken ranger cooling off after a successful fungi foray. The author was similarly enjoying the water while capturing this moment. Photo: S.Bruce 2025

Abstract

This Bush Blitz survey documented fungal diversity across selected areas of Jawoyn Country in the Northern Territory. Surveys were conducted across multiple habitat types, including open eucalypt woodland, sandstone escarpments, monsoon rainforest patches and riparian corridors. A total of 178 fungal records were documented, comprising 136 specimen-based records and 42 additional observation-only records.

Collections were identified using macromorphological characters supported by photographic documentation and, where appropriate, limited microscopic examination. No molecular analyses were undertaken at the time of reporting. Identifications were conservatively assigned where diagnostic features were insufficient for species-level resolution.

No species new to science were identified during the survey. All records represent new locality data for the surveyed area. Specimens collected during the survey are currently being curated pending finalisation of accessioning arrangements with relevant institutions. Accessioning will proceed in accordance with contractual obligations and appropriate governance considerations relevant to collections made on Aboriginal land.

The survey provides baseline fungal data for the region and lays the foundation for future seasonal survey efforts and taxonomic investigations.

1. Introduction

Fungi and lichens are fundamental components of terrestrial ecosystems, contributing to nutrient cycling, decomposition, soil formation, and plant health. Despite their ecological importance, fungal and lichen diversity remains poorly documented in northern Australia, particularly in tropical and monsoonal regions. This under-representation reflects historically low survey effort, strong seasonality and episodic fruiting, and taxonomic challenges relative to vascular plants. As a result, these groups are substantially under-represented in regional biodiversity datasets and conservation frameworks.

This report presents the results of fungal and lichen surveys conducted as part of the Bush Blitz expedition on Jawoyn Country in the Northern Territory in March - April 2025. Bush Blitz is a national biological survey program designed to improve baseline knowledge of Australia's biodiversity through intensive, short-term field surveys in under-surveyed regions. The fungal component of the Jawoyn Bush Blitz was undertaken opportunistically within the broader expedition framework. Survey effort focused on documenting macrofungi, and lichens encountered across a range of habitats and substrates during field activities, rather than targeting sites selected specifically for fungal diversity. This approach reflects established fungal survey practice and is appropriate given the patchy and unpredictable nature of fungal fruiting.

Jawoyn Country has not previously been the focus of targeted fungal surveys, and existing fungal records from the region are sparse. The survey aimed to document fungal and lichen taxa observed during the survey period and to provide baseline specimen records from a range of habitats represented within the Bush Blitz itinerary. The report focuses on field observations, specimen-based records, and conservative taxonomic assessments based primarily on macroscopic features.

The survey was conducted on Jawoyn Country, where Jawoyn people hold ongoing cultural authority and governance responsibilities for land, water, and biota. Research activities were undertaken with recognition that fungi and lichens occur within Indigenous estates and are subject to Indigenous governance, including decisions relating to access, interpretation, and future use. The absence of Aboriginal knowledge relating to fungi or lichens in this report should not be interpreted as absence of such knowledge; rather, this report documents information appropriate for a public scientific biodiversity survey.

Detailed descriptions of the study area, vegetation communities, survey rationale, and site selection are provided in the vascular plant flora report prepared by the Northern Territory Herbarium (DNA 2025) and are not repeated here. The present report is intended to complement that work by contributing fungal and lichen records to the broader understanding of biodiversity within the Jawoyn Bush Blitz survey area.

2. Methods

2.1 Site selection

Survey sites for the Bush Blitz were selected as part of the broader expedition planning process led by the Northern Territory Herbarium, with the primary aim of documenting vascular plant diversity and associated vegetation patterns across the study area. Detailed information on site selection rationale, vegetation communities, and site characteristics is provided in the Northern Territory Herbarium flora report and is not repeated here.

The fungal component of the survey was incorporated into the existing site framework and did not involve fungal-specific criteria during the site-selection phase. The fungal lead was not involved in the designation of survey sites, including the identification of standard survey sites, and site information was not structured around fungal survey objectives at the time of fieldwork.

This did not constrain fungal survey outcomes, as macrofungi and lichens occur broadly across landscapes and can be documented opportunistically across a wide range of habitats and substrates. Based on prior field experience, it was anticipated that fungal fruiting bodies would be encountered at all sites visited, irrespective of their original selection rationale. Accordingly, fungal records reflect habitat-driven and opportunistic sampling across the broader expedition footprint rather than targeted sampling of pre-defined survey sites.

2.2 Survey techniques

Fungal and lichen surveys were conducted using an opportunistic, field-based approach undertaken concurrently with broader Bush Blitz activities. Survey effort focused on detecting and documenting macrofungi and lichens encountered during field activities across the Katherine region and surrounding areas associated with the expedition. Observations were not restricted to approved collection sites; however, specimen collection was limited to

locations where collection approval had been granted. Fungi observed outside approved collection areas were documented photographically where possible but were not collected.

Macrofungi and lichens were recorded primarily through in situ observation and photography. For each observation or collection, field notes were recorded, including habitat, substrate, growth form, and associated environmental features. Where conditions, accessibility, and abundance allowed, representative specimens were collected for further examination and curation.

Survey effort emphasised visual searches of a wide range of microhabitats and substrates known to support macrofungal fruiting, including soil, leaf litter, decaying wood, standing timber, living trees, shaded drainage lines, termite mounds, and other organic material. This approach aligns with standard guidance for macrofungal surveys, which recognises that fruiting bodies are often spatially patchy, temporally unpredictable, and strongly influenced by short-term environmental conditions such as rainfall and humidity (Mueller et al. 2004; Claridge et al. 2009; Halme & Kotiaho 2012).

Opportunistic survey methods are widely accepted as appropriate for baseline fungal and lichen inventories, particularly where survey duration is limited and fixed-plot or standardised designs are unlikely to capture episodic fruiting events (Mueller et al. 2007; May et al. 2015). This is especially relevant in northern Australia, where fungal and lichen diversity remains poorly documented and existing distributional data are sparse (May & Wood 1997; May et al. 2016). In such contexts, flexible survey approaches maximise detection across available habitats within constrained survey windows and contribute valuable baseline records (Newell 2015).

Fungal survey effort was not limited to targeted searches by the fungal specialist alone. Throughout the Bush Blitz, participants from multiple disciplines, including scientists, educators, and Aboriginal Rangers from Jawoyn and Warddeken, actively contributed to locating and reporting fungal and lichen specimens encountered during field activities. Specimens were either examined in situ or brought to the field base for assessment and processing. All contributed material was subsequently assessed, documented, and curated by the fungal lead to ensure consistency in identification, recording, and specimen handling.

2.2.1 Methods used at standard survey sites

Two standard survey sites were established as part of the broader Bush Blitz expedition framework. The fungal component of the survey was undertaken concurrently with general field activities and was not specifically designed around these standard survey sites. The fungal lead was not involved in the designation of standard survey sites and was not provided with site status information at the time of survey. As a result, fungal survey effort was not structured to target standard survey sites as discrete sampling units.

Fungal and lichen observations and collections were therefore made opportunistically across all areas visited during the expedition, including standard survey sites, based on habitat suitability, substrate availability, and the presence of fruiting bodies. Approximately 15 fungal specimens were collected from one standard survey site during the course of general field activities; however, these collections were not made with prior knowledge that the location constituted a standard survey site.

Fungal observations at standard survey sites occurred concurrently with botanical surveys and followed the same opportunistic recording approach applied throughout the expedition, consistent with common practice in multi-taxon biodiversity surveys where fungi are documented alongside other taxa rather than through fixed-plot designs (Mueller et al. 2004; Parks Australia 2020). Given the episodic and short-lived nature of macrofungal fruiting, detectability is more strongly influenced by microhabitat conditions and timing than by fixed spatial boundaries.

Seasonal and environmental conditions influenced fungal detectability during the survey. Fieldwork was undertaken during the wet season, which is generally favourable for macrofungal fruiting in northern Australia; however, fruiting remains temporally variable and spatially patchy (Mueller et al. 2007). Weather conditions during the survey period, including recent rainfall and high humidity, likely influenced both the presence and condition of fruiting bodies. Absence of records from standard survey sites should therefore not be interpreted as absence of fungi.

This fungal survey was conducted on Jawoyn Country with recognition that fungi occur within living Indigenous cultural landscapes governed by ongoing Aboriginal authority and land management. No assumptions are made in this report regarding Aboriginal cultural knowledge, uses, or meanings of fungi unless such information has been explicitly shared for publication. Where Aboriginal knowledge is not recorded here, it is acknowledged as being held within Country and community rather than framed as absent.

2.3 Identifying the collections

Fungal and lichen collections made during the Bush Blitz were identified using a combination of field-based assessment and post-field examination. Preliminary identification was undertaken in the field based on macromorphological characters, including fruit-body form, colour, texture, hymenophore type, growth habit, and substrate association, and was supported by detailed field notes and photographic documentation.

Post-field identification involved comparison with published taxonomic literature and identification guides relevant to Australian macrofungi. Morphological terminology follows standard usage (Cannon and Kirk 2007). Where diagnostic features were insufficient due to specimen condition, immaturity or taxonomic complexity, identifications were conservatively assigned to genus or higher taxonomic rank. Taxonomic nomenclature follows Index Fungorum (2025) and MycoBank (2025), consistent with current Australian usage and the International Code of Nomenclature for algae, fungi, and plants (Turland et al. 2018). Specimen data were structured in accordance with Biodiversity Information Standards (TDWG 2023; Wieczorek et al. 2012).

Microscopic examination was undertaken for selected specimens where material condition permitted, focusing on features such as spore morphology and hymenial structures. Molecular analyses were not conducted at the time of reporting; voucher material has been retained to support potential future specialist review or sequencing where appropriate.
Identification was undertaken by Sherie Bruce (Aboriginal mycologist and report author), who participated in both field surveys and post-field specimen assessment. Ad hoc consultation was undertaken with Dr Matt Barrett (mycologist, James Cook University/Australian Tropical Herbarium), who provided informal taxonomic consultation and broader mycological guidance. Final identification decisions remained the responsibility of the report author.
Distribution records were cross-referenced with the Atlas of Living Australia to contextualise known Australian occurrence data.

Identification literature and resources consulted

A broad range of Australian field guides, taxonomic treatments, survey manuals, interactive keys, and biodiversity databases was consulted to support the identification and contextualisation of collections. Principal resources used include:

National field guides

- Fuhrer B 2003 *A Field Companion to Australian Fungi*. Bloomings Books, Melbourne.
- Fuhrer B 2016 *A Field Guide to Australian Fungi* (rev. ed.). Bloomings Books, Melbourne.
- Grey P, Grey E (eds) 2023 *Fungi Down Under: The Fungimap Guide to Australian Fungi*. Fungimap, Melbourne.
- McMullan-Fisher SJM, Leonard P, Guard FE 2014 *Australian Subtropical Fungi*. Suncoast Fungi / Fungimap, Queensland.
- Young AM 2010 *A Field Guide to the Fungi of Australia*. UNSW Press, Sydney.

Major identification series, interactive keys and citizen-science resources

- Lindsay A, Robinson R, May TW, McMullan-Fisher SJM 2013 *Guide to Surveying Fungi in Australia* (Edition 1.1). Fungimap Inc, South Yarra.
- May TW, Thiele K, Dunk CW, Lewis SH 2025 *FunKey: Key to the Agarics of Australia* (interactive identification key). Australian Biological Resources Study / Identic Pty Ltd / LucidCentral, Australia.
- Pascoe IG et al. *Fungi in Australia* series. Field Naturalists Club of Victoria, Melbourne.
- Fungimap Inc (accessed 2025) Fungimap online identification resources and mapping tools.

Regional field guides – Queensland and tropical Australia

- Hood IA 2003 *An Introduction to Fungi on Wood in Queensland*. University of New England, Armidale.
- McMullan-Fisher SJM, Guard FE 2021 *Fungi of southeast Queensland*. Fun Fungi Ecology, Maroochydore.
- McMullan-Fisher SJM, Guard FE 2021 *Mushrooms of southeast Queensland*. Fun Fungi Ecology, Maroochydore.
- Prance M, McMullan-Fisher S n.d. *A Little Field Guide to West Brisbane Fungi*.
- Queensland Mycological Society Inc (various years) *Australian Tropical Mushrooms & Other Fungi* (laminated field guide).
- Queensland Mycological Society Inc (various years) *Fungi of the Sunshine Coast* (laminated field guide).

- Queensland Mycological Society Inc (various years) *Mushrooms of the Sunshine Coast* (laminated field guide).

Specimen collection and preservation

- Prance M, Fechner N 2017 *Collecting and Preserving Fungi Specimens* (Version 2.1). Queensland Herbarium, Department of Science, Information Technology and Innovation, Brisbane.

Biodiversity databases and distribution resources

- Atlas of Living Australia 2025 Species occurrence and distribution records. Commonwealth of Australia, https://www.ala.org.au/ (accessed 2025-2026).
- MycoBank. (2025). MycoBank: Fungal nomenclature and taxonomy database. Westerdijk Fungal Biodiversity Institute. https://www.mycobank.org (accessed 2025-2026).

Lichen identification resources

- Australian Biological Resources Study (accessed 2025) Lichens of Australia. ABRS, Canberra.

Myxomycete references

- Lloyd S 2014 *Where the Slime Mould Creeps: The Fascinating World of Myxomycetes*. Tympanocryptis Press, Canberra.
- Stephenson SL 2021 *Secretive Slime Moulds: Myxomycetes of Australia*. CSIRO Publishing, Melbourne.

General morphological and visual references

- Petersen JH 2012 *The Kingdom of Fungi*. Princeton University Press, Princeton.

3. Results and Discussion

The fungal collections made during the Jawoyn Bush Blitz comprised 136 specimen-based records. A further 42 observations were documented for which no specimens were retained or where material was unsuitable for identification, bringing the total number of fungal records to 178.

Taxonomic resolution varied across collections. Due to the opportunistic survey design, seasonal fruiting constraints, specimen condition and the absence of molecular analyses, the majority of records were conservatively assigned to genus or higher taxonomic rank. No species new to science were identified during the survey. All records represent new locality data for the surveyed area.

Specimens collected during the survey are currently being curated pending confirmation of accessioning arrangements with relevant institutions. Accessioning will proceed in accordance with contractual requirements and in a manner consistent with appropriate governance and consent considerations relevant to collections made on Aboriginal land. The author intends to complete accessioning once these arrangements are confirmed.
Given the limited baseline data for fungi in the region, additional surveys conducted under varied seasonal conditions, combined with molecular analyses and specialist review, would improve species-level resolution and distributional understanding, subject to appropriate governance and institutional arrangements.

3.1 Un-named or not formalised taxa

No putatively un-named or undescribed taxa were identified during the survey; taxa not determined to species level reflect identification constraints rather than evidence of novel species.

3.2 Species new to science

In this report, ‘species new to science’ means species that were not recognised by Western science before this Bush Blitz.

No species new to science were identified during this survey. All taxa recorded were assigned to described genera or retained at higher taxonomic levels where species-level identification was not possible. No material was determined to represent a species new to science based on the information available during this Bush Blitz.

3.3 Introduced species

No introduced fungal or lichen species of known invasive concern were identified during this Bush Blitz. All taxa recorded are consistent with assemblages typically associated with the surveyed habitats, and no species currently listed as invasive or high-risk under relevant Commonwealth or Northern Territory legislation were detected.

The identification of fungal and lichen pests is limited by the absence of comprehensive regulatory frameworks for these groups. Based on the material collected and current knowledge, no species or locations identified during this survey are considered priorities for control.

3.4 Threatened species

No fungi or lichens recorded during this survey are listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 (Cwth) or under relevant Northern Territory legislation.

3.5 Range extensions

No confirmed range extensions were identified during this survey. While all records represent new locality records for the surveyed area, insufficient baseline distribution data and taxonomic resolution prevent confident determination of species range extensions.

3.6 Genetic information

No genetic analyses were undertaken during the survey period. Specimens were documented using macromorphological characters. Any future molecular work will be subject to appropriate governance and permitting arrangements.

4. Information on species lists

Appendix 1 lists all fungal and lichen taxa recorded during this Bush Blitz based on field observations and collected material. Identifications were made using macromorphological characters and photographic documentation. Some specimens were retained at genus level or higher due to limited diagnostic features or taxonomic uncertainty.

Only taxa recorded during this survey are included. Historic records for the region, where available, may be accessed through the Atlas of Living Australia and relevant herbarium databases.

5. Information for land managers

Fungal diversity recorded during this Bush Blitz reflects the range of habitats and substrates present across the surveyed areas of Jawoyn Country. Fungi were documented from open eucalypt woodland, sandstone escarpments, monsoon rainforest patches, riparian corridors, and disturbed areas.

Ectomycorrhizal fungi recorded during the survey (e.g. *Amanita, Russula,* and *Boletales* representatives) were associated with areas of intact tree cover and undisturbed soils.

Continued monitoring of these taxa through seasonal observations may help document changes in woodland-associated fungal communities over time.

Wood-decaying fungi, including polypores and agarics associated with coarse woody debris and standing dead trees, include the genus *Hymenochaetaceae* (Figure 2). Retention of fallen logs, standing dead trees and woody material, where safe and appropriate, is likely to support continued fungal diversity.



Figure 2: *Phellinus sp.* on a standing dead tree stump. Photo: S.Bruce, 2025.

Fungi were also recorded from exposed soil, leaf litter and other organic substrates (Figure 3), highlighting the importance of maintaining substrate diversity across the landscape.
Given the strong seasonal influence on fungal fruiting, surveys conducted under different rainfall conditions would provide a more complete understanding of fungal diversity across the region.



Figure 3: *Marasmius sp.* on burned grass stubs. Photo: S.Bruce, 2025

6. Other significant findings

A notable observation during the survey was a fungal infection consistent with so-called “zombie ant” fungi (Figure 4). The first infected ants were identified by Dr François Brassard, and additional infected individuals were subsequently observed and collected on a later survey day by Sherie Bruce. Infected individuals of *Polyrhachis senilis* were found attached to vegetation in elevated positions characteristic of behaviourally manipulated hosts. The associated fungus was identified to genus within the *Ophiocordyceps* complex, but could not

be resolved to species level based on available material. Attempts to culture the fungus and obtain molecular sequence data were unsuccessful.

This represents a documented host–fungus interaction within the survey area. Further targeted collection and molecular analyses would be required to confirm the species-level identity of the fungus.



Figure 4: Ant infected by a fungus within the Ophiocordyceps complex, observed attached to vegetation during the Jawoyn Bush Blitz. Photograph: Dr François Brassard.

A medium-sized agaric was recorded growing from sandy soil under mixed woodland vegetation. Basidiomata exhibited a convex, lilac-to-violet pileus, smooth and matte, with an even margin. Lamellae were moderately crowded, adnate to slightly sinuate, becoming rusty orange-brown at maturity. The stipe was central, cylindrical, lilac to violet, without a persistent annulus or volva. Interior flesh was pale lilac to whitish and did not stain when cut. The rusty orange-brown lamellae are consistent with a cortinarioid spore deposit. Based on macromorphological characters, the specimen is assigned to Cortinarius sp. (Figure 5).



Figure 5: *Cortinarius sp.* showing lilac stipe and rusty orange-brown lamellae. Image: Sherie Bruce, 2025.

7. Conclusions

This Bush Blitz survey provides a baseline documentation of fungal diversity across surveyed areas of Jawoyn Country. A total of 178 fungal records were documented, including 136 specimen-based records and 42 observation-only records, spanning a range of habitats and substrate types. The survey recorded representatives of multiple ecological guilds, including ectomycorrhizal fungi, wood-decaying taxa, soil- and litter-associated species, and documented a host–fungus interaction within the Ophiocordyceps complex.

Taxonomic resolution was constrained by the absence of molecular analyses and the limited availability of diagnostic material for some collections. Identifications were therefore conservatively assigned where appropriate.

The findings provide new locality data for fungal taxa within the region and establish a foundation for future targeted surveys, seasonal monitoring and specialist taxonomic review.

Acknowledgements

I respectfully acknowledge the Jawoyn Traditional Owners as the custodians of the Country on which this survey was conducted. I thank them for welcoming this research onto their Country and recognise their ongoing cultural authority and enduring connection to Country, which guided and provided direction to this work. I thank the Warddeken Rangers, who attended at the invitation of the Jawoyn Traditional Owners through the Bush Blitz program, for their engagement and for contributing direction and knowledge that shaped how this survey was undertaken. I am particularly grateful to Northern Territory Parks and Wildlife rangers Krystal and Amanda for their strong support of the fungi survey and for sharing their Aboriginal knowledge of fungi, which informed field-based decisions.

I extend my sincere thanks to all rangers, Traditional Owners, and contributors listed on the front page of this report. Their guidance, collaboration, and hospitality were central to the success of this survey. The Bush Blitz team were welcoming and highly supportive throughout the program, creating meaningful opportunities for collaborative biodiversity documentation. I acknowledge the many field participants and collectors whose collective efforts made this survey possible.

I acknowledge Dr Ilona Stobutzki, Science Director of National Research Collections Australia, CSIRO, for providing funding support that enabled my participation in this Bush Blitz. I also thank my colleagues, Dr Cecile Gueidan and Dr Heidi Zimmer, for their scientific guidance, practical assistance, and collegial support throughout the project. My thanks also extend to the Northern Territory Herbarium, particularly Nick Cuff, Chief Botanist, and his team, for recommending me to the program and for their valuable botanical advice.

I am grateful to Dr François Brassard, fellow survey scientist, for his collaboration on the Ophiocordyceps (“zombie ant”) observation. I extend special thanks to Dr Matt Barrett for his patience, taxonomic guidance, and generous advice as I continue to develop my knowledge of mycology through a largely self-directed learning journey. Field access was made possible by Heli-Muster NT, whose professionalism ensured safe and effective operations throughout the survey.

Finally, I acknowledge my Aboriginal ancestors — Arrernte and Yolŋu — whose knowledge, strength, and wisdom guide my work and continue to shape my approach to science and Country.

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United Nations 2007 United Nations Declaration on the Rights of Indigenous Peoples. United Nations, New York.

Appendix 1. List of fungi recorded during the Jawoyn Country Bush Blitz

Order: Acarosporales

Acarospora sp. (cf. Acarospora group)

Order: Agaricales

Agaricaceae sp.

Agaricales gen. et sp. indet.

Agaricales gen. indet.

Agaricales gen. indet. (minute saprotrophic agaric)

Amanita sp.

Amanita sp. (tentative)

Cortinarius sp.

Hygrocybe sp.

Hygrophoraceae sp.

Hymenogastraceae sp.

Marasmiaceae sp.

Marasmiaceae sp. (marasmioid, leaf-litter agaric)

Marasmius sp.

Mycena sp.

Psathyrella sp.

Psathyrellaceae sp.

Strophariaceae sp. (sensu lato)

indet. (possibly Marasmiaceae indet.)

indet. (possibly Tricholomataceae s.l. or related)

Order: Boletales

Boletaceae sp.

Boletaceae sp. (sensu lato)

Boletaceae sp. (tentative)

Scleroderma sp.

Order: Dacrymycetales

Dacryopinax sp.

Order: Gomphales

Gomphus sp.

Order: Hymenochaetales

Hymenochaete sp.

Order: Lecanorales

Caloplaca sp.

Order: Myxogastria

Stemonitis sp.

Order: Physarales

Physarum sp.

Order: Polyporales

Ganoderma sp.

Ganoderma sp. indet.

Polyporaceae gen. indet.

Polyporus sp.

Polyporus sp. (sensu lato; small stipitate polypore)

Trametes sp.

Trametes sp. indet.

Order: Russulales

Russula sp.

Russulaceae sp.

Order: Higher-Level / Unresolved

Agaricomycetes sp.

Basidiomycota indet. (coralloid fungus)

Fungi (unassigned)