

Mycological Notes 26: Draft Key to amyloid-spored group of New Zealand *Mycena* species and closely allied genera

Jerry Cooper, October 2014

Mycena is a common genus of saprophytic fungi on wood and litter. The species are generally small and rather drab looking but can often dominate when the conditions are right. Whilst many are LBMs (little brown mushrooms) there are some very noticeable species such as the common blue *Mycena interrupta*, and the bright red and sticky *Cruentomycena viscidocruenta*. The former has a small related species that is bioluminescent (*Mycena* 'Crystal Falls'), whilst the red *Cruentomycena viscidocruenta* is probably an introduction from Australia. After a long dormancy period from the first records in the 1960's this species has spread rapidly in recent years across South Island, much like the exotic orange *Favolaschia calocera*, which is also closely related to *Mycena*.

In New Zealand, like elsewhere, the genus is diverse. Many of our species are endemic with a number of introduced species in modified habitats, which is a common pattern for New Zealand saprophytic fungi. A number appear to be common between New Zealand and Australia, and a few appear to have a global distribution. This pattern contrasts with ectomycorrhizal fungi where the majority of species are endemic. Many of our species remain without formal names and this account I have given them temporary 'tag names'.

In compiling this account I have looked at about 300 collections in PDD, fresh material collected on forays, and my own collections. A number of New Zealand species were named in Greta Stevenson's early accounts in Kew Bulletin (Stevenson, 1964). In many cases these were accompanied by rather brief descriptions and poorly reproduced water colours. I have examined most of the original type collections now housed at Royal Botanic Gardens Kew, and I am indebted to RBGK for the loan of that material. My notes and micrographs on these collections may be found on the NZFUNGI2 website. This exercise was also carried out by Egon Horak in his review of New Zealand agaric species in the 1970's (Horak, 1971). In many cases I agree with Egon that the original material is too poor for an objective interpretation of those names, and we must consign them to history as *nomina confusa*. Many collections were based on just a few fruitbodies, and many of these are now very fragmented. A number of promising collections with many fruitbodies appear to have undergone excessive heating and have lost many key microscopic characters. Indeed, a number of Stevenson's own observations of micro-characters are in error, and perhaps observed after the material was degraded. In addition Stevenson described some species from exotic habitats and Horak dismissed a number of these. Some of those are referable to a single variable exotic species which I equate here with *Mycena olivaceomarginata*. I have also examined the type collections of *Mycena* species named by Barbara Segedin (Segedin, 1991). In a number of cases I can find no stable microscopic features to distinguish between species, which together with variability in macro-morphology in subsequent collections, and sequencing evidence, suggest a continuum. I therefore currently consider a number of her species to be synonyms and have indicated these in the section on excluded names. Subsequent collections may prove otherwise.

In this preliminary account I have listed 46 species in the genus, but in amyloid species, not treated here, raise that figure, and in fact there are likely around 70-90 species in total which could be enumerated with some additional collecting and diagnostic effort. This figure compares with 66 species from South Australia treated by Grgurinovich (2003), and 72 listed for the UK by Legon and Henrici (2005).

Mycena species have a reputation as being difficult to identify, not helped I believe, by a historical sub-generic classification with very fuzzy boundaries. For the core group of *Mycena* species the micromorphology of the cap, stipe and lamellar cystidia is critical, and should be examined using Congo Red in Ammonia or under Differential Interference Contrast illumination. I have used both sequences (ITS/LSU) of NZ material and morphology to guide my thinking on the boundaries between species and between clades within *Mycena*, and to formulate the key. The sequences will be deposited in GenBank when the final revision is published. From this phylogenetic perspective much sampling remains to be done, both in New Zealand and elsewhere. It is also clear that GenBank contains many incorrectly identified entries for European and North American taxa. Nevertheless the phylogenetic signals are quite clear. Most of the inamyloid species around *Mycena hiemalis*, *Mycena acicula* and the 'oregonensis' group are distant from core *Mycena* and group rather broadly with *Hemimycena* and *Mycenella*. This group does include some amyloid spored species like *Mycena* sp. 'Duffy Creek' and *Mycena papillata*. *M. acicula* and allies are much more closely related to the recently erected *Atheniella*, and in my opinion the group as a whole (which includes some cyphelloid genera and our *Scytinotis longinquus*) is worthy of separate recognition at family level.

A number of species within *Hydropus*, *Clitocybula* and *Delicatula* (now treated within the porotheliaceae) are mycenoid and poses amyloid spores. *Hydropus funebris* in particular looks like a typical *Mycena* until the micro-characters are examined.

Hemiomyces and *Xeromphalina* are likewise somewhat mycenoid and possess amyloid spores, and are in fact closely related to *Mycena* but have been excluded from this treatment.

Excluding these groups leaves the remainder treated here. All representatives in New Zealand possess amyloid spores, although in general some species elsewhere in the world, for example in *Prunulus*, poses inamyloid spores.

Favolaschia and *Panellus* lie on the outer boundary of the core mycenoid group and rather easily recognised from gross morphological features. Phylogenies indicate a clustering of related genera including *Cruentomyces*, *Resinomyces* and *Roridomyces*, and once again it is reasonable to recognise these genera on gross morphology.

The 'picta group' which includes our *Mycena mamaku* and *M. 'Erua'* is clearly both morphologically and phylogenetically distinct from core *Mycena*.

Moving closer to core *Mycena* we come next to groups that share the characteristic of a basal disk or bulb, and sometimes blue colouration (Sacchariferae, Basipedes, Cyanocephalae). In my opinion these should be separated at generic rank.

Closer still we come to the Calodontes section which contains the northern hemisphere *M. pura* and allies, and which generally have a purple colouration and raphanoid smell. This group is clearly monophyletic and requires separate recognition under the generic name *Prunulus*.

Now we arrive at clades which may or may not be treated as congeneric with *Mycena*, and more sampling is required. This boundary group includes species like *Mycena leaiana* var. *australia*, *M. stevensoniae*, *M. 'Croydon Bush'*, *M. helminthobasis* var. *novaezelandiae* and *Mycena subviscosa*. The latter is a very variable species in New Zealand and can have colouration ranging from all tan to bright yellow, but sequences indicate a single species. The group as a whole possesses gelatinised tissue and a gill edge that is usually separable as an elastic thread. *Mycena subviscosa* is part of the

northern hemisphere *Mycena epipterygia* group, and has been treated under the generic name *Collopus*. My personal preference is to once again separate this group at the generic level.

The next clade contains the bleeding mycenae, which in New Zealand are represented by the introduced *M. sanguinolenta* and our own *M. ura*, *M. mariae*, *M. parsonsii*, and *M. morrisjonesii*. Even without sap the species are recognised by characteristically awl-shaped cystidia, and often subglobose spores. Once again a generic name is available, *Galactopus*, should these be considered worthy of recognition at generic rank. At this point my personal opinion is divided and I can see arguments both for retention of a broad concept of *Mycena*, and a narrower one.

Mycena roseoflava, which is a very common small species on rotten wood segregates with a number of species placed in section *supinae*. *M. roseoflava* has been placed in the genus *Insiticia* but that is not an appropriate genus (type *M. amicta*).

The remaining species are without question congeneric with *Mycena galericulata*, the type of *Mycena*. The clade contains species placed in a number of classical sections such as *filipedes*, *fragilipedes*, *polyadelphia*, *mycena* etc. More sampling is required to establish the validity and boundary of these sections. In New Zealand the group contains a number of very similar looking species and microscopy (sometimes painstaking) is required to separate the species. Many northern hemisphere species within these groups require lecto/epitypification to stabilise and clarify the use of names.

I emphasize that this is a preliminary exercise, largely to order my own thoughts and notes. I will amend and expand the treatment as more information comes to light, and eventually I will publish a formal revision with new species descriptions. In the meantime I am waiting for our northern hemisphere colleagues to sort out acceptable generic boundaries and verified species sequences within the group.

References

Cooper, J.A. Studies of New Zealand agaric type collections not deposited in PDD; 2014; (unpub)
[NZFUNGI2](#)

Grgurinovich, C. 2003: Genus *Mycena* in South-eastern Australia

Horak, E. 1971: A contribution towards the revision of the Agaricales (Fungi) from New Zealand. *New Zealand Journal of Botany* 9(3): 403-462

Johnston, P.R.; Whitton, S.R.; Buchanan, P.K.; Park, D.; Pennycook, S.R.; Johnson, J.E.; Moncalvo, F.M. 2006: The basidiomycetous genus *Favolaschia* in New Zealand. *New Zealand Journal of Botany* 44(1): 65-87

Legon, N.W.; Henrici, A.; Roberts, P.J.; Spooner, B.M. 2005: Checklist of British and Irish Basidiomycota

Segedin, B.P. 1991: Studies in the Agaricales of New Zealand: some *Mycena* species in sections *Longisetae*, *Polyadelphia*, *Rubromarginatae*, *Galactopoda*, *Lactipedes*, and *Calodontes*. *New Zealand Journal of Botany* 29(1): 43-62

Stevenson, G. 1964: The Agaricales of New Zealand: V. *Kew Bulletin* 19(1): 1-59

The key




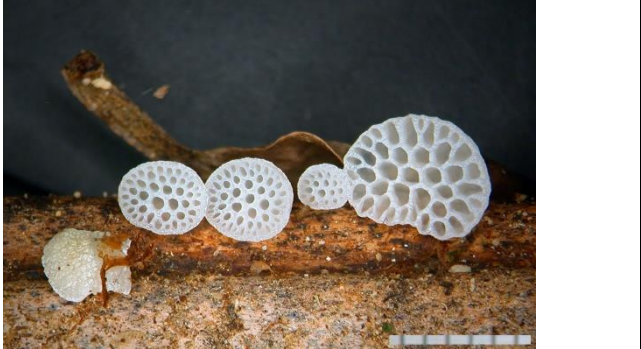
- 1 cap with pores (key after Johnston, 2006) [2](#)
- 1' cap with gills [6](#)
 - 2 Basidiocarps orange; acanthocysts and orange gloeocystidia present on pileus surface and pore edges; basidia 2-spored **Favolaschia calocera (1)**
- 2' Basidiocarps white; acanthocysts absent, gloeocystidia absent or hyaline; basidia 4-spored [3](#)
- 3 Basidiocarps on fallen wood, 5–85 mm diam., solid with thick flesh **F. pustulosa(2)**
- 3' Basidiocarps on dead tree fern fronds or decaying leaves of monocotyledons, 0.9–10 mm diam., delicate with thin flesh . [4](#)
- 4 Basidiocarps on monocotyledons, 0.9–5 mm diam.; edges of pores with broad-clavate cells; pileipellis with diverticulate hyphae. **Panellus minimus (3)**
- 4' Basidiocarps on tree fern fronds, 2.5–10 mm diam.; pileipellis without diverticulate hyphae [5](#)
- 5 Basidiocarps with powdery appearance when dry, pileipellis and edge of pores with cylindric, free hyphae **F. cyatheae (4)**
- 5' Basidiocarps glabrous when dry, pileipellis and edge of pores lacking free hyphae **F. austrocyatheae (5)**
- 6 lateral stemmed and/or pleurotoid [*Panellus*] [7](#)
 - 6' central stemmed [8](#)
 - 7 cap > 1cm, brown, edge not crenulate. **P. stypticus (6)**
 - 7' cap < 1cm, cream, edge crenulate, **P. 'montgomery park' (7)**
- 8 cap like upturned bucket, pleated, orange or red and associated with tree ferns [10](#)
- 8' cap otherwise [11](#)
- 10 cap orange, height > diameter **Mycena 'Erua' (8)**
- 10' cap brick red, height = diameter **M. mamaku (9)**
- 11 stem very glutinous, stem cream or scarlet, cap white, tan or scarlet, but not yellow, orange, pink or green. [12](#)
 - 11' if stem glutinous then with some shade of yellow/green, otherwise various [14](#)
- 12 cap pure white **Roridomyces 'sugarloaf' (10)**
- 12' cap with some pigment, at least when immature [13](#)
- 13 scarlet coloured. **Cruentomycena viscidocruenta (11)**
- 13' cap cream, with furfuraceous tan granules when young. **M. austrororida (12)**
- 14 With basal disk or arising from a bulb (perhaps not obvious in yellow/green capped M. flavoviens) [sacchariferae & basipedes] [15](#)
 - 14' without basal disk [25](#)

- 15 primordia grey, with spines **M. 'mt grey' (13)**
- 15' primordia not spinulose 16
- 16 basal disk orange, cap cream **M. carmeliana (14)**
- 16' basal disk blue or drab 17
- 17 cap with yellow and green **M. flavovirens (15)**
- 17' cap with other colours 18
- 18 cap and stem base with strong or faint blue/green colours 19
- 18' cap and stem without blue colours 21
- 19 cap spherical/hemispherical, pleated, colours fading in maturity **M. globuliformis (16)** (see also Gypsy Glen)
- 19' cap not spherical/hemispherical 20
- 20 Stem $\leq 3 \times$ cap diameter, usually indigenous habitat. **M. interrupta (17)**
- 20' stem $> 4 \times$ cap diameter, usually exotic habitat. **M. amicta (18)**
- 21 cap > 1 cm diam. Grey in cap centre and smell of hypochlorite **M. jac13315 (19)**
- 21' cap < 1 cm at maturity 22
- 22 stem $\geq 7 \times$ cap diameter 23
- 22' stem $< 7 \times$ cap diameter 24
- 23 cheilocystidia with short diverticulae and longer apical extension **M. adscendens (20)**
- 23' cheilocystidia with just short diverticulae **M. subdebilis & 'M. rotokuru lakes' (21,22)**
- 24 cap not pure white, without collarium, cap with vermiform diverticulae (if spores inamyloid then M. bulbosa) **M. 'gypsy glen' (23)**
- 24' cap pure white, with collarium **M. 'crystal falls' (24,25)** (two versions!)
- 25 stem base > 3 mm diam, smell none, farinaceous or raphanoid, with purple-violet-red-pink hues, nowhere gelatinised and without latex [*Prunulus*] 26
- 25' without this combination 30
- 26 without distinct smell (and not *Prunulus*) **M. 'rangitaiki' (26)**
- 26' smell farinaceous or raphanoid 27
- 27 with red or brown gill edge 29
- 27' gill edge concolorous, cheilocystidia cylindrical (if acuminate see jac10764) 28
- 28 spores < 7.8 um long, $Q < 1.8$ **M. fuscovinacea (27)**
- 28' spores > 7.8 um long, $Q > 1.8$ **M. vinacea (28)**
- 29 basidia with red granules (brown in KOH) **M. rubroglobulosa (29)**

- 29' basidia without red granules. *M. oratiensis* pink, lividorubra dark. ***M. lividorubra* & *M. oratiensis* (30,31)**
- 30 cap or stipe viscid or glutinous, stem white, pink or shades of yellow [*Collopus* pp] 31
- 30' cap and stem not viscid or glutinous, or if viscid then not white, pink or yellow 35
- 31 gills bright orange ***M. leaiana var australis* (32)**
- 31' gills not bright orange 32
- 32 small frb, stem and cap pink, on bleached patches of beech leaves (if on wood see *M. roseoflava*). ***M. stevensoniae* (33)**
- 32' frb not pink 33
- 33 stem or cap with some shade of yellow, gills with separable thread on gill edge, variable in colour from complete yellow to near complete tan/cream. ***M. subviscosa* (34)**
- 33' stem white, gills decurrent, cap flattening to umbilicate in centre 34
- 34 cap brown striate, stem very long, gills discolouring red when bruised. ***M. helmthobabsis var nz* (35)**
- 34' cap cream/tan, gills not discolouring ***M. 'croydon bush'* (36)**
- 35 broken stem exuding obvious latex, either red or white (not just clear 'sap'). Always with awl-shaped cystidia, even if latex not obvious [*Galactopus*]. 36
- 35' no coloured latex 41
- 36 cap cream to tan, latex white or? 37
- 36 cap with red hues, latex red/brown 38
- 37 latex white, spores globose ***M. galopus aff* (37)**
- 37 latex absent (or not?), spores broadly ellipsoid ***M. morrisjonesii* (38)**
- 38 in pine plantations ***M. sanguinolenta* (39)**
- 38' indigenous habitats 39
- 39 Frb bright red, tiny, leaf litter ***M. ura* (40)**
- 39' frb dull red or pink, larger 40
- 40 dull red, spores ellipsoid, leaf litter ***M. mariae* (41)**
- 40' pinkish tan, spores subglobose, wood ***M. parsonsii* (42)**
- 41 stem often eccentric, small, imbricate on wood, some shade of yellow/pink, but fading ***M. roseoflava* (43)**
- 41' no pink colors 42
- 42 cap contrasting dark brown/pale brown stripes, viscid when wet, cheilocystidia with irregular fingers, not metuloid (see also *M. leptcephala*, *atroavellanea* cf, and *M. morris-jonesii*) ***M. 'ahurri'* (44)**
- 42' cap without sharply contrasting stripes 43
- 43 exotic habitats and gills with contrasting gill edge colour: yellow, green, red 44

- 43' gills without contrasting coloured edge and natural habitats 45
- 44 frb in grass, lawns, introduced habitats, gill edge green or yellow **M. olivaceomarginata (45)**
- 44' frb in pine needles, gill edge red/brown, no red sap/latex **M. capillaripes (46)**
- 45 frb tan , plicate, strongly decurrent gilles, cap diameter <= stem length **M. JAC1021 (47)**
- 45' not these characters 46
- 46 with metuloid cystidia (see also M. barracouta and H. funebris) 47
- 46' without metuloid cystida 48
- 47 sterile stipes often present, stipes long relative to cap, cap perimeter pale, darkening to centre (a red variety also known) **M. cystidiosa (48)**
- 47' sterile stipes absent, stipe thicker and shorter relative to cap, cap tan/brown from perimeter to centre. **M. atroavellanea cf. (49)**
- 48 on litter, cheilocystidia sphaeropedunculate, with apical diverticulae, 2-spored (4-spored see JAC13019) 49
- 48' on wood, 2-4 spored, c heilocystidia not sphaeropedunculate 51
- 49 cheilocystidia with long stem, up to 70um long x 40um diameter. **M. metata (50)**
- 49' cheilocystidia without long stem 50
- 50 cheilocystidia up to 50um long x 25um diameter **M. filopes. M. filopes aff (51,52)**
- 50' cheilocystidia up to 30 long x 30 um diameter **M. austrofilopes (53)**
- 51 on thin branches, and twigs, cheilocystidia without diverticulae, caulocystidia often inflated **M. leptocephala (54)**
- 51' on stumps and logs 52
- 52 cheilocystidia with diverticulae, stipe without inflated caulocystidia, but with short diverticulae. **M. galericulata (55)**
- 52' cheilocystidia cylindrical, sometimes slightly thick walled, stipesurface ? **M. 'barracouta' (56)**

Images

<p>Favolaschia calocera -1</p>	 A photograph of several bright orange, cup-shaped fungi with a porous, reticulated surface, growing on a dark, textured substrate.
<p>Favolaschia pustulosa -2</p> <p>5-85mm diameter cap</p>	 A photograph showing two white, porous, cup-shaped fungi with a honeycomb-like structure. A scale bar in the top left corner indicates 5 mm.
<p>Panellus minimus - 3</p> <p>Scale = 1mm</p>	 A photograph of several small, white, porous, cup-shaped fungi growing on a light-colored wooden surface. A scale bar in the bottom left corner indicates 1 mm.
<p>Favolaschia cyathea - 4</p>	 A photograph of several white, porous, cup-shaped fungi with a honeycomb-like structure, growing on a dark, textured substrate. A scale bar in the bottom right corner is visible.
<p>Favolaschia austrocyathea - 5</p> <p>No image</p>	

Panellus stypticus – 6



Panellus/Resinomycena sp. 'Montgomery Park' - 7

Cap to 5mm diameter. Resinomycena sp. 'Waiohine Gorge (PDD87405)' might be the same.



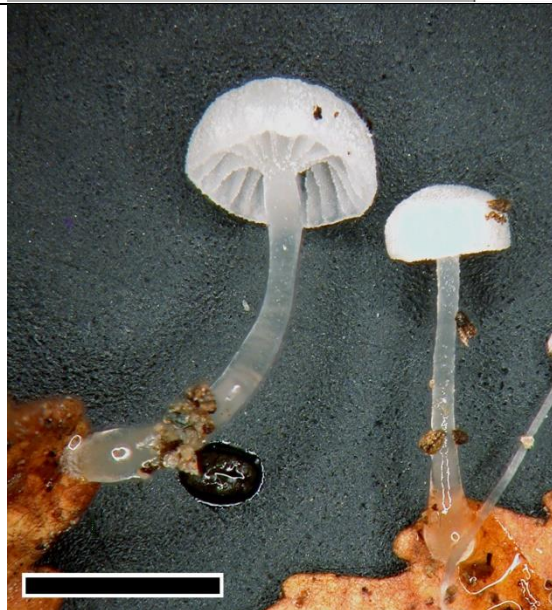
Mycena sp. 'Erua' – 8
Cap to 5mm



Mycena mamaku – 9



Roridomyces sp. 'Sugarloaf' – 10
Scale = 2mm



Cruentomycena viscidocruenta - 11
Cap to 10mm diam.



Mycena austrororida – 12



FUNNZ: 2009/1582

Mycena sp. 'Mt Grey' – 13

Scale = 1mm



Mycena carmeliana – 14

Scale=5mm



Mycena flavovirens – 15

Cap to 1cm



FUNNZ2013/643

Mycena globuliformis – 16

Pic Pat Leonard. Cap to 14mm



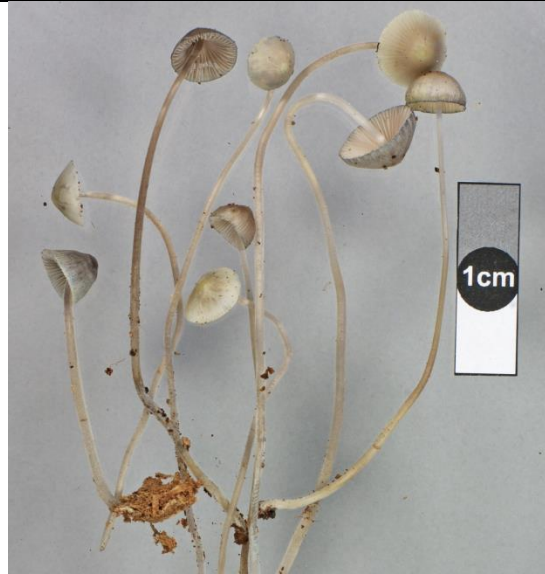
***Mycena interrupta* – 17**

Cp to 16mm diam.



***Mycena amicta* – 18**

Cap 8-15 mm. Stem 1-2 x 40-70 mm



***Mycena* JAC1315 - 19**



***Mycena adscendens* – 20**

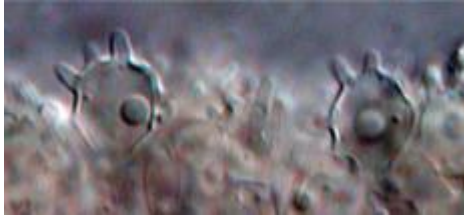
Only from BCP sequence. Pic Fungi Switz. Cap 1.5-5 mm. Stem 0.2-0.5 x 4-14mm.

Cheilocystidia



Mycena subdebilis – 21

Cheilocystidia



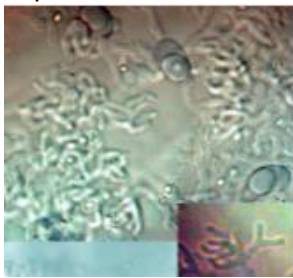
Mycena sp. 'rotokuru lakes' - 22



Mycena sp. 'gypsy glen' – 23

Note that a fungus like this from monocots in damp habitats and with inamyloid spores is *M. bulbosa* and confirmed as present in NZ.

Cap diverticulae



Mycena sp. 'crystal falls' ss – 24
Luminescent



Mycena sp. 'crystal falls' cf – 25
Requires characterisation

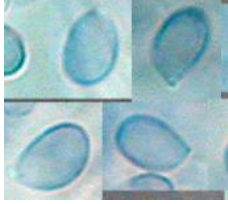


Mycena sp. 'rangitaiki' – 26
Not a *Prunulus* but related to *M. 'ahurriri'* and placed here in the key for convenience



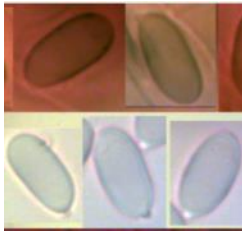
Mycena fuscovinacea – 27

Spores



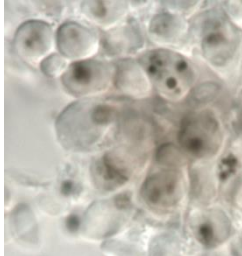
Mycena vinacea – 28

Spores



Mycena rubroglobulosa – 29

Basidia with globules



Mycena lividorubra - 30



FUNNZ: 2010/1508

Mycena oratiensis - 31

No image

Mycena leaiana var. australis - 31



FUNNZ2013/339

Mycena leaiana

Mycena stevensoniae - 33



***Mycena subviscosa* – 34**

This species is very variable



***Mycena helminthobasis* var. *novae-zelandiae*
- 35**



Mycena sp. 'Croydon Bush' - 36



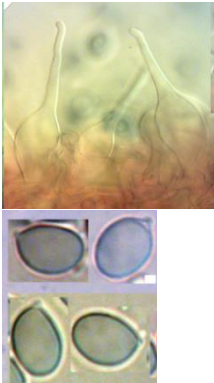
Mycena galopus aff – 37

Spores and cystidia



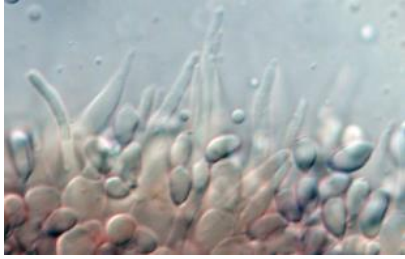
Mycena morrisjonesii – 38

Cystidia and spores



Mycena sanguinolenta – 39

Spores and cystidia

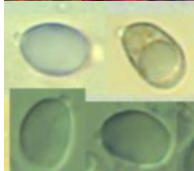
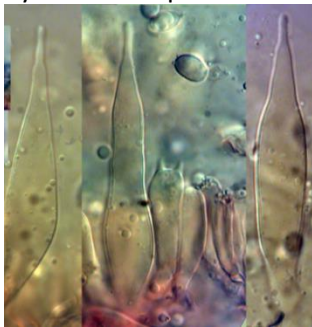


Mycena ura – 40



Mycena mariae – 41

Cystidia and spores

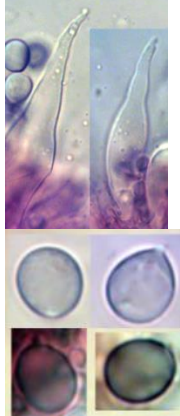


An undescribed species will key here. It has a hemispherical cap and pink/red striate cap.



***Mycena parsonsii* – 42**

Cystidia and spores



***Mycena roseoflava* – 43**

Scale = 2mm



***Mycena* sp. 'Ahuriri Reserve' - 44**



***Mycena olivaceomarginata* – 45**

I am using this name in a broad sense that may include *M. citrinomarginata*. Current sequences and characters are not definitive



***Mycena capillaripes* – 46**

Cheilocystidia and spores



***Mycena jac10021* - 47**



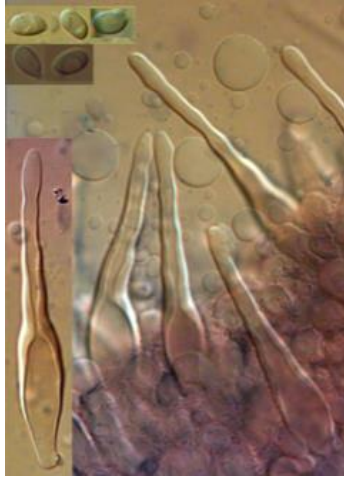
***Mycena cystidiosa* – 48**

Cheilocystidium



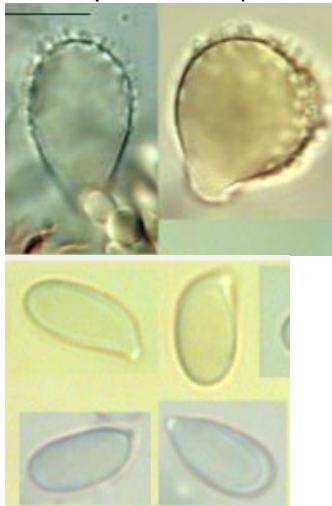
***Mycena atrovellanea* cf – 49**

Spores, cystidia



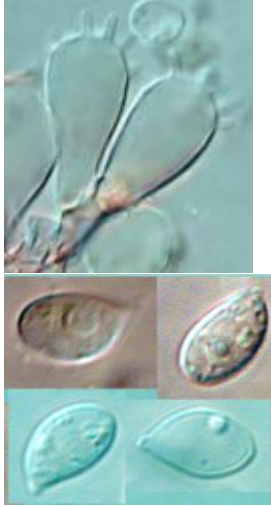
***Mycena metata* – 50**

Cheilocystidia and spores



Mycena filopes – 51

Cheilocystidia and spores



Fungus:

Mycena

(51)

FUNNZ: 2008/0791



Mycena filopes aff - 52

No image

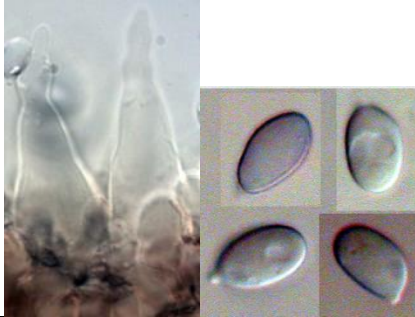
Mycena austrofilopes – 53

Cheilocystidia and spores



***Mycena leptocephala* – 54**

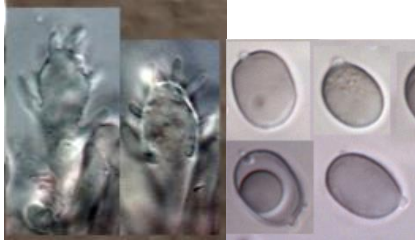
Cheilocystidia and spores



***Mycena galericulata* – 55**

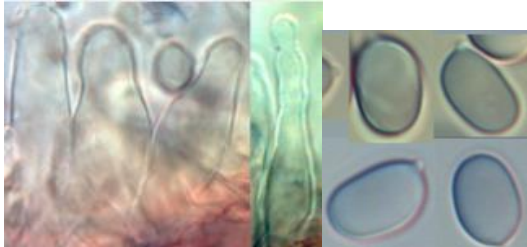
Pic Horak

Chelocystidia and spores



***Mycena* sp. 'barracouta' – 56**

Cheilocystidia and spores



2012/1807 FUNNZ

Insufficiently characterised

jac11993



Jac9225



Jac11580



Jac13505



Excluded and comments

Mycena abramsii – recorded in error

Mycena aetites – records require confirmation

Mycena alba – records require confirmation

Mycena alcalina – recorded in error

Mycena atrocyanea – sensu Colenos is an *Entoloma*.

Mycena atroincrustedata – Sensu NZ is probably *M. 'ahurriri'*

Mycena austroavenacea - NZ material identical to *M. lividorubra* and *M. podocarpi*. Equivalence with South American material possible but unlikely. Segedin's species are section *calodontes* and not *rubromarginatae* sensu northern hemisphere.

Mycena austromaculata – recorded in error

Mycena avellanea – recorded in error

Mycena avenacea – sensu Stevenson is *M. olivaceomarginata*

Mycena bulbosa – present – see *M. 'Gypsy Glen'*

Mycena capillaris – name used in error for *capillaripes*

Mycena citrinomarginata – sequences indicate overlap/confusion with *M. olivaceomarginata*.

Mycena conicola – is *Mycena filopes*

Mycena epipterygia – all records of this and related species are referable to *M. subviscosa*.

Mycena hiemalis – inamyloid species

Mycena hygrophora – the original description and type material is inadequate. A nom. conf.

Mycena inclinata – recorded in error

Mycena kuramulla – records require confirmation

Mycena lactea – inamyloid spores

Mycena minirubra – is *Cruentomyces viscidocruentus*

Mycena miriamae – possibly *Mycena stiptata*. Nom. conf.

Mycena mucor – recorded in error. See the *M. subdebilis* group.

Mycena munyozii – records require confirmation

Mycena papillata – sensu Stevenson = *M. 'waiohine Gorge'*, inamyloid spored

Mycena parabolica – sensu Stevenson = *M. 'ahurriri'*

Mycena pelianthina – recorded in error, see *vinacea/fuscovinacea*

Mycena pinicola – is *Mycea vinacea*

Mycena podocarpi – in my opinion is identical to *M. lividorubra*

Mycena polygramma – recorded in error

Mycena primulina – a *Hemimycena*

Mycena pura - recorded in error. see *vinacea/fuscovinacea*

Mycena simia – an error for the variable *M. subviscosa*

Mycena stylobates – recorded in error. See *M. subdebilis* and allies.

Mycena thymicola – recorded in error. See *M. capillaripes*.

Mycena vinaceipora - in my opinion is identical to *M. lividorubra*