



**THE QUEENSLAND MYCOLOGIST**  
**Bulletin of**  
**The Queensland Mycological Society Inc.**

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 May 15, 2010.

Please ensure that the Secretary ([secretary@qms.asn.au](mailto:secretary@qms.asn.au)) always has your current email address. The Secretary, Queensland Mycological Society Inc, PO Box 295, Indooroopilly Qld 4068

### SOCIETY OBJECTIVES

**The objectives of the Queensland Mycological Society are to:**

1. Provide a forum and a network for amateur and professional mycologists to share their common interest in macro-fungi;
2. 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;
3. Promote, at both the state and commonwealth levels, the identification of Queensland's macrofungal biodiversity through documentation and publication of its macro-fungi;
4. Promote an understanding and appreciation of the roles macro-fungal biodiversity plays in the health of Queensland ecosystems; and
5. Promote the conservation of indigenous macro-fungi and their relevant ecosystems.

### CONTENTS

	<b>Page</b>	
Society Objectives	1	<p><b>The Secretary</b>  <b>Queensland Mycological Society Inc</b>  <b>PO Box 295</b>  <b>Indooroopilly Qld 4068</b></p> <p>ABN No 18 351 995 423</p> <p>Web site: <a href="http://www.qms.asn.au">www.qms.asn.au</a>            Email <a href="mailto:secretary@qms.asn.au">secretary@qms.asn.au</a></p> <p>Editor: David Holdom</p>
QMS Website	2	
Office Bearers	2	
Sponsor Acknowledgement	2	
QMS Calendar	3	
QMS 2010 Field Trip programme	4	
President's Report	5	
Day out with the Museum Photographer	6	
Photography Training Gets Results	9	
<i>Tetrapyrgos nigripes</i>	11	
<i>Battarrea stevenii</i>	13	
Membership Form	16	

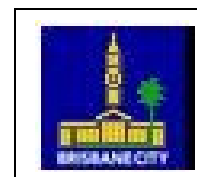
**QMS WEBSITE:** [www.qms.asn.au](http://www.qms.asn.au)

Have you logged onto the QMS website lately? If not then it is time you did!! Many thanks to Andrew Kettle for getting the site up and running. Please provide feedback to the Committee about any ideas you may have for the site.

**OFFICE HOLDERS 2009-10**

<b>OFFICE HOLDERS 2009-10</b>			
<b>Committee members</b>			
President	Sapphire McMullan-Fisher	5485 3066	<a href="mailto:president@qms.asn.au">president@qms.asn.au</a>
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QMS acknowledges and appreciates the sponsorship that has been given to the Society by the Queensland Herbarium, SEQ Catchments and Brisbane City Council.



## QMS CALENDAR 2010

**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 16.

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. They are asked to bring all images preferably renamed according to the QMS naming convention summarised on the next page (see the website or March 2009 Newsletter for details. The website will contain any updates to the protocol).

To assist those not in attendance at meetings, notes on the addresses given are included in issues of the Queensland Mycologist. However, the notes never do justice to the topic as they do not reflect the enthusiasm of the speaker or cover the questions and discussions that were raised on the topic. So remember, where possible it is far better to attend the meetings, get the information first hand and participate in the invaluable information sharing opportunity.

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### QMS Meeting Programme 2010

Date	Speaker	Topic
13 April	David Fisher	Cultural attitudes to fungi
8 June	John Wrench	Taxonomic Etymology
10 August	Andrew Kettle	Fungal Genetics
12 October	TBA	

### MEETING SUPPER ROSTER 2010

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

Meeting	Savouries	Cakes/sweets
April	Sapphire	Annita Hearle
AGM/May	All bring a plate to share	
June	Andrew Kettle	???
August	Pat Leonard	???
October	???	???
December	All bring a plate to share.	

## QMS 2010 Field Trip Programme

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

<b>Date</b>	<b>Location</b>	<b>Leader</b>
Saturday, 27 March	Chermside Hills	John Wrench
Saturday, 10 April	Linda Garrett, Mapleton	Patrick Leonard
Saturday, 24-25 April	Springbrook A.R.C.	TBC
Saturday, 8 May	Samford Valley/Redcliffe B.G.	Jan McNicol
Saturday, 29 May	Jolly's Lookout, Brisbane Forest Park	Ray & Noreen Baxter
Saturday, 26 June	Southern Cooloola, Great Sandy National Park, Lake Cooroibah Road, QLD.	Sapphire McMullan-Fisher
Saturday, 30 October	Northern SE Qld	Patrick Leonard
Saturday, 27 November	Mushroom Farming	Jon Atkinson / Kim Nguyen

## 2010 Workshop Programme

<b>Date</b>	<b>Topic</b>	<b>Leader</b>
Saturday, 31 July	Microscope workshop	Patrick Leonard, Diana Leemon
Saturday, 28 August	Fungi photography for IDs	Sapphire McMullan-Fisher
Saturday, 25 September	Creating image databases using Extensis Portfolio, and renaming images	Megan Prance

## President's Report

Sapphire McMullan-Fisher

The great news is that we have managed to get a new Secretary – so **huge thanks** to Fran Guard who will be a nominee for the position at our AGM in May. Fran and Gretchen Evans our minutes' secretary will work together with the rest of the QMS committee to help QMS keep running. I think we are a very active society considering we are relatively new and have a small membership of about 50. So if you know anyone who might be interested in fungi please encourage them to come along!

Sadly at the AGM we will need to find a new Foray coordinator – Andrew Kettle is in his third year of his science degree and needs a bit more time. He will stay on as our web designer/coordinator. If you think you might be able to help QMS in the role of Foray Coordinator please contact me <president[at]qms.asn.au> or Andrew <foray[at]qms.asn.au>. The foray coordinator can choose to be on the executive committee, where you will need to attend most executive meetings. Or alternatively the foray coordinator can be on the wider QMS committee which means you only need to turn up to meetings to give the foray coordinator report and proposals for new forays, which means you can turn up at the end of executive meetings.

We have a really great QMS committee who get all sorts of work done behind the scenes. As some of you will know Megan Prance who organised a collection permit for QMS members just put in our **first annual collection report**. So **thanks** and **appreciation** to Megan for getting the report in. For newer members if you want to be able to collect fungi – which is often necessary if you want to identify them properly – you need to have a collection permit to collect most places other than your backyard. If you would like to be on the QMS collecting permit you need to be a paid up member and you need to contact Megan who will give you details about the permit requirements <rhoda.spencer[at]gmail.com>.

The highlight from the report are that *Tetrapyrgos nigripes*, not previously recorded in Australia, was found simultaneously at Riverhills (in Megan's backyard) and at Baroon Pocket Dam on the Sunshine Coast. All up the report included 32 collections of which about a third have been deposited at the Brisbane Herbarium. These collections will help increase the understanding of fungi in Queensland and Australia. Hopefully more of these collections will be deposited once we get names to at least genus on to them.

For those who can remember, Patrick Leonard and Megan Prance went to a meeting with the Atlas of Living Australia (ALA) team back in September 2008; for more information see <http://www.ala.org.au/>. The ALA is now putting together a Steering Committee to help guide the tools ALA is producing for the fungi. This will include a list of current names for Australian fungi. I am pleased to let you know that Pat has accepted the nomination as QMS representative to be on the list of nominee's for the Steering committee. I hope his nomination gets accepted as I think Pat has a wealth of experience of the difficulties in getting names (identifications) on fungi.

The fungi coming up after all the recent rain has been very exciting so don't forget to keep your eyes out for our museum book targets. We need both great images and collections of these fungi. To find out more about our book target species look in the QMS members section (you will need the password so contact Andrew if you don't have it yet) <http://www.qms.asn.au/members/docs/museum/museum.html>

## Day out with the Museum Photographer

Sapphire McMullan-Fisher

QMS has been negotiating with the Queensland Museum to see if we can collaborate on producing one of their pocket guides on the fungi we are finding in SEQ. The QMS book sub-committee particularly Fran Guard, Megan Prance, Patrick Leonard and I have all worked hard to get together a list of fungi we would like for the book. We realise that not all of these fungi will necessarily be seen this year but hopefully enough of them will come up that we can get some book quality images with a voucher collection of each fungus. The sub-committee has pulled together as much information as we have on these species, so that members will be better able to recognise these targets.

To foster the project Fran and I went out with one of the professional photographers from the Museum – Jeff Wright. On the 15 Jan 2010 we took Jeff to Linda Garrett circuit in Mapleton. This is one of our regular survey sites and we thought it would be productive after the rain. The day was perfect – damp and overcast most of the time but no rain.

We found surveying for specific target fungi is quite different from just a general survey. You have to ignore fungi and just focus on those we want for the book. This was harder than you might think.

Jeff brought all of his camera gear in a huge camera backpack (Figure 1). He had two camera bodies, a good number of lenses and a couple of tripods. He said that he did take less gear but as he hadn't photographed fungi before he wasn't sure what he would need.



**Figure 1:** Jeff Wright photographing a specimen, note the backpack behind, with Fran Guard watching and learning more about macro-photography. Jeff is using a diffuser to protect the specimen from the harsh direct sunlight. © S.J.M. McMullan-Fisher

If you think our photographers are slow on a forays you should see a professional photographer at work! Each collection took at least 45 minutes. We explained to Jeff the different characteristics that needed to be recorded for the different fungi. For example when considering Boletes the blueing reaction that some species have is an important characteristic used in identification (Figure 2).



**Figure 2:** *Boletellus emodensis* cut in half has a blueing reaction on the pores and cap.

© S.J.M. McMullan-Fisher

Jeff was careful to review the images he had taken and would then often notice something in the background which would then be removed and he would take more images. It was a wonderful learning experience us all, Fran and I learnt more about photography and Jeff some of the intricacies of fungal characteristics.

All up we saw eight species, three of which we ignored as they were not on our list. We made collections of *Boletellus emodensis* (2100115P004), *Piptoporus australiensis* (2100115P006) and *Lentinus sajor-caju* (2100115P008). One specimen thought to be *Russula viridis* (2100115P003) in the field was checked by Patrick and turned out to be *Russula aff luteotacta* instead. Also the *Amanita* we collected is *Amanita luteolovelata* (2100115P005) and although not an original target may be used in the book. I have included the collection numbers in parentheses for each species which are the same as the first part of the file name of the photographs.

Once Jeff had left Fran and I prepared descriptions of the five collections and took some 'laboratory' style photographs (Figure 4). This process took a couple of hours. So I would recommend only making a couple of collections on any one day. Once the identification of these collections have been confirmed the collections will get lodged at the Brisbane Herbarium as vouchers for the book.

For the *Russula aff. viridis* collection some of the characteristics of the specimens had changed since we had collected it. The specimen had gone quite yellow where it was handled and cut (Figure 4), something not apparent from the field photographs (Figure 3). This emphasizes the

importance of observing and recording colour changes in specimens. The strong yellowing reaction is well known in a European species *Russula luteotacta*. It appears that this collection is an undescribed species which may be related to the European one, but has a different cap colour. It has been provisionally named *Russula* aff. *luteotacta*. The notes and photographs showing the yellowing reaction will be essential accompaniments to the specimen when it goes to the herbarium, allowing it to be properly described.



**Figure 3:** *Russula* aff. *luteotacta* image taken in the field.  
© S.J.M. McMullan-Fisher



**Figure 4:** *Russula* aff. *luteotacta* image taken under controlled circumstances and includes a ruler for scale.  
© S.J.M. McMullan-Fisher

Please note the images in this were taken by Sapphire, so are not the high quality of Jeff's photos.

## Photography training gets results

Megan Prance

Recently I spent a month working in Mary Street, Brisbane, and spent lunch breaks walking around the City Botanic Gardens. My delightful colleague, Jessica took an interest in my fungi photos and started to show me hers. In the course of our conversations she highly recommended a business called Trekabout Photography. I had a look at their website: [www.trekaboutphotography.com](http://www.trekaboutphotography.com) and was suitably impressed. Jess assured me that Michael and Mark were both excellent instructors and would teach me how to better use my camera and take much better photographs.

The January Foray was cancelled due to lack of rain so I jumped in and was lucky to get a spot on their Half Day Macro Workshop, and met up with a small group of 7 (maximum class is 10) at Mt Coot-tha Botanic Gardens. The instruction and instructors lived up to the recommendation, with a lot of one on one instruction. Whether your camera is a basic point and shoot or you own a top of the range camera and every lens and gadget known to man- you are guaranteed to come away taking better photos.

About 8 years ago I saw my first *Phallus multicolor* at Lamington National Park. I had never seen anything so beautiful or so unexpected. It was right beside the walking track. The mantle was a brilliant orange, the phallus was like a brilliant fluorescent light, and the cap looked like it had been dipped in rich dark chocolate. Instantly I was hooked on both fungi and photography! I didn't have a camera at the time and I so regret not having a photo of that specimen. I soon bought my first digital camera, but I haven't seen a comparable *Phallus multicolor* since then. I missed the fresh ones on the Bunya Mountains Foray, but did see a couple of old manky and very deflated specimens while there. So you can imagine my delight when in the course of the Macro Workshop we found about 20-25 specimens in the gardens near the lagoon.

Now back to Trekabout Photography: Compare my very poor photo of *Tetrapygos nigripes* taken last March and the stinkhorns on the next page. Sometimes I got it right but so many of my photos were just slightly out of focus. I am very happy with the improvement and plan to keep practising and also taking more time for each photo. I also plan to do more of these workshops and highly recommend them to all our camera bugs.

**Editor's note:** The *T. nigripes* photo mentioned here is on page 12.



**Top:** *Colus hirudinosus*

**Bottom from left:** *Phallus multicolor*, *Phallus rubicundus*, *Lysurus mokusin*

All photos © Megan Prance

## *Tetrapyrgos nigripes*

Pat Leonard

Small whitish fungi that grow directly on wood are very common after wet weather in late summer and autumn. Many of the all white ones are in the genus *Mycena* or its close relatives. Whitish fungi with a tough stem that is two tone, with a black or darkish brown lower half, tend to be in the genus *Marasmius*. So, when this fungus was first found, it was dried and put in a box to be 'shown to Fran' who knows about these things. To identify *Marasmius* species one has to look at the spores, when this was done a pattern of grains of sand appeared, quite a common problem if you collect fungi on the coast. After a new slide had been prepared with no signs of any sand, it became clear that what we were looking at were the fungus's spores, triangular with sagging sides in one dimension and diamond shaped in the other.

The combination of the small whitish to greyish cap, tough stem that is black on the lower part, and its habit of growing on wood should be enough to convince anyone finding such a fungus to look at its spores. The results are amazing.

A full description is given on the accompanying Fungi of Queensland information sheet.

This is a first record for Queensland.



*Tetrapyrgos nigripes* specimens and spores © Megan Prance (specimens), Patrick Leonard (spores)

## *Tetrapyrgos nigripes* Horak



*Tetrapyrgos nigripes* © Megan Prance

**Cap:** convex; 10 - 20 mm diameter; chalk white at first developing an olivaceous sepia (1F2-6) colour from centre; rugulose, powdery

**Stipe:** central, tapering to base; 10 - 15 × 2 µm; white at apex, black at base; insititious, caulocystidia at apex, glabrous below

**Flesh:** very thin, tough, white, staining black on bruising

**Gills:** white, decurrent; wavy; 18 - 24 reach stipe, lamellulae in intercalated in two rows

**Spores:** white; nodulose and triangular in vertical section, diamond shaped in horizontal section; 7.5 × 7.5 × 7.5 µm in vertical section, 9 - 10.5 × 7 - 9 µm in horizontal section

**Cheilocystidia:** numerous, clavate but irregular; 20 - 30 × 7.5 - 10 µm

**Pileipellis:** irregular trichoderm of nodulose hyphae with ends capitate and often branched; with clamps present

**Habitat:** growing in troops on wood in rainforest and wet sclerophyll forests.

**Notes:** the powdery white cap, wavy subdecurrent gills and black and white insititious stipe are good clue to the identity of this fungus in the field. The nodulose spores that are triangular in one view and diamond shaped in the other confirm identity.

**Collections examined:** QMS8409, Pooh Corner, Wacol, Megan Prance, 5 April 2009.

**QUEENSLAND FUNGAL RECORD**

© Queensland Mycological Society

## ***Battarrea stevenii***

Matthea Paulus

### **Background**

I discovered *Battarrea stevenii* by chance in Kedron, Brisbane in January 2009. I left the fungi in place to mature, but after several weeks I observed a young child touching and removing what was left of them, so I collected the remains. I did not know quite what to do with it, and it remained safely tucked away in a container until the QMS microscope workshop on September 2009.

With the support and guidance of Patrick Leonard and Sapphire McMullan-Fisher the fungus was studied and the minute dust particles in the box proved to be the spores of *Battarrea*. The specimen was lodged at the Queensland Herbarium at Mt. Coot-tha in October 2009.

**Location:** Turner Rd, Kedron 4031, January 2009

**Macroscopic appearance:** (Figure 1)

Puffball on a stem. Although not observed by the author, *Battarrea stevenii* emerges from an egg, 50 mm in diameter. The egg has a sandy colour and on maturity will split open, leaving a cup and a cap.

The cap falls away to expose a rusty, cognac coloured powdery dome-shaped mass.



**Figure 1:** *Battarrea stevenii*, Top row, stages of development, bottom row, specimens and remains of caps © QMS/Matthea Paulus

**Fruit body:**

The sample observed was approx. 150 mm tall and consisted of a woody stem and a cognac coloured head with a dusty cover. Literature mentions heights of up to 400 mm. The fungus appears out of proportion due to the small head on the tall stem.

**The head:**

Diameter approx. 60 mm and height approx 30 mm. The "cap" appeared light rusty brown with a grey, dusty centre and an uneven edge which was quite rough, almost serrated.

**The stem:**

My samples varied in height from 130 - 220 mm, and were 10 -15 mm thick. It had a woody, scaly appearance, very rough and fibrous and flaky, with a mottled colour of rusty brown and off white,

Reports mention heights of up to 350 mm.

**Spore mass:**

This sample showed a rusty brown, cognac coloured spore mass. Powdery and dome shaped. The spore mass was resting like a cushion on a small disc that is attached to the stem. This disc was off white in colour.

**Habit:**

The samples I found occurred in a group.

There are conflicting reports about the prevalence of this fungus. Some indicate it is uncommon but widespread; others that it is common and widespread.

**Habitat:**

*Battarrea Stevenii* has been found in dry, sandy areas, and they have been associated with wattles and wilga (*Geijera parviflora*: Rutaceae) trees, and has also been found on termite mounds.

My specimens were found under a conifer bush, in a dry sandy soil, with a mix of pebbles and leaf litter.

**Microscopic appearance** (Figure 2)

**Spores:** Rusty to dark brown in colour, Globose to sub-globose, approx 5-6µm.

I have observed elaters amongst the spore mass which are supposedly rare in fungi but more common in liverworts. Elaters assist with the dispersal of spores. A probable elator is visible in Figure 2, lower left photo, but the structure is not clear. That is shown more clearly in a plate from Grgurinovic (1997), in which the elators are labelled **b**. (Unfortunately the various manipulations needed to create the figure have reduced the clarity of the text. For the full sized figure you will need to consult that reference; ed).

**References**

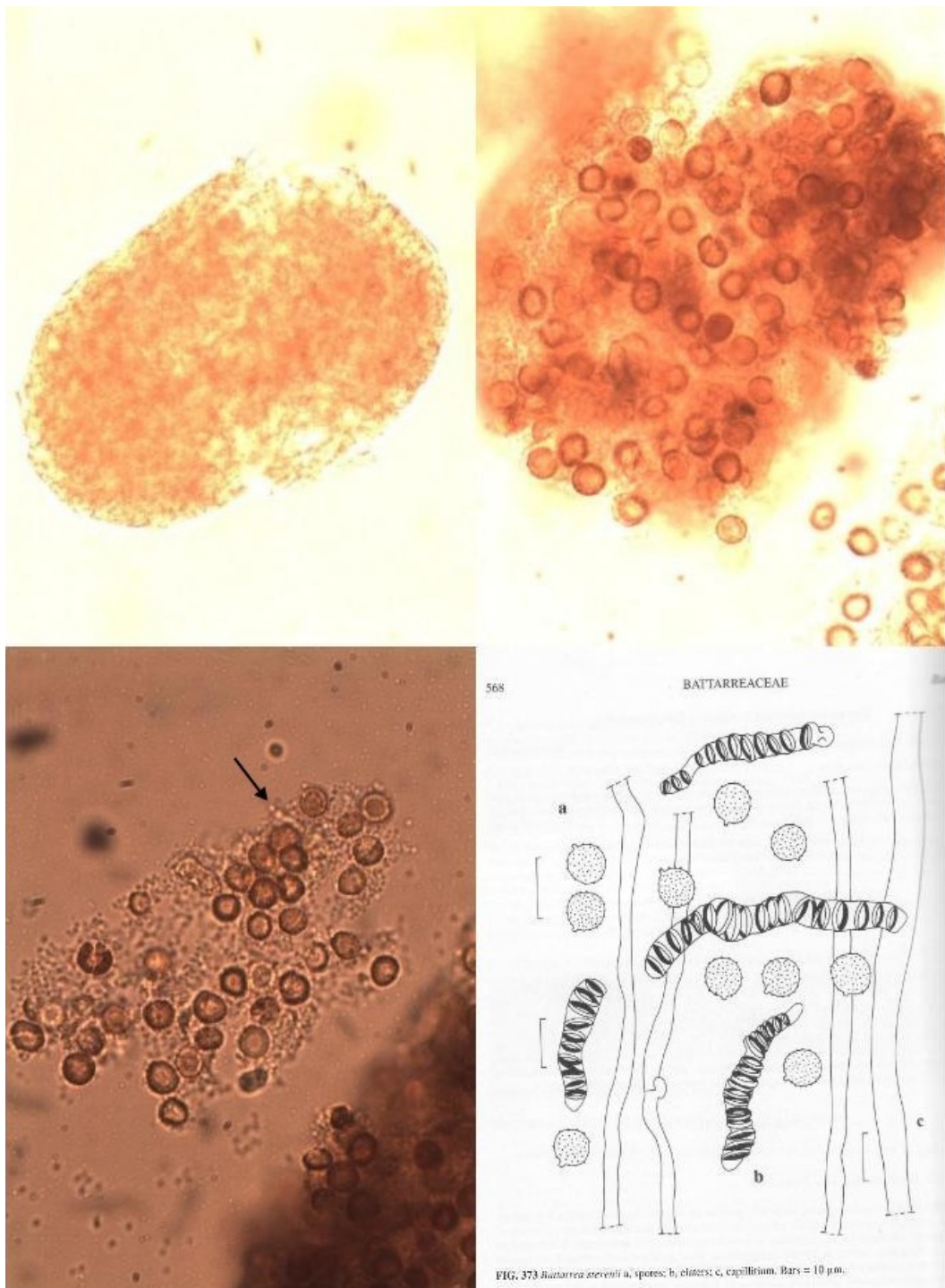
Grey, Pat & Ed. 2005. *Fungi Down Under*. Melbourne: Fungimap.146 p.

Tait, Ross (ed). 2007. *Fungi Out West*. Chinchilla Field Naturalists Club. 154 p.

Grgurinovic, C.A. 1997. *Larger Fungi of South Australia*. Adelaide: Botanic Gardens of Adelaide and State Herbarium and Flora and Fauna of South Australia Handbooks Committee. 725 p

Cunningham G.H, 1944 *Gastromycetes of Australia and New Zealand* Dunedin: McIndoe. 236 p. *Battarrea stevenii*, Liboschitz, Fries, Plate

Genevieve Gates & David Ratkowsky. 2004 Some interesting fungal records for Tasmania. *The Tasmanian Naturalist* 126: 2-5



**Figure 2:** *Battarrea stevenii* spores. Top row, spore bundles, bottom left, spores and elator (arrow), bottom right a figure from Grgurinovic showing microscopic structures in more detail. Images © QMS/Matthea Paulus

**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:** 1<sup>st</sup> 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:

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Receipt No
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- \* Please ensure your name is on the transfer entry
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