

KEY TO PRINCIPAL GENERA OF AGARICACEAE

1.—Fleshy Fungi

Stem central:	SPORE COLOUR				
	WHITE	PINK	BROWN	PURPLE	BLACK
With ring and volva	<i>Amanita</i>	<i>Chitoniella</i>	
With volva	<i>Amanitopsis</i>	<i>Volvaria</i>	<i>Locellinia</i>	<i>Clarkeinda</i>	
With definite ring:					
Gills free	<i>Lepiota</i>	<i>Annularia</i>		<i>Psalliota</i>	<i>Annelaria</i>
Gills adnexed to decurrent	<i>Armillaria</i>		<i>Pholiota</i>	<i>Stropharia</i>	
Ring filamentous, fugacious:					
Terrestrial, stem fleshy ...	<i>Hiatula</i>		<i>Cortinarius</i>		<i>Gomphidius</i>
Lignicolous, rather fibrous			<i>Flammula</i>	<i>Hypholoma</i>	
Stem cartilaginous				<i>Psilocybe</i>	
No ring or volva, stem fleshy:					
Exuding milk	<i>Lactarius</i>				
Stem thick, brittle	<i>Rusula</i>				
Gills mealy	<i>Laccaria</i>				
Gills waxy	<i>Hygrophorus</i>				<i>(Gomphidius)</i>
Gills free	<i>(Hiatula)</i>	<i>Pluteus</i>	<i>Pluteolus</i>	<i>Pilosace</i>	
Gills sinuate	<i>Tricholoma</i>	<i>Entoloma</i>	<i>Hebeloma</i>	<i>(Hypholoma)</i>	
Gills decurrent, thin	<i>Clitocybe</i>	<i>Clitopilus</i>			
Gills decurrent, thick and branched	<i>Cantharellus</i>				
No ring or volva, stem cartilaginous:					
Gills free to adnate, cap fleshy	<i>Collybia</i>	<i>Leptonia</i>	<i>Naucoria</i>	<i>(Psilocybe)</i>	<i>Panaeolus</i>
Gills free to adnate, cap submembranaceous	<i>Mycena</i>	<i>Nolanea</i>	<i>Galera</i>	<i>Psathyra</i>	<i>Psathyrella</i>
Gills decurrent	<i>Omphalia</i>	<i>Eccilia</i>	<i>Tubaria</i>		
Stem eccentric or absent	<i>Pleurotus</i>	<i>Claudopus</i>	<i>Crepidotus</i>		

2.—Tough Leathery Fungi

Stem central, dried plants reviving if rewet, spores white	Marasmius
Stem lateral or absent:	
Gill edge split longitudinally, spores white	Schizophyllum
Gill edge serrate, spores white	Lentinus

3.—Fragile Putrescent Fungi

Spores brown	Bolbitius
Spores purple	Coprinus

Some Notes on Agarics

GRETA B. CONE

Agarics are notoriously difficult for a botanist to deal with for a variety of reasons. The characters by which different genera are distinguished are not always clearly delimited, though practice in dealing with fungi helps one to recognise differences. The main features by which the genera are recognised are set out in the accompanying key. Broadly, agarics fall into main groups distinguished by spore colour. When fresh fungi are laid gill downwards on black or white paper, they shed a thick layer of spores, and the colour of this mass of spores can be seen plainly, although microscopically or in thin layers they are usually colourless. The tint of the gills does not correspond with this spore colour, though old specimens usually show the gills coated with spores and thus shows the spore colour.

The attachment of the gills to the stem is important though it varies within some genera, e.g., *Hygrophorus*. The presence or absence of ring and volva on the stem varies with age, so that young and fresh specimens must be examined. The texture of the stem, fleshy or cartilaginous, is often a vexed question: a truly cartilaginous stem is stringy when mashed between the fingers, but there are many gradations between truly fleshy and truly cartilaginous. However, most agaric genera are well defined. One finds in practice that the combination of characters defining a genus makes it fairly plain, though individual points may be doubtful.

Apart from technical difficulties there are other problems in knowing agarics. They fruit sporadically, mainly in autumn and winter, some seasons in abundance and other seasons poorly. A few species occur regularly in the same place year after year, but some others have been found only once in a life-time. The fruit body grows fast and reaches maturity within a few days of first showing as a button or small ball. It is attacked immediately by insects, other mould fungi and bacteria,