

**Galerina.** This synoptic key by David Savage, 2008, is intended as an alternative approach to fitting *Galerina* specimens to the descriptions in British Fungus Flora Vol. 7 (Watling & Gregory). Most of the species in BFF 7 are included in the key. No account has been made for any changes to species descriptions, limits, or names, made since the issue of BFF 7.

## A SYNOPTIC GALERINA KEY

The Key uses spore length, the presence/absence of a stem ring, and the presence of 2 or 4 spored basidia, as the primary sorting characteristics. These are all objective features which should be easy to categorise with reasonable certainty. However it must be noted that a stem ring is easily lost, by handling, weather, or age, particularly in those species which possess a weakly developed ring. As usual careful observation on collection, and avoiding old specimens, helps.

Marginal cystidia shapes and cap colour are used as secondary sorting characteristics. Both vary significantly across the range of species. They are subjective observations which can often be hard to categorise. In addition colour seems to be dependent on recent weather conditions, leading to washed out colours in some specimens.

Habitat, stem colour and presence/absence of facial cystidia are used for final characterisation.

The selection of sequence of characters reflects the ease with which I can categorise them. Others may find it easier to vary the order of priority as they use the key.

The characteristics are described below.

Each character is given a code letter, to give an 8 letter sequence. These code letter sequences are related to the species number and name as detailed in BFF 7. Additional distinctive features are noted in the final column when appropriate. For very similar species, more minor differences are noted. The detailed descriptions in BFF 7 should be used to check on the probable identification of a specimen.

A number of species have one (or more!) features which are close to the boundaries selected for this key. Other species have features which are noted as variable in BFF 7. In both cases, specimens could easily be allocated to more than one code letter for a single feature. Where this seems likely, both letters are included in the alphabetical list.

This key was prepared as a personal aid to fitting specimens to the species described in BFF 7. I have found it a big help, particularly with species I have not previously found. However, I find some species are difficult to separate even after close perusal of BFF 7. Specimens from these groups/pairs of species continue to give me problems with identification. Also no guarantee it is free from error.

Please give the key a try, I hope it helps,

Dave Savage, Mar 2007

## FEATURE CODING

### SPORE LENGTH

- A**     Small             Most spores less than 9 micron long.  
**B**     Normal             Most spores between 9.5 and 11.5 micron long.  
**C**     Long                 At least many spores 12 or more micron long.

Allocated to species on the basis of typical spore lengths as quoted in BFF 7. There will often be a number of shorter or longer spores present.

### STEM TEXTURE

- D**     Stem shiny and silky smooth, as if polished.  
         There may be a few fibrils present, especially on young specimens. Often powdered at the apex.  
**E**     With significant fibrils present, usually forming a ring-like zone, or with a distinct ring.  
         These are easily lost so check on collection.

### BASIDIA

- F**     4 spored basidia. This is normal.  
**G**     2 spored basidia dominate.

### CYSTIDIA

- H**     Flask shaped. A swollen base tapering to an elongated narrow top. Apex no more than half as wide as base.  
         Vary between Fig. 14 and Fig. 30 of BFF 7.  
**J**     Long cylindrical. Elongated and more or less cylindrical. Often with a slightly swollen head and/or base, but with base and head of similar widths. Sometimes with one or more constrictions in the middle.  
         Many cystidia more than 50 micron long.  
         Figs. 18, 52 and 61 in BFF 7 are examples.  
**K**     Short cylindrical. Short, dumpy, more or less cylindrical. Most cystidia less than 50 micron long. Often slightly constricted in the middle to give an almost utriform, club or capitate profile, but with base and head of similar width. Some can be swollen in the centre.  
         Figs. 10, 13 and 58 in BFF 7 are typical.  
**L**     Capitate. A swollen base with a long neck topped by a globose head. The head is at least twice the width of the neck.  
         Figs. 12, 15 and 16 in BFF 7 are examples.

Specimens can be found with some or all cystidia which fall on the boundaries between **H** and **J**, **J** and **K**, **K** and **L**, and **L** and **H**, when both code letters should be followed.

## CAP COLOUR

Colours refer to the dominant colour of moist caps. Cap margins and radial lines are normally paler. Some species may display a paler central spot. All caps dry paler; add a drop of water if you think the cap may be dry. Many species vary from a darker to a lighter shade as the caps age.

- M**     Dull or Pale. Cinnamon, buff, or ochraceous buff shades. Typically cream or paler when dry.
- N**     Bright. Close to fulvous. This is the most typical Galerina colour.
- O**     Dark. Tawny to bay shades.

Colours are as illustrated in the Flora of British Fungi colour identification chart.

## HABITAT

- P**     Terrestrial. Usually amongst mosses and grasses.
- Q**     Sphagnum. Amongst or on sphagnum.
- R**     Wood. Normally on rotting wood, which can be buried.

## STEM COLOUR

- S**     Pale. Predominantly cream to white.
- T**     Golden buff. A mix of ochraceous and buff to pale fulvous shades.
- U**     Dark. Fulvous to bay colours dominate, although the stem apex is often paler.

Stem colour normally varies from darker at the base to paler at the apex. Use the dominant colour, normally in the middle of the stem.

Stem colour often darkens as a fruit body matures.

## FACIAL CYSTIDIA

- V**     Facial cystidia present. Facial cystidia are normally similar to marginal cystidia.
- W**     Facial cystidia absent.

## ALPHABETICAL

## LIST

	Code			Species	Notes
<b>ADF</b>	HN	PTW	33	uncialis	
	KN	RTW	35	sideroides	Almost smooth spores, cystidia tending to capitate.
		PTW	32	triscopa	Cap with conic umbo.
		RTW	32	triscopa	Cap with conic umbo.
	LM	PSW	4	laevis	Cap cystidia present,
		RTW	39	camerina	
<b>ADG</b>	LN	RTW	35	sideroides	Almost smooth spores.
	JN	PTV	48	heimansii	
	LM	PSW	4	laevis	Cap cystidia present.
<b>AEF</b>	HM	RTW	3	myriadophylla	Clustered; cap can be large.
	HN	PTW	33	uncialis	On sandy soils.
		RTV	42	marginata	On coniferous wood.
			43	autumnalis	On frondose wood; cap can be large.
		RTW	1	mutabilis	Clustered; cap can be large.
		RUV	42	marginata	On coniferous wood.
			43	autumnalis	On frondose wood; cap can be large.
	KN	PTV	16	salicicola	Ventricose cystidia.
		RTV	16	salicicola	Ventricose cystidia.
	LM	RTW	3	myriadophylla	Clustered; cap can be large.
<b>AEG</b>		RUV	40	stylifera	
	JN	PTV	48	heimansii	
<b>BDF</b>	HM	PSW	28	pseudomniophila	Spores 6 to 7.5 wide.
	HN	PSW	38	luteofulva	Yellow cap margin.
		PTV	8	vittiformis	
		PUV	8	vittiformis	
	HO	PSW	38	luteofulva	Yellow cap margin.
		PUV	8	vittiformis	
	JM	PTW	27	mniophila	Spores at least 7 wide.
			13	hypnorum	Spores 5 to 6 wide.
	JN	PSW	38	luteofulva	Yellow cap margin.
		PTW	11	calyptrata	Cystidia 30 to 60 long. Spores calyptrate, less than 6.5 wide, most less than 11 long.
			17	pumila	Cystidia at least 60 long. Spores almost smooth, wider than 7, longer than 11.
			19	permixta	Cystidia of varied shapes.
		PUV	8	vittiformis	
	PUW	23	embolus	Cap often flat, often on sand dunes.	
<b>JO</b>	PSW	38	luteofulva	Yellow cap margin.	
	PUW	23	embolus	Cap often flat, often on sand dunes.	

<b>BDF</b>	KM	PSW	28	pseudomniophila	Spores 6 to 7.5 wide.
		PTW	13	hypnorum	Spores 5 to 6 wide.
	KN	PSW	18	viscidula	Viscid, shiny cap.
		PTW	18	viscidula	Viscid, shiny cap.
		PTW	11	calyptrata	Some cystidia more than 40 long. Spores calyptrate.
			13	hypnorum	Cystidia less than 40 long. Spores almost smooth.
		QTW	24	sphagnorum	
	KO	PUW	15	phillipsii	
	LN	PTW	19	permixta	Cystidia of varied shapes.
		QTW	7	stordalii	Pruinose stem. Spores with a germ pore.
		31	tibiicystis	Pruinose stem.	
<b>BDG</b>	HN	PTV	47	nana	Cystidia thick walled with apical deposits.
		PUV	8	vittiformis	
	JN	PTV	48	heimansii	
<b>BEF</b>	HN	PTV	44	pseudomycenopsis	On mosses. Most spores over 7 wide.
		PUV	45	praticola	Damp meadows. Most spores under 7 wide.
		PTW	33	uncialis	Usually on sand dunes.
		RTV	43	autumnalis	On frondose wood; cap can be large. Most spores under 10 long.
	HO	PTV	44	pseudomycenopsis	On mosses. Most spores over 7 wide.
		PUV	45	praticola	Damp meadows. Most spores under 7 wide.
	JN	PTW	19	permixta	Cystidia of varied shape.
		PUV	45	praticola	Damp meadows.
		PUW	45	praticola	Damp meadows.
	JO	QTW	26	paludosa	
		PUV	45	praticola	Damp meadows. Most spores under 7 wide.
		PUW	45	praticola	Damp meadows. Most spores under 7 wide.
	KN	QTW	26	paludosa	
		PTW	18	viscidula	Viscid, shiny cap.
	LN	QTW	26	paludosa	
		PTW	19	permixta	Cystidia of varied shape.
	<b>BEG</b>	HM	PTV	47	nana
RUW			36	ampullaceocystis.	
HN		RUV	41	badipes	
JN		PTV	48	heimansii	
LN		PUW	37	cinctula	
		RUW	37	cinctula	

<b>CDF</b>	HN	PSW	38	luteofulva	Yellow cap margin.
	HO	PSW	38	luteofulva	Yellow cap margin.
		PUW	p80	Phaeogalera	Spore print snuff to cigar brown.
		QUW	p80	Phaeogalera	Spore print snuff to cigar brown.
	JM	PTW	27	mniophila	Cystidia less than 70 long.
	JN	PSW	38	luteofulva	Yellow cap margin.
		PTW	17	pumila	Cystidia at least 60 long.
	JO	PSW	38	luteofulva	Yellow cap margin.
		PUW	p80	Phaeogalera	Spore print snuff to cigar brown.
		QUW	p80	Phaeogalera	Spore print snuff to cigar brown.
	KM	PTW	27	mniophila	Cystidia less than 70 long.
	KN	PUW	29	hypophaea	
	LM	PTW	5	clavata	Clamp connections absent.
	LN	PTW	34	pseudocerina	Clamp connections present
<b>CDG</b>	HM	PTV	47	nana	Cystidia thick walled with apical deposits.
	HN	PTV	8	vittiformis	
			10	atkinsoniana	Cap cystidia present.
		PUV	8	vittiformis	
		QUV	10	atkinsoniana	Cap cystidia present.
	HO	PTV	8	vittiformis	
		PUV	8	vittiformis	
	LN	PTW	6	subclavata	Clamp connections absent.
<b>CEF</b>	HN	PTV	44	pseudomycenopsis	
	HO	PUW	p80	Phaeogalera	Spore print snuff to cigar brown.
		QUW	p80	Phaeogalera	Spore print snuff to cigar brown.
	JN	PUW	22	harrisonii	
	JO	PUW	p80	Phaeogalera	Spore print snuff to cigar brown.
	QUW	p80	Phaeogalera	Spore print snuff to cigar brown.	
<b>CEG</b>	HM	PTV	47	nana	Cystidia thick walled with apical deposits.
	HN	RUV	41	badipes	
	JM	PTW	30	jaapii	
	JN	PTW	30	jaapii	
	KM	PTW	30	jaapii	
	LM	PTW	37	cinctula	
	RTW	37	cinctula		