

A LITTLE BOOK OF CORALS

Pat and Ed Grey



Reiner Richter

Ramariopsis pulchella

Revision 3 (2018)

Ramaria flaccida



De'ana Williams

Introduction

This booklet illustrates some of the Coral Fungi found either on FNCV Fungi Forays or recorded for Victoria. Coral fungi are noted for their exquisite colouring – every shade of white, cream, grey, blue, purple, orange and red - found across the range of species. Each description page consists of a photo (usually taken by a group member) and brief notes to aid identification. The corals are listed alphabetically by genus and species and a common name has been included. In this revision five species have been added: *Clavicornia taxophila*, *Clavulina tasmanica*, *Ramaria pyrispora*, *R. watlingii* and *R. samuelsii*. A field description sheet is available as a separate PDF.

Coral Fungi are so-called because the fruit-bodies resemble marine corals. Some have intricate branching, while others are bushier with ‘florets’ like a cauliflower or broccolini. They also include those species that have simple, club-shaped fruit-bodies.

Unlike fungi such as Agarics that have gills and Boletes that have pores, the fertile surface bearing the spores of coral fungi is the external surface of the upper branches. All species of *Artomyces*, *Clavaria*, *Clavulina*, *Clavulinopsis*, *Multiclavula*, *Ramariopsis* and *Tremellodendropsis* have a white spore print while *Ramaria* species have a yellow to yellow-brown spore print, which is sometimes seen when the mature spores dust the branches.

Most species grow on the ground except for two Peppery Corals *Artomyces* species and *Ramaria ochracea* that grow on fallen wood. *Ramaria filicicola* grows on woody litter and Tree-fern stems. Usually *Ramariopsis crocea* and *R. kunzei* grow on the ground in moss and litter, but occasionally on Tree-fern stems. *Multiclavula mucida* (on wood) and *M. vernalis* (on soil) grow in association with an alga to form a lichen.

A photo illustrates each species and photographers are acknowledged just below the image. The notes start with a general description of the mature fruit-body – **size, shape and colour** (which may, however, differ in young specimens). Size relates to the whole fruit-body but the height is described as **tall** - 90 to 150 mm, **medium** - 50 to 90 mm **small** - 20 to 50 mm and **tiny** – 1 to 20 mm . A more detailed identification follows and includes habit and habitat.

A QUICK FIELD INDICATION

ON GROUND

CAULIFLOWER-SHAPED, LARGE (to 150 mm tall)

Pale yellow – orange yellow, viscid

Ramaria capitata var *capitata* p 31

Salmon pink, non-viscid

Ramaria capitata var *ochraceosalmonicolor* p 32

CAULIFLOWER-SHAPED, MEDIUM (to 90 mm tall)

Red

Ramaria stuntzii var *gelatinosa* p 40

CORAL-SHAPED, LARGE (to 150 mm tall)

Buff, tips red to pale pink-reddish

Ramaria botrytoides p 30

Buff to pale tan

Ramaria pyrispora p 38

Lavender

Ramaria fennica var. *fumigata* p 33

Orange to salmon-pink

Ramaria anziana p 29

Pale to dark ash grey

Clavulina cinerea p 14

Pink, tips yellow

Ramaria samuelsii p 39

Purple purple

Ramaria versatilis var *latispora* p 41

Straw yellow to pale ochre

Ramaria watlingii p 42

Violet to purple

Clavaria zollingeri p 12

CORAL-SHAPED, MEDIUM-SIZED (to 90 mm tall)

Fawn with some dark tips

Clavulina vinaceocervina p 19

Mustard-yellow

Ramaria flaccida p 35

Yellow with wine-red bruising

Ramaria lorithamnus p 36

White with spiky tips

Clavulina coralloides p 15

CORAL-SHAPED, SMALL (to 50 mm tall)

Green-yellow

Ramaria abietina p 28

Pale yellow to buff

Tremellogendropsis pusio p 46

Rich mauve

Ramariopsis pulchella p 45

Yellow

Ramariopsis crocea p 43

White

Ramariopsis kunzei p 44

ON GROUND

CLUB-SHAPED, TALL (to 150 mm tall)

Red

Clavulinopsis sulcata p 24

White, in exotic vegetation

Clavulina rugosa p 16

White, in native vegetation

Clavulina fragilis group p 10

Yellow

Clavulinopsis amoena p 20

Clavulinopsis fusiformis p 23

CLUB-SHAPED, MEDIUM (to 90 mm tall)

Buff

Clavaria tenuipes p 11

Dark ash grey to grey-brown,

Clavulina tasmanica p 18

Orange-yellow

Clavulinopsis depokensis p 22

Pink and red

Clavulinopsis corallinosacea p 21

White, in native vegetation

Clavulina subrugosa p 17

CLUB-SHAPED, SMALL (to 50 mm tall)

White, in native vegetation

Clavicornia taxophila p 13

CLUB-SHAPED, TINY (to 20 mm tall)

Orange, tiny

Multiclavula vernalis p 27

WOODY LITTER

CORAL-SHAPED, LARGE (to 100 mm tall)

Buff with white tips

Ramaria filicicola

p 34

SMOOTH TREE-FERN TRUNK

CORAL-SHAPED, LARGE (to 120 mm tall)

Buff with white tips

Ramaria filicicola

p 34

CORAL-SHAPED, MEDIUM (to 90 mm tall)

White

Ramariopsis kunzei

p 44

CORAL-SHAPED, SMALL (to 50 mm)

Yellow, delicate

Ramariopsis crocea

p 43

DEAD WOOD

CORAL-SHAPED, LARGE (to 120 mm tall)

Whitish to fawn

Artomyces austropiperatus

p 8

CORAL-SHAPED, MEDIUM (to 90 mm tall)

Whitish to fawn, delicate

Artomyces colensoi

p 9

CORAL-SHAPED, SMALL (to 50 mm)

Pale ochre

Ramaria ochracea

p 37

CLUB-SHAPED, TINY (to 20 mm tall)

White

Multiclavula mucida

p 26

Ramariopsis pulchella



Paul George

Clavulinopsis depokensis



Richard Hartland



De'ana Williams

Artomyces austropiperatus Peppery Coral

Fruit-body: large, multi-branched, with crown-like tips, whitish, pink beige or fawn. The larger of two very similar corals that grow on wood.

- **Size** to 120 mm tall x 80 mm wide.
- **Branches** upright, to 6 mm diameter, usually divide twice at each division forming 4 new branches, whitish, pink beige or fawn.
- **Branch tips** crown-like (coronate), whitish to fawn.
- **Stem** to 20 mm tall x 4 mm diameter, concolourous with branches.
- **Spore print** white.

Note – Immediate or delayed, strong, persistent peppery taste. Often multiple fruit-bodies grow close together.

Habit: gregarious and grouped close together.

Habitat: on wood in wet native forests.



Ed Grey

***Artomyces colensoi* group**

Delicate Peppery Coral

Fruit-body: medium, multi-branched, with crown-like tips, whitish to fawn. The smaller of two very similar corals that grow on wood.

- **Size** to 60 mm tall x 15 mm wide.
- **Branches** upright, very fine, less than 1mm diameter, usually divide twice, each division, forming 4 new branches, whitish to fawn.
- **Branch tips** crown-like (coronate), whitish to fawn.
- **Stem** to 10 mm tall x 1.5 mm diameter.
- **Spore print** white.

Note - Delayed peppery taste. Often multiple fruit-bodies grow close together. This group includes *A. candelabrus*, which is only differentiated on minor microscopical features.

Habit: gregarious and grouped close together.

Habitat: on wood in wet native forests.



De'ana Williams



Richard Hartland

***Clavaria fragilis* Group**

Brittle Club

Fruit-body: tall, simple club, growing in a clump with all the clubs joined together at the base (caespitose), white, very brittle.

- **Size** to 100 mm tall x 4 mm diameter.
- **Club** simple, white, smooth.
- **Club tip** rounded, not acute or crested, with age becomes pointed and yellow to brown.
- **Stem** merges smoothly into the club, white.
- **Spore print** white.

Note – group includes *C. fragilis*, *C. alboglobospora* and *C. acuta* that can only be securely separated on microscopic grounds. However, *C. fragilis* typically grows in dense clusters while *C. acuta* grows singly or in small groups.

Habit: caespitose.

Habitat: on the ground in eucalypt forests.



John Eichler



De'ana Williams

Clavaria tenuipes Buff Club

Fruit-body: medium, simple or once-branched club, pale yellow to buff, with a distinctly darker stem.

- **Size** to 85 mm tall x 5 mm diameter.
- **Club** simple or once branched, longitudinally grooved, pale yellow to buff, smooth.
- **Club tip** rounded to flattened, pale yellow to buff.
- **Stem** distinct, tapering towards base, yellow-brown, darker than club.
- **Spore print** white.

Habit: gregarious in groups.

Habitat: on the ground in litter or bare soil, in native forests.



Richard Hartland



Pat Grey

Clavaria zollingeri Violet Coral

Fruit Body: large, multi-branched with rounded branch tips and a short stem, violet to purple (ageing brown).

- **Size** to 100 mm tall x 70 mm wide.
- **Branches** to 6 mm diameter, usually dichotomous (divide into two), grey-purple, fragile, brittle, dry, smooth.
- **Branch tips** rounded with 2-4 blunt protrusions, purple to brownish, often white with spores.
- **Stem** very short, pale grey-purple, arises from a white mycelial mat, occasionally with white mycelium over the base.
- **Spore print** white.

Habit: usually solitary.

Habitat: on the ground in litter under Tree-ferns and eucalypts in wet forests.



Charlie Price

Clavicornia taxophila Fluted Trumpet

Fruit-body: small, delicate, simple trumpet-like club, longitudinally striate, flaring out at apex looking frilly, snow-white.

- **Size** to 30 mm tall x 6 mm diameter at apex, narrowing to 2 mm diameter at base.
- **Club** simple, trumpet-shaped, narrowing at base, longitudinally striate, white, ageing slightly yellow.
- **Club tips** slightly cup-shaped, thin, with a crown-like to frilly rim.
- **Stem** translucent, arises from a white hairy mycelial mat.
- **Spore print** white.

Note – grows in moist soil after heavy rain.

Habit: groups, usually single fruit-bodies, occasionally paired.

Habitat: on the ground amongst litter in dry eucalypt forests after heavy rain.



Ed Grey



Richard Hartland

Clavulina cinerea Ash-grey Coral

Fruit-body: large, multi-branched or unbranched, pale to dark ash-grey to purple, dulled with a powdery bloom.

- **Size** to 120 mm tall x 60 mm wide.
- **Branches** to 10 mm wide, ash-grey, with a hint of purple when infected, smooth to wrinkled, or longitudinally grooved.
- **Branch tips** fat and blunt or slightly crested, maybe a darker grey or brown.
- **Stem** present as a short, fleshy sterile base, white to ochre.
- **Spore print** white.

Note – Immature specimens are white and smaller. Fruit-bodies may be infected with the pyrenomycete *Helminthosphaeria clavariarum* which causes a colour change from ash-grey to a tinge of purple and the embedded perithecia should be visible as black dots under a hand lens.

Habit: solitary or gregarious.

Habitat: on the ground in eucalypt and exotic forests.



Paul George



Pat Grey

***Clavulina coralloides* (*Clavulina cristata*)**

Spiky Coral

Fruit-body: large, sparingly branched, branches with spiky tips, white, occasionally with pink tinges, ageing ochre to brownish.

- **Size** to 100 mm tall x 100 mm wide.
- **Branches** to 4 mm diameter, sparingly or repeatedly divided (up to 4 times), white, flattened.
- **Branch tips** crested with several sharp points (cristate), white often ageing darker.
- **Stem** to 30 mm tall x 5 mm diameter, white.
- **Spore print** white.

Note – In most cases not all the branch tips are crested, but there are always some, which identify the species. Specimens are routinely infected with the pyrenomycete *Helminthosphaeria clavariarum* which causes a colour change from white to grey to black and the embedded perithecia should be visible as black dots under a hand lens.

Habit: solitary or gregarious.

Habitat: on the ground in native forests, woodlands and heaths.



Ed Grey

Clavulina rugosa Wrinkled Coral

Fruit-body: tall, unbranched to sparsely branched and contorted, white, always grows with exotic vegetation.

- **Size** to 120 mm tall x 15 mm wide.
- **Club** contorted and twisted, sometimes flattened, white, smooth to wrinkled.
- **Club tip** blunt or crested.
- **Stem** not clearly defined.
- **Spore print** white.

Note – Unlike *Clavulina subrugosa*, it is never found amongst Eucalypt or native vegetation. Specimens are routinely infected with the pyrenomycete *Helminthosphaeria clavariarum* which causes a colour change from white to grey to black and the embedded perithecia should be visible as black dots under a hand lens.

Habit: solitary or gregarious.

Habitat: on the ground, always with exotic trees (conifers and hardwoods).



Ed Grey



Reiner Richter

Clavulina subrugosa White Club

Fruit-body: medium, usually a simple club but can be branched, sometimes wrinkled, off-white, always in eucalypt forests.

- **Size** to 85 mm tall x 8 mm diameter.
- **Club** simple or sparsely branched, off-white to yellowish, smooth.
- **Club tip** rounded, not acute or crested.
- **Stem** to 4 mm diameter, white becoming darker.
- **Spore print** white.

Note – never found in exotic vegetation like *C. subrugosa*, nor does it grow in caespitose groups like the *Clavaria fragilis* group.

Habit: solitary or clustered.

Habitat: on the ground, always in eucalypts forests.



Charlie Price



Richard Hartland



Clavulina tasmanica Lumpy Club

Fruit-body: small to medium, irregular, lumpy club, deep ash-grey with a whitish to tan bloom, widening at top, often split into paler tan tips.

- **Size** to 25 (70) mm tall to 5 (7) mm diameter
- **Club** irregular, can be simple to sparsely branched, single, in pairs or occasionally in threes, lumpy, greyish-brown with whitish to tan bloom.
- **Club tip** splits at the apex into 2-6 finger-like forms, pale tan.
- **Stem** short, to 4 mm diameter, pale, arises from a basal mycelial pad.
- **Spore print** white.

Habit: gregarious to caespitose, in groups of up to 4 individuals.

Habitat: mossy soil in wet eucalypt forests.



Bruce Fuhrer



Pat Grey

Clavulina vinaceocervina Dark-tipped Coral

Fruit-body: large, contorted and irregularly branched, pink to fawn. There are always some branches with dark tips.

- **Size** to 100 mm tall x 60 mm wide.
- **Branches** variable, often flattened and short, stout, pink to fawn, wrinkled and knobby.
- **Branch tips** blunt or acute and thorn-like, dark (vinaceous).
- **Stem** to 10 mm tall, whitish, arises from a small tangle of white mycelium.
- **Spore print** white.

Note - there are always some dark tips to identify the species, fruit-body bruises brown.

Habit: solitary or clustered.

Habitat: on the ground amongst shrubs in eucalypt forests and rainforests.



De'ana Williams



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Clavulinopsis amoena (*Clavaria amoena*) Yellow Club

Fruit-body: tall, simple club, cylindrical, occasionally flattened, bright yellow to orange.

- **Size** to 100 mm tall x 5 mm diameter.
- **Club** simple, cylindrical but often flattened and grooved, bright yellow to orange.
- **Club tip** blunt, sometimes forked.
- **Stem** to 17 mm long x 3 mm diameter, translucent pale yellow, arises from a small whitish mycelial patch.
- **Spore print** white.

Note – unlike *C. depokensis* it is not twisted, although sometimes flattened.

Habit: clustered in groups.

Habitat: on the ground amongst moss and rotting woody litter of native forests and woodlands.



Richard Hartland



Carol Page

Clavulinopsis corallinorosacea
(*Clavaria corallinorosacea*)
Rosy Coral Club

Fruit-body: medium, simple club, pale pink to reddish with a distinct red stem.

- **Size** to 80 mm tall x 3 mm diameter.
- **Club** simple, smooth, cylindrical, with a pale pink fertile surface caused by the white powdery bloom of spores.
- **Club tip** blunt.
- **Stem** to 2 mm diameter, red in contrast to the paler pink fertile top.
- **Spore print** white.

Note – old fruit-bodies lose the pale bloom and become completely red, and look similar to *C. sulcata*.

Habit: gregarious in small groups.

Habitat: on the ground amongst moss and litter of native forests.



De'ana Williams

***Clavulinopsis depokensis* (*Clavaria depokensis*)** **Bright Orange-yellow Club**

Fruit-body: medium, simple club, bright orange to yellow, flattened and twisted.

- **Size** to 80 mm tall x 7 mm diameter (much less when unbranched).
- **Club** simple, cylindrical or flattened, commonly twisted, bright orange to yellow, waxy or smooth.
- **Club tip** tapered or rounded, sometimes divided.
- **Stem** very short to 5 mm long, narrower than club, lemon-yellow, a few may unite to form a single body, arises from a yellow to orange mycelial pad.
- **Spore print** white.

Note – unlike the yellow *C. amoena*, it is twisted.

Habit: clustered in groups.

Habitat: on the ground in deep moist litter of eucalypt forests.



Web: en. Wikipedia.org



web: Nature and More ©Alan Cressler

***Clavulinopsis fusiformis* (*Clavaria fusiformis*)** **Golden Spindles**

Fruit-body: tall, simple, bright yellow clubs with brown tips. Clubs emerge in tight clusters from an underground fused base.

- **Size** to 150 mm tall x 10 mm diameter.
- **Club** simple, often flattened, sometimes with longitudinal grooves, bright yellow to orange yellow, fading with age, dry.
- **Club tip** sharply pointed, with brownish tints.
- **Stem** not defined, clusters of clubs arise from a white underground fused base.
- **Spore print** white.

Note – unlike *C. amoena*, the clubs emerge in tight clusters.

Habit: clustered.

Habitat: on the ground in native forests.



Ed Grey



Reiner Richter

Clavulinopsis sulcata (*Clavaria miniata*) Flame Fungus

Fruit-body: tall, simple, occasionally some branching, red to orange club and red to orange stem.

- **Size** to 100 mm tall x 5 mm diameter.
- **Club** variously shaped – flattish, vertical, slender, contorted, colour varies from red, orange-pink to reddish orange, smooth.
- **Club tip** rounded or tapered, occasionally divided or yellowish.
- **Stem** to 20 mm long x 5 mm diameter, no distinct colour difference between the stem and club.
- **Spore print** white.

Note – unlike the pink and red *C. corallinorosacea*, it is always completely red.

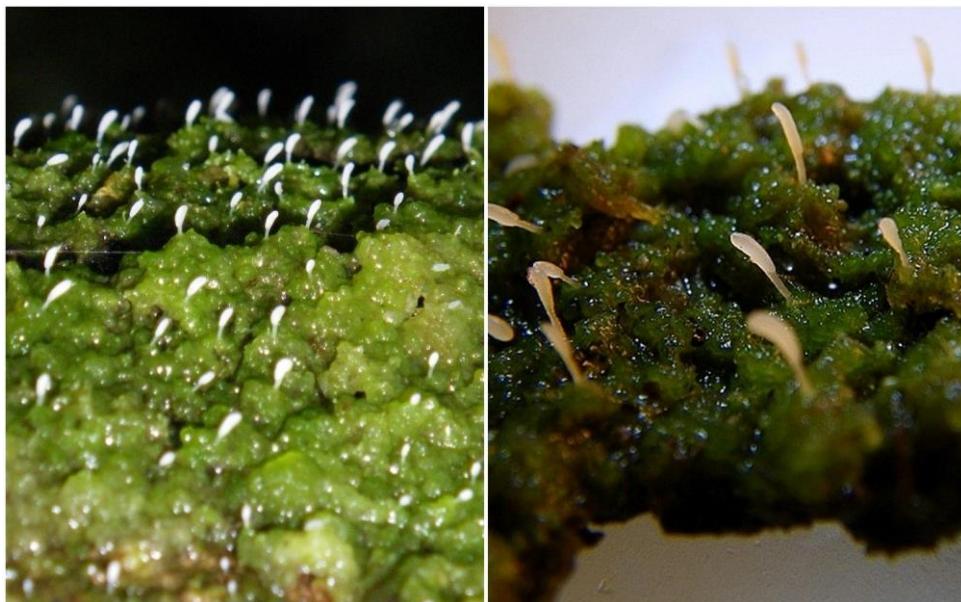
Habit: clustered in groups.

Habitat: on the ground amongst moss and litter of native forests.

Clavulinopsis sulcata



Claire Ferguson



John Eichler

Multiclavula mucida White-club Scum-lover

Fruit-body: tiny, simple slender club, white. A lichenised fungus growing on wood with a *Coccomyxa* alga.

- **Size** to 15 mm tall x 2 mm diameter.
- **Club** simple or once-branched, often flattened, white to cream, smooth.
- **Club tip** rounded, may brown when dehydrated.
- **Stem** distinguished from the club by its narrower size and more translucent colour, arises from a minute white mycelial pad integrated with the alga.
- **Spore print** white.

Note – *Multiclavula vernalis* grows in algal scum on soil and has orange clubs.

Habit: scattered or in groups.

Habitat: in algal scum (*Coccomyxa* sp.) on wet, debarked, rotting wood.



Web: Lichens of Belgium, Luxembourg and northern France.

Multiclavula vernalis Orange-club Scum-lover

Fruit-body: tiny, slender simple club, usually unbranched, pale orange with a distinctly paler stem. Often with a small white spot at the apex, like a cap. A lichenised fungus growing on soil with a *Coccomyxa* alga.

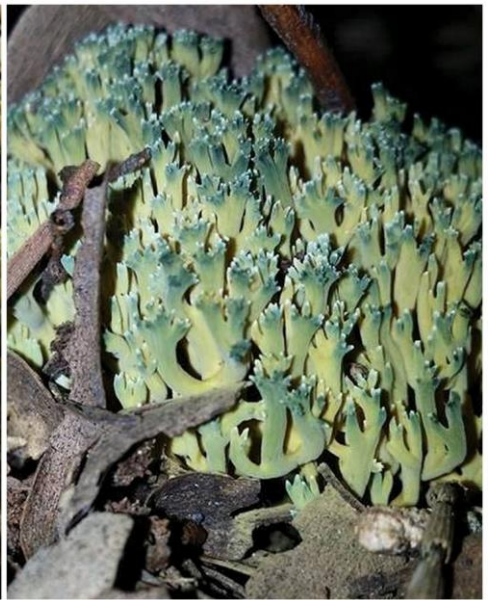
- **Size** to 20 mm tall x 2.5 mm diameter.
- **Club** simple, pale orange, smooth.
- **Club tip** bluntly rounded.
- **Stem** to 7 mm long x 1.5 mm diameter, narrower than club, and whitish, arises from a minute white mycelial pad.
- **Spore print** white.

Note – *Multiclavula mucida* grows on algal scum on wood and has whitish clubs.

- **Habit:** groups.
- **Habitat:** in algal scum (*Coccomyxa* sp.) on wet, sandy or silty soil.



Ed Grey



Marc Campobasso

***Ramaria abietina* (*Phaeoclavulina abietina*)** **Green-staining Coral**

Fruit-body: small, multi-branched, yellowish, staining green all over.

- **Size** to 35 mm tall x 25 mm wide.
- **Branches** upright, slender, yellowish becoming green, axils (branch divisions) narrowly round.
- **Branch tips** bluntly pointed, yellowish becoming green.
- **Stem** to 15 mm long x 2 mm diameter, yellowish-green, white at base, arises from a white mycelial mat, white rhizomorphs present.
- **Spore print** yellow.

Note - because of its small-size and yellow-green colour, this coral could easily be overlooked or mistaken for a moss.

Habit: clusters, often in fairy rings.

Habitat: on the ground in deep litter.



Matthias Theiss

Ramaria anziana

Orange and Salmon-pink Coral

Fruit-body: large, multi-branched, numerous orange or salmon-pink branches with yellow tips arise from a compound stem.

- **Size** to 110 mm tall x 85 mm wide.
- **Branches** upright, slender, cylindrical, smooth or (rarely) finely grooved, orange to salmon-pink, arising from a stem, aborted (undeveloped) branches present, axils (branch divisions) round to narrowly round.
- **Branch tips** slenderly pointed (awl-shaped) or with blunt protrusions, yellow.
- **Stem** to 20 mm long x 10 mm diameter, thin, often compound (several small stems fusing to form a false stem), smooth to pruinose (finely powdery), pale at the base becoming orange or salmon-pink above.
- **Spore print** yellow-brown.

Note – *R. anziana* is differentiated from the similar-looking *R. samuelsii* by the thin, sometimes false stem, orange fruit-body and lack of fruity odour.

Habit: gregarious.

Habitat: on the ground in litter of eucalypt forests.



Pat Grey



Richard Hartland

Ramaria botrytoides **Pink-tipped Coral**

Fruit-body: large, multi-branched, branches buff, branch tips pale pink to reddish or pink buff.

- **Size** to 120 mm tall x 110 mm wide.
- **Branches** long and buff-coloured, main axils (branch divisions) round.
- **Branch tips** with blunt protrusions, pale pink to reddish or pink buff.
- **Stem** short, to 40 mm long x 15 mm diameter thick, white to buff-coloured.
- **Spore print** yellow-brown.

Note - immature specimens are more compact and have cream to pinkish short branches with reddish tips. Dr A Young has determined that *R. botrytis* does not occur in Australia and that all collections labelled *R. botrytis* are *R. botrytoides*.

Habit: solitary or small groups.

Habitat: on the ground amongst litter in wet eucalypt forests.



Paul George

Ramaria capitata* var *capitata **Pale Cauliflower Coral**

Fruit-body: large, cauliflower-shaped, viscid, pale yellow orange-yellow. The stem is short and off-white.

- **Size** to 150 mm tall x 150 mm wide.
- **Branches** finely grooved longitudinally, pale yellow, axils usually acute.
- **Branch tips** swollen and almost fused together to form layers or a completely closed surface, yellow.
- **Stem** short to 20 mm long x 10 mm diameter, solid, rounded, hairy, off-white.
- **Spore print** yellow-brown.

Note – The fruit-body stains brown when bruised and soil particles often adhere to the viscid fruit-body, unlike the non-viscid *R. capitata* var *ochraceosalmonicolor*.

Habit: solitary to gregarious.

Habitat: on the ground in leaf litter of native forests.



Richard Hartland

Ramaria capitata* var. *ochraceosalmonicolor **Salmon-pink Cauliflower Coral**

Fruit-body: large, cauliflower-shaped, not viscid, salmon-pink.
The stem is short and off-white.

- **Size** to 150 mm tall x 150 mm wide.
- **Branches** grooved longitudinally, salmon-pink to apricot-pink, axils (branch divisions) usually acute.
- **Branch tips** fuse together to form a completely closed surface, buff to yellowish-orange.
- **Stem** short, to 20 mm long x 10 mm diameter, rounded, off-white, hairy.
- **Spore print** yellow-brown.

Note – the fruit-body stains brown when bruised. This variety is not viscid like *R. capitata* var *capitata* and soil particles do not adhere to the fruit-body.

Habit: solitary to gregarious.

Habitat: on the ground in leaf litter of native forests.



De'ana Williams



John Eichler

Ramaria fennica* var. *fumigata **Lavender Coral**

Fruit-body: large, multi-branched with tapering branch tips, lavender to violet-purple, ageing to clay-pink with yellow-brown spores showing as brownish patches.

- **Size** to 140 mm tall x 80 mm wide.
- **Branches** to 4 mm diameter, cylindrical, becoming elongated with maturity, axils (branch divisions) round, lavender to purple.
- **Branch tips** tapered, with two to four blunt protrusions, lavender to purple.
- **Stem** short, to 40 mm long x 25 mm diameter, white at base, becoming lavender near first branching.
- **Spore print** yellow-brown.

Note – although similar in colour to *Clavaria zollingeri* it has a larger fruit-body and different shaped branch tips. *R. versatilis* var. *latispora* is also a similar size and colour but has fewer (2-5) and thicker (to 15 mm diameter) main branches.

Habit: solitary or in groups.

Habitat: on the ground in eucalypt forests.



Pat Grey



Richard Hartland

***Ramaria filicicola* (= *R. gracilis*)**

Pale Buff Coral

Fruit-body: large, multi-branched, branches are upright, buff with white tapered tips.

- **Size** to 100 mm tall x 60 mm wide.
- **Branches** are very upright, buff, axils (branch divisions) usually round.
- **Branch tips** tapered with 2-5 sharp points or blunt protrusions, dull white.
- **Stem** short to 20 mm long x 5 mm diameter, pale buff, mostly smooth, arises from a white mycelial mat with abundant white root-like rhizomorphs, both attached to the woody litter.
- **Spore print** yellow-brown.

Note – has a slightly aniseed smell. Dr A Young has determined that *R. gracilis* does not occur in Australia and that all collections labelled *R. gracilis* are, in fact, *R. filicicola*.

Habit: solitary or in groups, often forming a ring.

Habitat: in woody litter on the ground with native or exotic trees and on Tree-fern stems.



De'ana Williams



Carol Page

***Ramaria flaccida* (*Phaeoclavulina flaccida*)** **Mustard-yellow Coral**

Fruit-body: medium, multi-branched, branches are upright and branch tips finely pointed, mustard-yellow.

- **Size** to 60 mm tall x 40 mm wide.
- **Branches** upright, axils (branch divisions) narrowly rounded, mustard-yellow, arising close to ground level.
- **Branch tips** finely pointed, slightly paler than branches.
- **Stem**, if present, short, to 20 mm long x 4 mm diameter, often well below ground level, arises from a mass of cream rhizomorphs and occasionally a mycelial mat.
- **Spore print** yellow-brown.

Habit: grows in groups, sometimes forming rings.

Habitat: on the ground in eucalypt forest and Tea-tree thickets.



Ed Grey

Ramaria lorithamnus **Yellow Tufted Coral**

Fruit-body: medium, multi-branched, yellow, with a small whitish stem. The fruit-body stains red-brown and tends to grow in clusters.

- **Size** to 90 mm tall x 40 mm wide (tufts to 80 mm wide).
- **Branches** mostly upright, cylindrical, axils (branch divisions) round, yellow, ageing buff, smooth.
- **Branch tips** dichotomous (divide into two) with rather blunt prongs, pale yellow.
- **Stem** to 25 mm long x 4 mm diameter, whitish, smooth.
- **Spore print** yellow-brown.

Note - bruising of the fruit-body leaves a wine-red or brown stain on the surface.

Habit: in clusters and groups.

Habitat: on the ground in eucalypt forests.



Paul George



Richard Hartland

Ramaria ochracea (*Phaeoclavulina ochracea*) Delicate Coral

Fruit-body: small, delicate, branched, with pointed branch tips, cream to pale ochre. One of the four coral fungi that grows on wood.

- **Size** to 50 mm tall x 25 mm wide.
- **Branches** upright, to 1.5 mm diameter, fine and delicate, axils (branch divisions) round, cream to pale ochre.
- **Branch tips** pointed, usually dichotomous (divided into two) whitish, ageing pale tan.
- **Stem** to 30 mm long x 6 mm diameter, arises from a whitish mycelial ball or tuft.
- **Spore print** pale yellow-brown.

Habit: solitary or in small groups.

Habitat: on dead wood and Tree-fern stems.



Pat Grey

Ramaria pyrispora Flaring Branched Coral

Fruit-body: large, multi-branched, coralloid branches are pale tan to buff, off-white tips with blunt protrusions.

- **Size** to 110 mm tall x 80 mm wide.
- **Branches** flare as they ascend, somewhat flattened, axils narrowly round, pale tan to buff, aborted (undeveloped) branches present.
- **Branch tips** have pointed or blunt protrusions, pale almost white.
- **Stem** very short to 20 mm long x 10 mm diameter, tapering to an acute somewhat hairy base, white, soil and litter attached, sparse white mycelium was observed but not white rhizomorphs.
- **Spore print** yellow-brown.

Note – Does not colour when bruised. *R. pyrispora* can be differentiated from the similar-looking *R. filicicola* by the absence of a mycelial mat attached to woody litter.

Habit: groups, often forming a ring.

Habitat: in ground amongst the litter in wet eucalypt forests.



Matthias Theiss

Ramaria samuelsii Upright Pink Coral

Fruit-body: large, multi-branched, compact, very upright pink branches with yellow tips, arising from a distinct stout stem.

- **Size** to 100 mm tall x 60 mm wide.
- **Branches** upright, cylindrical, longitudinally grooved, axils (branch divisions) roundish, pink aborted (undeveloped) branches present.
- **Branch tips** 4 blunt, rounded protrusions, bright yellow fading to pale yellow, bruises to pale wine-colour.
- **Stem** to 20 mm long x 10 mm diameter, stout, white becoming pink towards branches, bruises a weak brown.
- **Odour** weakly fragrant; **taste** weakly bitter.
- **Spore print** yellow-brown.

Note - the stout stem, pink branches, fruity odour, and very upright structure of *R. samuelsii* differentiates it from the similar-looking *R. anziana*.

Habit: gregarious.

Habitat: on the ground amongst humus, and leaf litter of eucalypt woodland and forest.



Richard Hartland

Ramaria stuntzii var *gelatinosa* Red-tipped Cauliflower Coral

Fruit-body: medium, cauliflower-shaped, branch tips dry and bright red. The stem is hairy and the white flesh distinctly gelatinous.

- **Size** to 70 mm tall x 60 mm wide.
- **Branches** cylindrical, pink to bright pink, white aborted (undeveloped) branches present.
- **Branch tips** crowded, rounded, ending in several blunt protrusions, dry, bright red.
- **Stem** 20 mm long x 15 mm diameter, stout, white becoming pinkish near branching, covered with white matted hairs.
- **Spore print** yellow-brown.

Note – flesh white and distinctly gelatinous.

Habit: solitary.

Habitat: on the ground in leaf litter of dry eucalypt forests.



Richard Hartland



Ed Grey

Ramaria versatilis* var *latispora **Purple Vinaceous Coral**

Fruit-body: large, multi-branched, with blunt branch tips,
and branches purple to vinaceous purple.

- **Size** to 120 mm tall x 80 mm wide.
- **Branches** 2-5 major branches, stout, to 15 mm diameter, purple to vinaceous purple to cinnamon (spore cover).
- **Branch tips** short blunt processes, purple.
- **Stem** if present, very short, to 30 mm long x 20 mm diameter, off-white.
- **Spore print** yellow-brown.

Note - flesh stains yellowish at base of stem. The 2-5 thick (to 15 mm diameter) main branches differentiate it from the similarly sized and coloured *R. fennica* var. *fumigata* with its multiple, thinner branches.

Habit: solitary.

Habitat: on the ground amongst litter of eucalypt forests.



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Ramaria watlingii

Pale Yellow Coral

Fruit-body: large, multi-branched, branches dark straw-yellow to pale ochraceous, tips often branch at right angles, yellow to very pale ochre, ageing brown.

- **Size** to 120 mm tall x 120 mm wide.
- **Branches** numerous, cylindrical to flattened, dark straw-yellow to pale ochraceous, aborted (undeveloped) branches present.
- **Branch tips** bluntly rounded, dichotomous (divide into two) often at right angles, or at an obtuse angle, yellow to very pale ochraceous.
- **Stem** 30 mm long x 15 mm diameter, white to yellowish. Rhizomorphs not recorded
- **Spore print** yellow-brown.

Note - no colour change with bruising. *R. watlingii* is distinguished from other similar yellow species by the paired branch tips dividing at right angles to one another.

Habit: gregarious.

Habitat: amongst litter on disturbed ground by the roadside in dry eucalypt forest (Victoria) or cool temperate rainforest with Eucalypts (Tasmania).



Reiner Richter



Carol Page

Ramariopsis crocea Delicate Yellow Coral

Fruit Body: small, delicate and branched, bright yellow to orange.
Branches are often antlers-like.

- **Size** to 50 mm tall x 20 mm wide.
- **Branches** to 1.5 mm diameter, dichotomous (divide into two) becoming ‘antler-like’, axils (branch divisions) round, yellow to orange.
- **Branch tips** blunt not pointed, yellow.
- **Stem** to 10 mm long x 2 mm diameter, golden yellow to orange, base fluffy with white mycelium.
- **Spore print** white.

Note – *Calocera viscosa* Yellow Staghorn looks similar, but grows on wood, has a waxy texture and is viscid when fresh.

Habit: solitary or clustered.

Habitat: on the ground in moss and litter of native forests and on Tree-fern stems.



Reiner Richter



Richard Hartland

Ramariopsis kunzei White Coral

Fruit Body: medium, multiple thin branches with blunt two-pronged branch tips and a short stem, white becoming pink-tinged with age.

- **Size** to 80 mm tall x 70 mm wide.
- **Branches** to 2 mm diameter, dichotomous (divide into two), axils (branch divisions) round, slightly flattened, white, smooth, brittle and fragile.
- **Branch tips** two blunt protrusions, white ageing yellowish.
- **Stem** if present, to 10 mm long x 3 mm diameter, white, scurfy with flakes and scales, arises from white basal mycelium and some white rhizomorphs.
- **Spore print** white.

Habit: solitary, in groups or small clusters.

Habitat: on the ground in litter of wet native forests and on Smooth Tree-fern stems.



Richard Hartland



Reiner Richter

Ramariopsis pulchella Small Mauve Coral

Fruit Body: small, thin branches and a short, thin stem. The whole fruit-body is mauve.

- **Size** to 20 mm tall x 15 mm wide.
- **Branches** to 1 mm diameter, dichotomous (divide into two), axils (branch divisions) deep round to round, rich mauve-violet, smooth.
- **Branch tips** two blunt protrusions, deep mauve.
- **Stem** short, to 1.5 mm diameter, tapering slightly downwards, pale mauve to white at base, arises from a very small, pale mauve mycelial pad.
- **Spore print** white.

Habit: solitary or in small groups.

Habitat: on the ground in litter of wet native forests.



John Eichler



Richard Hartland

Tremellodendropsis pusio Needle-branched Coral

Fruit Body: small, branches long, extremely slender, whitish to pale buff with pointed tips, and a long, whitish stem.

- **Size** to 50 mm tall x 50 mm wide.
- **Branches** extremely slender, less than 1 mm diameter, dichotomous (divide into two), upright, axils (branch divisions) acute, whitish to pale buff.
- **Branch tips** pointed, whitish to pale buff.
- **Stem** to 11 mm long x 1 mm diameter, tough, whitish to pale buff, arises from a small, white mycelial patch.
- **Spore print** white.
- **Note** – stem and lower branches stain brownish.

Habit: groups.

Habitat: on the ground in native forests.

Tremellodendropsis pusio



Richard Hartland

SCIENTIFIC NAMES AND DERIVATIONS

NAME

MEANING

Artomyces

austropiperatus

colensoi

Clavaria

acuta

alboglobospora

fragilis

miniata

tenuipes

zollingeri

Clavicornia

taxophila

Clavulina

cinerea

coralloides

cristata

rugosa

subrugosa

tasmanica

vinaceocervina

Clavulinopsis

amoena

corallinorosacea

depokensis

fuciformis

sulcata

Multiclavula

mucida

vernalis

Phaeoclavulina

ochracea

Ramaria

abietina

anziana

botrytoides

capitata var. *capitata*

capitata var. *ochraceo-*

salmonicolor

fennica var. *fumigata*

filicicola

Close to fungus

southern peppery

after William Colenso

pertaining to club

acute, sharp pointed

white round spores

fragile

painted with red lead

thin stalked

named after Heinrich Zollinger

Crown-tipped Club

almost Clavaria

ashen, ash-coloured

similar to coral

having a crest

rugose (wrinkled)

almost rugose (wrinkled)

of/from Tasmania

wine-red to deer-brown

resembling a Clavulina

pleasant, cheerful

rosy coral

From Depok (Indonesian city)

spindle-shaped

longitudinally grooved

many diminutive clubs

slimy

pertaining to spring

a dark clavulina

yellow

pertaining to branches

fir tree (associated with)

?pertaining to elderly female

like a bunch of grapes

related to head

related to head, yellow-

salmon colour,

of Finland; smoke-colour (grey mixed with brown)

like a fern stalk

NAME**MEANING*****Ramaria cont.****flaccida*

flaccid (limp)

gracilis

gracile (slender, thin)

lorithamnus

victor's wreath

ochracea

yellow

stuntzii var *gelatinosa*

after Daniel Elliot Stuntz, mycologist; gelatinous

versatilis var *latispora*

versatile; large spored

watlingii

after Roy Watling, mycologist

Ramariopsis*crocea***similar to *Ramaria***

yellow like saffron (crocus)

kunzei

Kunz - mycologist

pulchella

very beautiful

Tremellodendropsis**resembling a trembling tree***pusio*

stalked

Ramaria filicicola (R. gracilis)

Carol Page

BIBLIOGRAPHY

- Arora D (1986). *Mushrooms Demystified*. Ten Speed Press, California USA.
- Bougher, N & Syme K (1998). *Fungi of Southern Australia*. Frank Daniels P/L Perth.
- Cleland, JB (1976 reprint). *Toadstools and Mushrooms and Other Larger Fungi of South Australia*. Government Printer, SA.
- Fuhrer, Bruce (2011). *A field guide to Australian fungi*. Bloomings Books Melbourne Australia.
- Gates, G & Ratkowsky D (2014). *A Field Guide to Tasmanian Fungi*. The Tasmanian Field Naturalists Club: Hobart.
- Hubregtse, Jurrie (2012). *The Fungi CD: Fungi in Australia* [CD-ROM] 3rd Edition. FNCV Fungi Group.
- McCann, IR (2003). *Australian fungi illustrated*. Macdown Productions: Victoria.
- Nelsen, MP (2005). Noteworthy Collection Michigan, *The Michigan Botanist* 46.
- Petersen, JH (2012). *The Kingdom of Fungi*. Princeton University Press: New Jersey, USA
- Petersen, RH (1986). Three Lichen-forming Clavarioid Fungi from Tasmania, *Australian Journal of Botany* 34, 217-22.
- Petersen, RH (1978). The Genus *Clavaria* in South-eastern Australia, *Australian Journal of Botany* 26, 415-424.
- Petersen, RH (1978). The Genus *Ramariopsis* in South-eastern Australia, *Australian Journal of Botany* 26, 425-431.
- Phillips, R (2006). *Mushrooms*. Macmillan London.
- Young, AM (2005). *A Field Guide to the Fungi of Australia*. University of New South Wales Press: Sydney.
- Young, AM (2014). Australian Coralloid Fungi IV – *Ramaria filicicola*, *Muelleria* 33: 13-19.

WEB SITES

- first-nature.com - articles by species names.
- Hubregtse, Jurrie (2017) Fungi in Australia - e-book
- landcareresearch.co.nz - articles by species names.
- mushroomexpert.com - articles by species names.
- mycobank.org - articles by species names.
- mycoweb.com - articles by species names.
- qldfungi.org.au - Young, AM Keys to the Published Australian species of *Ramaria*.
- qldfungi.org.au - articles by species names.
- wikipedia.org - articles by species names.

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Clavulinopsis amoena



Ed Grey

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