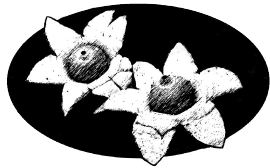


THE QUEENSLAND MYCOLOGIST



Bulletin of
The Queensland Mycological Society Inc.
Vol 5 Issue 3, Spring 2010



The *Queensland Mycologist* is issued quarterly. Members are invited to submit short articles or photos to the editor for publication. The deadline for contributions for the next issue is November 15, 2010.

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SOCIETY OBJECTIVES

The objectives of the Queensland Mycological Society are to:

- Provide a forum and a network for amateur and professional mycologists to share their common interest in macro-fungi;
- Stimulate and support the study and research of Queensland macro-fungi through the collection, storage, analysis and dissemination of information about fungi through workshops and fungal forays;
- Promote, at both the state and commonwealth levels, the identification of Queensland's macrofungal biodiversity through documentation and publication of its macro-fungi;
- Promote an understanding and appreciation of the roles macro-fungal biodiversity plays in the health of Queensland ecosystems; and
- Promote the conservation of indigenous macro-fungi and their relevant ecosystems.

Members are reminded that 2010 subscriptions (\$20 pp) were due in January.

Payment can be made by cheque mailed to the Treasurer, Queensland Mycological Society Inc., PO Box 295, Indooroopilly Qld 4068 or directly to the Treasurer at the next meeting. A Membership Renewal Form is included on page 15.

Please ensure that the Secretary (secretary[at]qms.asn.au) always has your current email address.

The Secretary, Queensland Mycological Society Inc, PO Box 295, Indooroopilly Qld 4068

QMS WEBSITE: www.qms.asn.au

Cover photo: Megan Prance photographed this clump of *Filoboletus manipularis* growing on a wet log near the walking track at Mt Cordeaux (Cunningham's Gap), Queensland, on 13 March 2010.

OFFICE HOLDERS 2010-11			
Committee members			
President	Sapphire McMullan-Fisher	5485 3066	President [at] qms.asn.au
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Newsletter Editor	David Holdom	0431 293 813	editor[at]qms.asn.au

QMS CALENDAR 2010

Meetings are held in the Bailey Room at the Herbarium, Mt Coot-tha, commencing at 7pm on the second Tuesday of alternate months from February, unless otherwise scheduled. Check the website for any changes.

There will be a pre-meeting at 6 pm. at the Herbarium at Mount Coot-tha for those who attended forays and took photographs. Bring images preferably renamed according to the QMS naming convention (see the website or March 20 Newsletter for details. The website will contain any updates to the protocol).

To assist those unable to attend meetings, notes on the talks are included in the Queensland Mycologist wherever possible. However, the notes never do justice to the topic as they do not reflect the enthusiasm of the speaker or cover the discussion that follows. So remember, where possible it is better to attend the meetings, get the information first hand and participate in the invaluable information sharing opportunity.

QMS Calendar 2010-11

Meeting Programme 2010-11

Date	Speaker	Topic
12 October	Jutta Godwin	For the Love of Lichens!
7 December, 2010	Festive season celebration	
February 8, 2011	TBA	
April 12, 2011	AGM	
June 13, 2011	TBA	

Meeting Supper Roster 2010-11

Two volunteers are required for each meeting – one to bring something savoury and one something sweet.

Meeting	Savouries	Cakes/sweets
October 12, 2010	Jon	Ken and Floss
December 14, 2010	All Bring a plate to share	
February 8, 2011		
April 12, 2011	AGM. All Bring a plate to share	
June 13, 2011	Marie	Jutta

2010 Field Trip Programme

Field trip details may change as a result of drought or other unforeseen circumstances. Check the website for changes.

Date	Location	Leader
Saturday 16 October	Three locations in Chapel Hill and Indooroopilly. Meet at Merri Merri Park, Chapel Hill (UBD 157 M18) , 8.00am	Jutta Godwin
Saturday, 30 October	Northern SE Qld	Patrick Leonard
Saturday 27 November	Mushroom Farming	Jon Atkinson / Kim Nguyen

2010 Workshop Programme

The 2010 Workshop programme has concluded. Check the website and future newsletters for workshops in 2011.

Workshops are given on a cost recovery basis so there will be a charge between \$10-\$30.

Forays: Finding the right balance between science and fun

Pat Leonard

At the last QMS meeting we had a discussion about forays and why we seemed to be getting fewer volunteers to be foray leaders. There was a feeling that the balance had moved from a fun day out towards a serious and complicated scientific endeavour, at least for the foray leader and the recorder.

The QMS has been feeling its way, and this is a good time for us to review where we have got to and to try and reduce the burden on foray leaders and recorders for the next fungal season starting at the end of October.

The main points to emerge were:

- Just getting a list of the Fungimap Target species from a site will contribute to the science.
- It may be better to ignore difficult fungi and just place them into morpho groups, these don't need to be recorded in detail or photographed.
- Very young or old specimens should be ignored.
- Make fewer collections so there is less work after a foray.
- Take fewer but better photographs.
- Be patient with each other!

We have had a number of instances this year when a fungus has been collected without being photographed, and it later emerged that the fungus was very interesting. There have been other occasions where we have taken dozens of photos of the same thing.

Other suggested improvements were:

- Put all the forms together and put them up on the website.
- Swap recorders after one hour.
- Possibly smaller foray groups would work better.

Recording is a demanding task, particularly when the mycologists are being dragged off to see a new exciting fungus before the recorder has taken all the details down. Everyone should help the recorder get information. It only takes a few minutes more to write each species down but it is almost impossible to add the details like substrate later.

This last year we have started trying to have a get together around a picnic table at the end of the foray, before everyone leaves. This provides an opportunity to go through the foray records to check what specimens were collected, and who they are now with. It also lets people check that there is at least one good photo of each collection.

Data and images should ideally be sent to Megan, Pat or Sapphire

Mt Mee Foray report

Patrick Leonard

On an overcast day in late April a select group of QMS members gathered at The Gantry in the Mt Mee National Park. We made a late start, reputedly because some members took a wrong turning at Dayboro. There were mentions later on in the day of there being a good bakery in Dayboro and some interesting cakes were described. Following the foray leader's briefing on hazards on the track we were treated to a comprehensive first aid lecture on dealing with snake bites by John Wrench.

A previous exploratory visit to the site had revealed lots of interesting mycorrhizal fungi on a section of the track to the west going towards the Somerset lookout, starting about 500 m from the car park. However, members only just managed to cross the road into a thick Picabeen plantation before several small fungi were found that the foray leader was quite unable to identify. These included a small *Campanella*¹ found by Lil Spadijier growing on what appeared to be dead *Lantana* stems.

¹ Editor's note: The foray list records this as *Campanella pustulata*, and that is in the photo caption, but Patrick informs me that it is not known on this host so it could be a different species -DH



Campanella pustulata © David Holdom

Very good collections of *Lactarius subclarkeae* were made at two stops a little further along the track as a few Mycorrhizals began to appear. The orange coloured *Cantharellus ochraceoravus* was also seen in two places. The find of the foray was undoubtedly Pat Thompson's discovery of *Marasmius crinisequi*, which we all immediately recognised but few of us has seen before. It is a wonderful minute fungus with horsehair like wiry stems which branch. Some of the branches have caps on whereas others are bare. It grows on fallen leaves and twigs.

By mid day it started to rain, and we had travelled all of 250 M from the car park but had seen 35 species. (List on QMS website). We retreated to the picnic site, ate our lunch and reviewed our specimens under cover but without the benefits of a picnic table. We were distracted by a Kookaburra trying to steal snags off a barbie. The foray leader resolved to return to the site next year and blindfold the members for the first 500 M, and not mention snakes!



Cantharellus ochraceoravus © Annita Hearle



Lactarius subclarkeae © Annita Hearle



Marasmius crinisequi © David Holdom

QMS Cooloola Forays 26-27 June 2010

Sapphire McMullan-Fisher

A weekend of forays in Cooloola in the northern end of the Sunshine Coast was held in June. Both days were well attended with both Sunshine Coast and Brisbane based members. The weather was perfect with rain the weekend and the two days before but dry days for the forays. Most attendees stayed locally, and on Saturday night a congenial dinner was held at the Apollonian Hotel in Boreen Point.

Saturday's foray was to Doggrell Loop, Kin Kin, Cooloola, mixed forest site with canopy species including *Eucalyptus cloeziana*, *Corymbia* sp., *Araucaria cunninghamii* and *Agathis robusta*. All up 34 macrofungi (Table 1) were recorded with 14 (41%) identified to species, 14 (41%) to genus and 5 (15%) to morphogroup.



Figure 1: A large (5cm) *Marasmius*
© Sapphire McMullan-Fisher

The highlights of this foray were a large distinctive *Marasmius* species (Figure 1) and a “boring” brown mushroom (Figure 2, left), that we were lucky to collect and photograph at all but that ended up being the highlight of the weekend.

In the field we thought it was some sort of *Psilocybe* but Pat found some amazing cruciform shaped spores (Figure 2, right) when he looked at the collection under the microscope. Discussions with Tom May about a similar collection of Sapphire's from Mary Cairncross revealed that both collections belong to the genus *Crucispora*, previously unrecorded from Australia. These collections do not match either of the described species, *Crucispora naucorioides* (from New Zealand) and *C. rhombisperma* (from Asia). Chris Dunk has also found something with similar shaped spores in Victoria. Hopefully more work on the Australian material will reveal if the Queensland and Victorian material are the same species and will likely result in at least one new named species. I guess the moral of this story is that sometimes even ordinary-looking brown mushrooms can be exciting!

Following the foray to Doggrell Loop the society's microscopes and foray box identification materials were put to good use, with several collections having descriptions written up and a couple even identified to name. During this identification process Lil and Adrian wandered around and found a black bolete which Patrick identified as *Strobilomyces velutipes* (Figure 3). This may be a new record for Queensland. A follow up session after forays is very valuable in providing names and teaching members about the identification process.

The Sunday foray was to Great Sandy National Park, Southern Cooloola, Lake Cooribah Road section. This is one of the QMS sites nominated for at least annual visits and the vegetation is wallum woodland with scattered *Eucalyptus* overstory, midstory dominated by *Melaleuca quinquenervia*, with *Banksia robur* (swamp banksia), patches of *Allocasuarina littoralis* and sedge understory. Overall 28 macrofungi (Table 1) were recorded and 41%

identified to species, 48% to genus and 11% to morphogroup. The mycological highlights were two boletes: *Boletus ovalisporus* (Figure 4) and the gilled bolete *Phylloporus* aff. *leucomycelinus* (Figure 5).

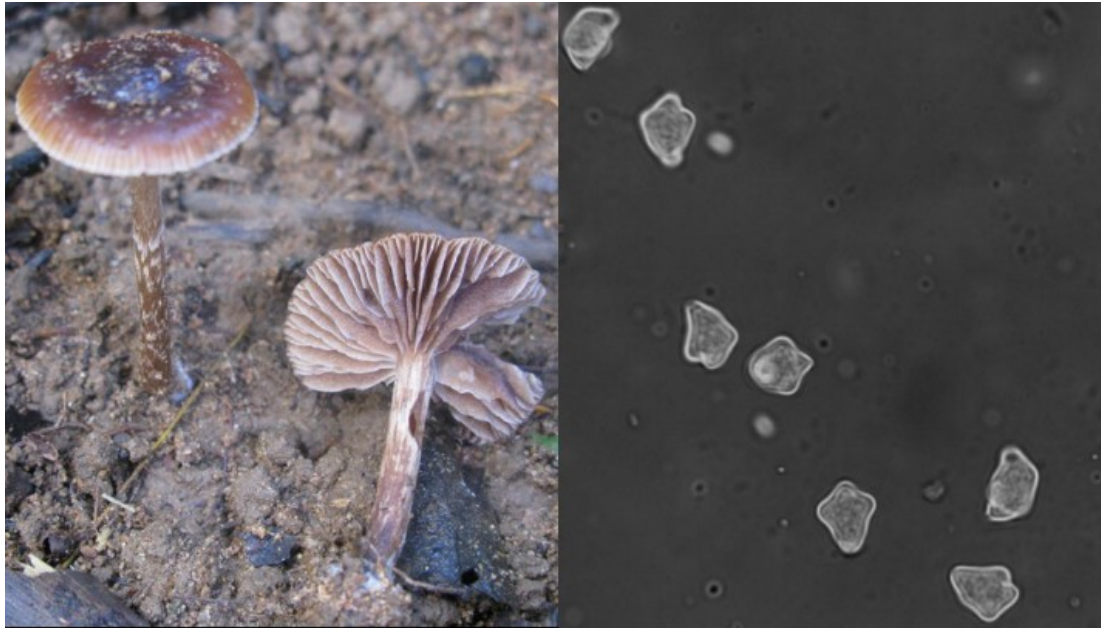


Figure 2: *Crucispora* sp. © Sapphire McMullan-Fisher, (left) Patrick Leonard (right)



Figure 3: *Strobilomyces velutipes* © Sapphire McMullan-Fisher

Thanks to Patrick for doing most of the identifications; without his valuable work we would learn a lot less about the fungi we see on forays. Thanks also to all who attended and produced a fun fungal weekend.



Figure 4: *Boletus ovalisporus* © Megan Prance



Figure 5: *Phylloporus* aff. *Leucomycelinus* © Fran Guard

Table 1. Macrofungi from the June QMS forays.

Field number	Species	Substrate	Associated organism	Doggrell Loop	Southern Cooloola
37	Agaric - <i>Inocybe/Conocybe</i> sp.	Soil - sandy			+
52	<i>Amanita</i> sp. 'grey with volva'	Soil - sandy			+
20	<i>Anthracoephyllum</i> <i>archeri</i>	Twigs 1-2 cm		+	
15	<i>Auricularia auricula- judae</i>	Log 4 cm diam.		+	
38	<i>Boletus ovalisporus</i>	Soil - sandy	<i>Allocasuarina</i>		+
47	<i>Boletus ovalisporus</i>	Soil - sandy	<i>littoralis</i>		+
44	<i>Calocera</i> aff. <i>spathulata</i>	Wood - 5 cm diam.			+
	<i>Collybia</i> <i>eucalyptorum</i>	Log 150 cm diam., moss		+	
59	<i>Coltricia</i> <i>cinnamomea</i>	Soil - sandy			+
39	<i>Conocybe</i> sp.	Soil - sandy			+

35	<i>Cortinarius</i> sp. 'felty buff C, lilac G'	Soil - sandy		+
50	<i>Cortinarius</i> sp. 'pale cinnamon tints C'	Soil - sandy		+
9	<i>Crucispora</i> sp.	soil		+
49	<i>Dictyopanus pusillus</i>	Wood - 5 cm diam.		+
46	Discomycete sp. 'yellow'	Soil - sandy		+
12	<i>Entoloma</i> aff. <i>albosimulans</i>	soil litter -		+
51	<i>Entoloma</i> sp. 'isabelline CS'	Allocasuarina needles	<i>Allocasuarina littoralis</i>	+
23	<i>Galerina</i> sp.	Log 150 cm diam., moss		+
41	<i>Gloeophyllum</i> aff. <i>abietinum</i>	log 3-15 cm diam. Burnt		+
13 &		Log 80 cm diam. & Wood -		
55	<i>Gymnopilus</i> spp.	5 cm diam.		+
61	<i>Hebeloma</i> sp.	Soil - sandy		+
6	<i>Hexagonia</i> sp. 'pale edge'	Log 12 cm diam.		+
24	<i>Hexagonia tenuis</i>	Twig 1 cm		+
33	<i>Hymenochaete</i> sp.	Log 20 cm diam.		+
60	<i>Inocybe dewrangia</i>	Soil - sandy		+
34	<i>Laccaria</i> sp. 'pale G'	Soil - sandy		+
48	<i>Lactarius eucalypti</i>	Soil - sandy		+
2, 18 &				
26	Leather			+
5, 27 &	<i>Marasmius</i> spp. 3 taxa	Twig 0.3 cm		+
57	<i>Marasmius</i> sp. 'large grey'	Log 5 cm diam.		+
30	<i>Marasmius</i> sp. 'sicci group'	Log 15 cm diam.		+
29	<i>Morganella purpurascens</i>	Log 4 cm diam., rotting		+
22	<i>Mycena</i> sp. 'small beige'	Litter		+
1	<i>Omphalina chromacea</i>	Soil - sandy, with algal matt	algal matt	+
58		Butress of living tree >2 m diam.	Bloodwood (Corymbia)	+
7	<i>Phellinus</i> sp.			+
56	<i>Phylloporus</i> aff. <i>leucomycelinus</i>	Soil - sandy		+
43	<i>Pisolithus marmoratus</i>	Soil - sandy		+
19	Polypore sp.	Log 16 cm diam.		+
3	Polypore sp. eccentric stipitate	Twig 1.3 cm, rotted		+
10 &		Twig 3 cm &		
14	<i>Polyporus dictyopus</i>	Log 4 cm diam.		+

32, 36 & 42	<i>Pycnoporus coccineus</i> <i>Ramaria</i> sp.	Twig 1 cm, Twig 2 cm diam. & Twig 5 cm diam.	Melaleuca sp. wood	+	+
54	'Cooloola orange'	Soil - sandy			+
45	Resupinate fungus	Wood			+
4 & 21	<i>Russula iterika</i>	soil		+	
16	<i>Ryvardenia</i> sp.	Butress of living tree >2 m diam. Twig 1 cm & Butress of dead	<i>Eucalyptus cloeziana</i> = Gympie messmate	+	
25 & 40	<i>Schizophyllum commune</i>	Allocasuarina tree	Allocasuarina sp.	+	+
28	<i>Stereum</i> aff. <i>complicatum</i>	Logs 10-30 cm diam.		+	
8	<i>Stereum ostra</i>	Log 4 cm diam.		+	
31	<i>Trametes hirsuta</i>	Log 6 cm diam.		+	
53	<i>Trametes lactinea</i>	Wood - 5-8 cm diam.			+
17	<i>Tremella foliaceae</i>	Butress of living tree 15c m diam.	Rainforest tree	+	
11	<i>Typhula</i> sp.	Log 4 cm diam.		+	

Orchids And Fungi -- Partners For Life

Three Thai orchids have been found to rely on a range of fungi to obtain carbon, rather than producing their own organic carbon. A study of the relationship was published in the open access journal *BMC Biology* in 2009.

Marc-André Selosse and Mélanie Roy, from the Centre d'Ecologie Fonctionnelle et Evolutive, Montpellier, France, studied *Aphyllorchis montana*, *A. caudata* and *Cephalanthera exigua* orchids with Suyanee Vessabutr and Santi Watthana from the Queen Sirikit Botanic Garden, Thailand. These orchids have no chlorophyll and rely on fungi colonising their roots for their carbon supply.

The plants grow on the ground in mountain forests across Thailand. The two *Aphyllorchis* orchids studied associated with a wide range of fungi, while the *Cephalanthera* was much more specific.

The authors showed that these orchids associate with highly diverse soil fungi colonizing their roots, and use them as a carbon source. In turn, the fungi associate with the roots of nearby trees, from which they collect carbon for the orchids.

Journal reference: Mélanie Roy, Santi Watthana, Anna Stier, Franck Richard, Suyanee Vessabutr and Marc-André Selosse. (2009) Two mycoheterotrophic orchids from Thailand tropical dipterocarpacean forests associate with a broad diversity of ectomycorrhizal fungi. *BMC Biology*, 7:51 Open Access [[link](#)]

BioMed Central (2009, August 22). Orchids And Fungi -- Partners For Life. *ScienceDaily*. Retrieved Aug 24, 2009, from <http://www.sciencedaily.com/releases/2009/08/090813190936.htm>
This article is abridged from the full text of the Science Daily article, which was in turn adapted from materials provided by [BioMed Central](#), via [EurekAlert!](#), a service of AAAS.

How to Recognise a *Bolbitius*

Patrick Leonard



Bolbitius variicolor photographed by Ray Baxter on the Bunya Mountains field trip, March 2009 (top) and *Bolbitius titubans* Photographed by Fran Guard in South Gippsland, Victoria in May 2008.

The genus *Bolbitius* consists of small and very thin fleshed fungi with an orange to reddish brown spore deposit. The fruiting bodies have ovoid to conical caps, 20 – 50 mm wide, often wrinkled in the middle, and are viscid to slimy when fresh. The spores have a distinct germ pore, that is like a small hole at one end. They grow on dung, manured ground, frass (the powdery remains left behind by wood-boring insects) or sawdust.

Only four species have been found in Australia and of these only the bright yellow *Bolbitius titubans* (Synonym *B. vitellinus*) which grows on dung, has been widely recorded. But, there are no good collections or photographs of this fungus growing in Queensland. QMS members saw the much paler *B. variicolor* on the Bunya Mountains foray.

So next time you are in a paddock or habitat that is grazed, look out for a small lemon yellow viscid fungus growing on a cow pat.

Good photos and specimens are needed.

Queensland Mycological Society Inc

ABN 18 351 995 423

Membership Renewal 2010

Surname: **Given Names**

Address

.....

..... **PostCode**

Phone

Mobile.....

Email Address:.....

Date:

Amount due: \$20.00 per person

Due date: 1st January 2010

Amount paid: \$.....

Renewal Forms may be submitted in person at a QMS general meeting at the Queensland Herbarium, Mt Coot-tha or posted to:

•The Treasurer

Queensland Mycological Society Inc

PO Box 295

Indooroopilly QLD 4068

Payment Options

Please circle as appropriate:

Cheque / Money Order / EFT / Cash (only in person – not by mail)

Electronic Funds Transfer (EFT) Bank Details:

Account Name: Queensland Mycological Society Inc

Westpac Bank BSB 034 055 Account Number 21-3324

Receipt No

* Please ensure your name is on the transfer entry

* Please also send an email, including EFT reference number to

The Treasurer at [diana.leemon\[at\]deedi.qld.gov.au](mailto:diana.leemon[at]deedi.qld.gov.au)