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Fungi smells: Evaluating the smell descriptions in selected literature according to a new classification for fungi smells

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Abstract

Over 120,000 species of fungi are described globally. In temperate Europe, the estimated number is higher than 20,000. Classical species determination relies on morphological microscopic and macroscopic features, but also smell is an important determinant.

This work compiles data regarding all smell descriptions associated with the fungi species. In total, data regarding 1,295 species were collected, consisting of 291 different smell descriptions. The descriptions were put into nine categories: botanical-reference-objects, non-botanical reference-objects, chemical compounds, gustatory sense, scent-related adjectives, emotionally valuing adjectives, other adjectives, intensity level and odour-development-describing adjectives.

The descriptions are different in their levels of exactitude, from very specific (e.g., “horseradish”, “very ripe watermelon”) to not precise or confusing (e.g., “*Pelargonium*”, “ink”, “insignificant”). Terms from the category’s “intensity” and “emotional valuing adjectives” do not help with fungi identification.

In “Fungi of Temperate Europe” the smell is part of the description of 24% of the species. Several reasons could explain this low percentage: the authors do not consider smell relevant, there is no smell, or it is not possible to describe it. Some species have different smell descriptions, depending on the source of information. Some of the reasons that could explain this mismatch: the descriptions are not complete enough and refer to different conditions upon which the smells are different, misidentification of species or the smells change with external factors, etc.

Key words: fungi smells, smell categories, literature review.

Zusammenfassung

Weltweit sind über 120.000 Pilzarten beschrieben. Im gemäßigten Europa liegt die geschätzte Zahl bei über 20.000. Die klassische Artbestimmung beruht auf morphologischen mikroskopischen und makroskopischen Merkmalen, aber auch der Geruch ist eine wichtige Determinante.

In dieser Arbeit werden Daten zu allen mit den Pilzarten assoziierten Geruchsbeschreibungen zusammengetragen. Insgesamt wurden Daten zu 1.295 Arten gesammelt, die aus 291 verschiedenen Geruchsbeschreibungen bestehen. Die Beschreibungen wurden in neun Kategorien eingeteilt: Pflanzliche Referenzobjekte, Nicht-pflanzliche Referenzobjekte, chemische Verbindungen, Geschmackssensorik, geruchsbezogene Adjektive, emotional wertende Adjektive, andere Adjektive, Intensitätsstufe und Geruchsentwicklung beschreibende Adjektive.

Die Beschreibungen unterscheiden sich in ihrer Genauigkeit, von sehr spezifisch (z. B. „Meerrettich“, „sehr reife Wassermelone“) bis hin zu ungenau oder verwirrend (z. B. „Pelargonie“, „Tinte“, „unbedeutend“). Begriffe aus den Kategorien „Intensität“ und „emotional bewertende Adjektive“ helfen bei der Pilzbestimmung nicht.

Bei „Fungi of Temperate Europe“ liegt der Anteil an Arten mit Geruchsbeschreibungen bei 24%. Mehrere Gründe könnten diesen geringen Anteil erklären: Die Autoren halten Geruch für nicht relevant, Geruch ist nicht vorhanden oder nicht beschreibbar. Einige Arten haben je nach Informationsquelle unterschiedliche Geruchsbeschreibungen. Einige der Gründe, die diese Diskrepanz erklären könnten: Die Beschreibungen sind nicht vollständig genug und beziehen sich auf unterschiedliche Bedingungen, unter denen die Gerüche unterschiedlich sind, falsche Identifizierung von Arten oder die Gerüche ändern sich mit externen Faktoren.

Introduction

From early times to nowadays, humans have been interested and even fascinated by mushrooms. Mushrooms were probably, since prehistoric times, harvested and sometimes part of the diet of our ancestors, hunter-gatherers. Gradually it became part of our eating habits until today (Alimentarium, n.d.). In ancient civilizations, such as old Greece, Rome, Egypt, China, etc., there were beliefs about mushrooms being "food for the Gods" and that eating them could give someone superhuman strength (Sajon *et al.*, 2018; Valverde *et al.*, 2014).

Although people are fascinated by mushrooms and the overall existing culture of collecting them for food or other purposes, many of the books, documentaries, etc., that have been inspired reflect only an amateur and not scientific level of information.

Fungi diversity

Fungi are still a poorly known group of organisms. Its global diversity is so large that there is no consensus on the number of species. The actual range is estimated at 2.2 to 3.8 million, according to Hawksworth & Lücking (2017), but higher estimates exist. Over 120,000 species of fungi are officially described (Hawksworth & Lücking, 2017), which means the number of unknown species is 18-32 times higher. Studying these organisms can be challenging. Many fungi are hidden and possibly invisible to the naked eye throughout their life cycle. They can live in the most varied habitats: within plant tissues, underground, or other hidden places, even on plants such as deadwood (Ismail *et al.*, 2018). Many never produce fruitbodies, and even in species that do, it may take decades between the fruiting. Often this is the only phase when fungi are noticed. Fruitbodies are produced for sexual reproduction and the dispersal of propagules (Læssøe & Petersen, 2019).

In temperate Europe, the number of species is estimated to be higher than 20,000. And at least 6,000–9,000 are fruit-body forming fungi (Læssøe & Petersen, 2019). A macrofungus (Chang & Miles, 1992) or the macroscopic fruit bodies produced by fungi or eukaryotic organisms are known as mushrooms (Ismail *et al.*, 2018; Hawksworth, 2001) (slightly different definitions exist).

Fungi play an essential role in ecosystems. They are important for the nutrient cycles, as they are responsible for a significant part of the turnover of organic material in nature. They are also indispensable in plant growth (Læssøe & Petersen, 2019).

Species identification and smells

Classical species identification relies, mainly, on the observation of both morphological microscopic features, such as spore size and spore surface structure and, on morphological

macroscopic features, such as the pileus shape, the texture of stipe context, the colour of the lamellae, or the smell. The “smell” is defined as the sensation of the molecules that attach to the olfactory receptors on the olfactory cells of our nose (Salawudeen *et al.*, 2018).

The smells and tastes represent important qualities in the identification process of fungi. It may be easier for most people to describe tastes than smells since they are more focused on describing food and food qualities by its taste rather than its smell, but actually the taste is most of the time smelling: retro-nasal olfaction. Tastes can be mild or hot like chilli, as in many species of *Russula*. They can also be bitter, sour, peppery or mealy/farinaceous (Læssøe & Petersen, 2019). The mushroom smells are not only scientifically but culturally important. Some species make this point, e.g., *Haploporus odorus* is part of IUCN's international Red List of Threatened Species (Callan, 2017). It has been considered a sacred fungus amongst North American indigenous tribes, probably due to the intense smell (Blanchette, 1997).

Smell identification

The components that are responsible for the smell of a living being can be chemically detected.

Historically, the first method applied for smell analysis was gas-chromatography combined with mass spectrometry. The result of this combination is a diagram where different peaks correspond to distinct substances. Even if the information obtained can be very accurate, it does not directly relate to smell perception (Odour Observatory, 2018).

It has been shown (e.g., using chromatography-olfactometry: Cho *et al.*, 2006, 2007; Delahunty *et al.*, 2006; Grosshauser & Schieberle, 2013; Kleofas *et al.*, 2015; Misharina *et al.*, 2009; Ruth, 2001; Zellner *et al.*, 2007; Zhang *et al.*, 2018) that predicting the smell-contributing substances in fungi by chemical analyses alone may lead to wrong conclusions. In some cases, the largest peaks have no smell impact (Aisalaa *et al.*, 2019) and the compounds responsible for the smell are not measured as they occur below a certain threshold value (Buchbauer *et al.*, 1993).

The nose is usually the most suitable tool for objective smell determination. A single nose contains around 350 olfactory receptors and more than 20 million olfactory sensory cells. Even if every nose is physiologically the same, not everybody has all the receptor genes so that some people are not able to perceive a specific smell. This phenomenon is called specific anosmia, which, however, can be cured by a smell-training (Croy *et al.*, 2015). Experience and well-trained olfactory senses are needed to identify and distinguish smells that are often mixed with different odours, creating complex impressions to the sensitive nose (Læssøe & Petersen, 2019). The further processing of the olfactory sensation in the brain may lead to subjective emotional evaluation (Hatt & Dee, 2016).

Examples of smells

The mushroom smell with which most people are familiar is that of the commercial mushroom *Agaricus bisporus*. Another familiar smell is that of certain moulds, e.g., some *Aspergillus* and *Penicillium* species. These smells can be found in many other species. Every fungus has a different smell. Its diversity ranges from mostly odourless, such as the decomposers on dead wood of genus *Flammulina*, to strong smells, usually evaluated as unpleasant, foul or pungent, as the stinkhorns, that can be detected over a considerable distance. In some genera, almost all species have farinaceous smells, e.g., *Clitopilus*, while this type of smell is completely absent in others, e.g., *Russula*. Numerous species of *Inocybe* have a spermiac odour. *Hebeloma* mostly has earthy, fruity or flower-like smells. Fruity smells include the smell of banana, apple, orange and gooseberry found in *Russula*, the strong marzipan (almond) smell in, e.g., *Agaricus arvensis*, the aniseed-like smell of, e.g., *Clitocybe odora*. Chemical-like smells are also ordinary, e.g., the carbolic smell of *Agaricus xanthodermus*, the iodoform (hospital-like) smell of *Hemileccinum impolitum* (from the stem base) and the chlorine-like smell found in, e.g., *Mycena stipitata*. Bitter almond or cyanide smells are usual in old fruitbodies of *Clitocybe* and *Phaeolepiota aurea* (Læssøe & Petersen, 2019).

Benefiting from emitting smells

There is no complete knowledge of why the smells are emitted, and many of them are possibly just a by-product of various processes within the fungus. Some fungi, on the other hand, clearly emit smells for a reason, for instance, to interact with animals. While some species may emit strong and unpleasant smells to not be eaten, some do the opposite, e.g., truffles.

Truffles fruit underground and are dependent on their strong smell to be detected, dug up and dispersed. The odours vary from species to species, some produce odours that may resemble various pheromones, and some of the edible truffles produce testosterone-like smells. These extremely pungent odours attract animals. Various mammals (e.g., boars, deers, rodents, etc.) dig the fruitbodies out of the soil and eat them. Some species spores tolerate passage through the gut and are in this way dispersed (Læssøe & Petersen, 2019).

Also, stinkhorn mushrooms benefit from being noticed by animals. They depend upon flies for their spore dispersal, so they mimic the smells of faeces or decaying flesh (Johnson & Jürgens, 2010). In some species, e.g., *Phallus impudicus*, while the flesh smells like radish, the mature spore mass develops a super foetid odour that can be detected over a considerable distance, as it can be incredibly strong-smelling (Læssøe & Petersen, 2019).

This work intends to answer the following research question: which fungi smell descriptions have been recorded in the literature so far, but particularly in the most recent publications. For this purpose, all the smell descriptions from the recent publication "Fungi of Temperate

Europe” (2019) were recorded and, in a complementary and comparative way, from additional literature that focus on fungi in Europe. Then, the smell descriptions were grouped into botanical-reference-objects, non-botanical-reference-objects and other smell-describing categories following the classification for fungi smells “Pilzduft- und Pilzgeruchsfamilien, eine Klassifikation für Pilzgerüche” (Oschatz & Krisai-Greilhuber, in press) and the recent work on fungi smell descriptions in German literature (Erker, 2021).

The work aims to assemble data as comprehensively as possible, as a possible and useful basis for future research on mushroom smells as a defining characteristic.

Methods

This work's basis is the collection of data regarding the smell of fungi from literature. The data compiles all the smell descriptions associated with the fungi species.

The first and main data collection source used is the two-volume publication “Fungi of Temperate Europe”, by Thomas Læssøe and Jens H. Petersen. This publication is translated from “Nordeuropas svampe”, published in 2019, and gives a broad overview of the fungi in the temperate zone of Europe, including more than 2,850 species of fungi from about 1,000 genera. In volume 1 are included chanterelles, agarics and boletes, in volume 2 are described polypores, corticioids, stinkhorns, truffles and other groups (Læssøe & Petersen, 2019).

In order to complete and compare the data, other sources of information were used as well. The following sites specialized in information about fungi were accessed:

Abbreviation	Source name (URL)
a -	First-Nature (first-nature.com)
b -	Agraria (agraria.org/)
c -	Fungipedia (pt.fungipedia.org)
d -	Mushroom Expert (mushroomexpert.com/)

In this thesis, the abbreviations will be used to refer to these sources. It is relevant to state that sources **a** and **d** were originally written in English, while **b** and **c** were translated from Italian and Portuguese respectively, this data was used in a complementary and comparative way to the main source “Fungi of Temperate Europe”.

The collection of smell descriptions resulted in a large table (Appendix) consisting of a list of scientific names of fungi species (first column) alphabetically ordered, followed by their smell descriptions in the adjacent columns. The second column shows the descriptions extracted from the publication “Fungi of Temperate Europe”, the third column “volume and page” cites

either the specific volume and page where the descriptions of column two can be found, or the abbreviation (**a**, **b**, **c**, **d**) corresponding to the other literature sources instead, and being this the case, the smell descriptions are found in the fourth column.

In the following second step a list of all expressions describing the fungi smells was compiled, alphabetically ordered. Subsequently, these smell expressions were put into categories such as botanical-reference-objects, non-botanical-reference-objects and other categories, similarly to the scheme of “Pilzduft- und Pilzgeruchsfamilien, eine Klassifikation für Pilzgerüche” (Oschatz & Krisai-Greilhuber, in press).

Finally, the descriptions were rearranged within the categories, attempting a smell-related sorting instead of the alphabetical order. It’s important to understand that this ordering is only a way to guide the reader through the different smells, making the visualization of results easier. There is more than one way to do it correctly, as a subjective component is always part of the process of putting in order a compilation of heterogeneous smell descriptions.

Results

Following the classification for Fungi smells “Pilzduft- und Pilzgeruchsfamilien, eine Klassifikation für Pilzgerüche” (Oschatz & Krisai-Greilhuber, in press) and the Bachelor thesis of Erker (“Pilzdüfte und -gerüche: Eine Studie anhand von Literatur”), and more previous work about floral-scent- and floral-odour-families (Oschatz, 2018), the following nine categories have emerged: botanical-reference-objects and non-botanical-reference-objects, chemical compounds, gustatory sense, scent-related adjectives, other adjectives, emotionally valuing adjectives, intensity level, and odour development describing adjectives. Differently from previous works, it made sense to create the new category “scent-related adjectives” and separate it from “other adjectives”.

A total of 1,295 species smell descriptions were collected. From which, around 54% are described in “Fungi of Temperate Europe” and 46% species only in the different literature sources, mainly in source **a** (37,5%) - but it is important to note that from those, in source **a**, a large part (26%) are descriptions such as “not distinctive”. Many species are only described as “not significant”, “not distinctive”, “odourless” or equivalents, not giving any idea about the smell or even its intensity or development. In “Fungi of Temperate Europe” the smell is part of the description of 24% of the species.

Almost 10% of the species are in both sources described (main and others). Around 2.3% of the total species have descriptions that somehow don’t match, meaning that, different sources described their smells differently, e.g., aniseed/almonds; metallic/rubbery (examples will be further discussed).

In total, 291 different descriptions are considered and shown in the results (Tables 1-9). From those, 196 appear in “Fungi of Temperate Europe”, 163 in the other literature, and 66 of the terms appear in both sources.

Botanical-reference-objects and non-botanical-reference-objects

The first two categories, botanical-reference-objects and non-botanical-reference-objects are deduced from the classification for fungi smells (Oschatz & Krisai-Greilhuber, in press). Botanical-reference-objects are deduced from the smell class “fungi-scent-families”, the non-botanical-reference-objects from the smell class “fungi-odour-families”. Every specific “fungi-scent-family” and “fungi-odour-family” is strictly referenced to a type-smell emitted from a clearly defined reference object: “fungi-scent-families” to a type-smell of a specific object of botanical origin and “fungi-odour-families” to a type-smell of a specific object of non-botanical origin (general rule). As the smell descriptions in the discussed literature mostly lack the exactitude of the “fungi-scent- and fungi-odour-families”, this classification system cannot be applied to the smell descriptions. Hence, the two categories, botanical-reference-objects and non-botanical-reference-objects, were established (shown in Tables 1-2).

The botanical-reference-objects (Table 1) include scents such as: fruity, nutty, spicy, herb-like, flowery, vegetable-like and woody. It starts with the most general words “fruit” and “fruity” followed by specific fruits and fruit-related terms. The succession is made from sour fruits, starting with the citrus (“lemon”, “oranges”), to less sour-ones (“apples” and directly related words “stewed apples”, “cider”, etc.), and sweet ones such as “very ripe watermelon, then continues with nuts (“coconut”, “almonds”, etc.). Marzipan connects almonds with spices (“vanilla”, aniseed” etc.), these end with a rather complex scent “stock cubes”. This was positioned there as in the fungi smell description going with the stock cubes is “curry and lovage” making thus the connection between spices and herbs (“fenugreek”, “parsley”, etc.). From here, the list continues with flowers (“hyacinth flowers”, “lavender”, etc.) followed by vegetables (“cucumber”, “radish”, etc.), followed by the cereal product “malt” and ending with woody scents (“cedar”, “sandalwood”, etc.). The positioning of “*Prunus padus*” and “*Prunus padus* flowers” within the table is due to its “bitter-almond” and “honey + bitter-almond” scents, respectively.

The non-botanical-reference-objects (Table 2) include smells of animals, man-made products, fungal-smell, etc. It starts with flour-like odours (“farinaceous”, “mealy”, etc.), flour and flour-products (“coconut cookies”). Then chewing gum, yeast and processed products (“Camembert cheese”, “old cheese”). After, follow animal odours such as odours from insects (“bugs”, “stink bugs”, etc.) and fish (“herring”, “shellfish”, etc.) continued with decay and putrefactive smells (“rotting meat”, “corpse”) now other animal-related expressions follow such as excretions of various kinds (“spermatic”, “urine”, etc.). Next, smells associated with places and materials (“soap”, “almond soap”, “damp cellar”, etc.) including animal products such as “Russian

leather” or “beeswax” follow. By the end of the table, there are the odours of products such as “rubber”, “ink” and “paint”.

Table 1. Botanical-reference-objects, extracted from the “Fungi of Temperate Europe” and other sources

“Fungi of Temperate Europe”	other literature
fruit	
fruity	fruity (a, b, c)
lemon	
orange	orange (a)
gooseberry compote	
apples	apples (a) stewed apples (a)
cider	
plums	
	apricots (a)
very ripe water melon	
unripe bananas	
banana peel	
coconut	coconut (a)
almonds	almonds (a, d)
bitter almonds	bitter almonds (a) crushed almonds (a)
<i>Prunus padus</i>	
<i>Prunus padus</i> flowers	
marzipan	marzipan (a)
coumarin	
honey	honey (a) maple syrup (a)
cacao	
coffee grains	
spicy	spicy (a, d)
vanilla	
aniseed	aniseed (a, b)
liquorice	liquorice (a)

(Table 1. continuation)

	cinnamon (d)
nutmeg	
pepper	
fresh pepper	
black pepper	
	freshly ground pepper (a)
freshly ground black pepper	
curry	curry (a)
stock cubes (curry, lovage)	
lovage	
	fenugreek (a)
parsley	
marjoram (<i>Origanum</i>)	
peppermint	
flower(s)	flower(s) (a)
flowery	flowery (a, c)
hyacinth flowers	
<i>Sambucus</i> flowers	
	irises and violets (a)
Iris roots	
lavender	
<i>Pelargonium</i>	<i>Pelargonium</i> (a)
	<i>Pelargonium</i> = pot geraniums (a)
<i>Pelargonium</i> leaves	
grass	
	freshly-mown grass (a, c)
	new-mown hay (a)
cucumber	cucumber (d)
cabbage	
	boiled cabbage (a)
rotten cabbage	rotten cabbage (d)
crushed tomato leaves	
	tomato concentrate that becomes unpleasant (a)
radish	radish (a, b)
radishy	

(Table 1. continuation)

	cut radishes (a)
horseradish	
	turnip (a, c)
beetroot	
raw beetroot	
celeriac	
	onions (d)
garlic	garlic (a, b, d)
stale garlic	
raw potato	
	cut raw potato (a)
	rotting potatoes (a)
maize	
	corn (d)
raw maize cobs	
malt / malty	
cedar	cedar (b)
cedar wood	
cedar oil	
	sandalwood (a)
	rotten pinewood (a)
	turpentine (a)

Table 2. Non-botanical-reference-objects, extracted from literature

"Fungi of Temperate Europe"	other literature
farinaceous	farinaceous (a, b, c)
mealy	mealy (a, d)
	mealy / farinaceous (like wet flour) (a)
	damp flour (a)
	fresh flour (b)
	flour dough (a)
	floury (a, b)
	white flour (b)
coconut cake	

(Table 2. continuation)

coconut cookies	
chewing gum	
perfumed chewing gum	
	mushroomy (a)
	fungal (a, c)
yeast	
bread yeast	
Camembert cheese	Camembert cheese (b)
old cheese	
	mature goat's cheese (a)
earth	
larvae of <i>Cossus cossus</i>	
	crushed / injured larvae of Goat Moth (<i>Cossus cossus</i>) (a)
	bugs (a)
stink bugs	
	bed bugs or shield bugs (a)
	oily smell of bedbugs (a)
chicken manure	
chicken run or a wet chicken / hen house	chicken run or a wet chicken / hen house (a)
fish / fishy	fish / fishy (d)
	herring (b)
pickled herring	
half rotten fish	
	rotting fish (a)
	dead shad, the most malodorous freshwater fish (d)
shellfish	shellfish (a)
	boiled shellfish (a)
	shrimp (d)
	rotting meat (a)
	corpse (b)
urine	urine (a)
cat urine	
mouse urine	
	mice (a)

(Table 2. continuation)

horse stable	
spermatic	spermatic (a, d')
burnt horn or hair	
bad breath	
	sweat (b)
	sweaty feet (a)
used cloth	
sewage water	
old wine barrels or a damp cellar	
damp cellar	
soap	soap (d')
soapy	soapy (a)
	carbolic soap (a)
almond soap	
lemon-scented soap	
perfume	
	Russian leather (a)
	beeswax (a)
rubber	rubber (a)
rubber boots	rubbery (a)
old rubber-bands	old or burnt rubber (a)
burnt rubber	burnt rubber (a)
ozone (warm metal, steam engine or extinguished candle)	
metallic	
	ink (a, b)
ink-like (carbolic)	
	paint (c)
wet paint	

Other categories

The following categories describe the smells relating them with chemicals, tastes or different adjectives, including scent-related, emotional valuing and other adjectives.

“Chemical compounds” (Table 3) are comparable with botanical-reference-objects and non-botanical-reference-objects in terms of containing, in general, concrete descriptions, but its reference objects may rather hardly be available. The following categories are different in their level of exactitude or specificity. The “gustatory sense” category (Table 4) includes olfactory terms relating to the sense of taste. Two of the five officially recognized tastes (sweet, sour) (Wu *et al.*, 2021) are mentioned, or three, considering that briny” is a synonym of “salty” (Cambridge Dictionary, n.d.) Also “acidic” and “acidulous”, both fairly synonyms of ‘sour’, “oily” and “acrid” according with O'Reilly (2011) with a peppery, burning taste, fall into this category due to their value in terms of taste. The category “scent-related adjectives” (Table 5) includes descriptive terms related to the olfactory sense, such as “perfumed” and “fragrant”. The category “emotional valuing adjectives” (Table 6) is ordered from the adjectives with a positive connotation of “very pleasant” to adjectives with a negative connotation of “very unpleasant” and have a strong subjective component. By last, the descriptive adjectives that cannot be assigned to any of the other categories were comprised in “other adjectives” (Table 7). This list is made up of terms such as “distinct”, “peculiar”, and “strange”.

Table 3. Chemical compounds, extracted from the “Fungi of Temperate Europe” and other sources

“Fungi of Temperate Europe”	other literature
	ammonia / bleach (a, d)
	ammoniacal / bleach (ammonia) (a)
butyric acid	
	camphor (a)
camphorous	
cyanide	
	iodine (a, d)
iodoform	
menthol	
nitrous	nitrous (a)
nitrous (like a swimming pool)	
chlorine	chlorine (a)
	hypochlorite (b)
naphthalene / naphthaline (moth balls)	
phenolic	phenolic (d)
	phenol (a)
tar	
	coal tar (d)
gas	gas (a)

(Table 3. continuation)

gaseous	coal gas (a)
	gassy (a)
	sulphur dioxide (a)

Table 4. Gustatory sense, extracted from the “Fungi of Temperate Europe” and other literature sources

“Fungi of Temperate Europe”	other literature
sour sour-aromatic aromatic sweet sweetish sweetish-aromatic sweetish-sour	acrid (a)
	acidic (a)
	acidulous (b)
	briny (d)
	sour (a)
	aromatic (a)
	sweet (a, d)
	sweetish (b)
	oily (a)

Table 5. Scent-related adjectives, extracted from the “Fungi of Temperate Europe” and other sources

“Fungi of Temperate Europe”	other literature
perfumed	perfumed (a) fragrant (d) fruity-fragrant (d)
sharply fragrant	
rancid	
rancid-farinaceous	
musty	
musty-earthy	
mouldy	mouldy (a)
earthy	earthy (a)
earthy-sweetish	
earthy-musty	

(Table 5. continuation)

damp (**c**)

rotten (**d**)

Table 6. Emotionally valuing adjectives, extracted from the “Fungi of Temperate Europe” and other sources

“Fungi of Temperate Europe”	other literature
very pleasant	very pleasant (a)
pleasant	pleasant (a, b, c)
pleasantly	pleasantly (a)
	not unpleasant (a, c)
smelly	
fetid	
	bad (b)
nauseous / nauseatingly	
nauseating	nauseating (a)
nauseous-sweet	
sweetish-nauseous	
	sickly (a)
	sickly sweet (a)
unpleasant	unpleasant (a, b, c, d)
unpleasantly	
foul	foul (d)
very foul	
very unpleasant	
	most unpleasant (a)

Table 7. Other adjectives, extracted from the “Fungi of Temperate Europe” and other sources

“Fungi of Temperate Europe”	other literature
very distinct	
distinct	
distinctive	distinctive (d)
distinctly	
evident	
characteristic	characteristic (a)

(Table 7. continuation)

peculiar	peculiar (a)
complex	
	neutral (b)
variable	
	difficult to discern (a)
indistinct	
not distinctive	not distinctive (a, b, d)
indistinctive	indistinctive (a, c)
insignificant	insignificant (a, b)
strange	
unusual	
very unusual	

The categories “intensity level” (Table 8) and “Odour development describing adjectives” (Table 9) are not comparable with the other categories, in the sense that these do not describe the smell but are additional information. “Intensity level” contain qualitative terms. The terms range from the less to the most intense, from “odourless”, to “very strong”, “pungent”. By last, the four terms in “odour development describing adjectives” describe the behaviour of a smell “developing”, “persistent”, “reminiscent”, “very reminiscent” indicate that the smell changes over time.

Table 8. Intensity level, extracted from the “Fungi of Temperate Europe” and other sources

“Fungi of Temperate Europe”	other literature
no smell	no smell (a, b, c)
odourless / inodorous	
almost absent	
almost odourless	almost odourless (c)
mostly odourless	
	barely perceptible (c)
more or less odourless	
	not noticeable (a)
	little noticeable (c)
	noticeable (a)
	vague (a)
	very faint (a)

(Table 8. continuation)

faint	faint (a, b)
faintly	faintly (a)
	slight / slightly (a, b, c)
	very slight (a)
	very slightly (d)
weak	weak (a, b, c)
mild	mild (a, c)
not very strong	
not strong	not strong (a)
markedly	
heavy	
very heavy	
strong / strongly	strong / strongly (a, b, c)
very strong	very strong (a, b, c)
incredibly strong	
highly	
	intense (c)
extremely	
striking	
	pronounced (c)
penetrating	
pungent	

Table 9. Odour development describing adjectives

“Fungi of Temperate Europe”	other literature
	developing (a)
	persistent (b)
	reminiscent (a, d)
	very reminiscent (a)

Discussion

“Fungi of Temperate Europe” describes around 2,850 species of fungi. It is relevant to realize that this number represents less than 15% of the occurring species in temperate Europe since the actual fungal diversity is probably higher than 20,000 species (Læssøe & Petersen, 2019).

Also, in this publication, temperate Europe is defined as extending from northern Norway down to the Alps, northern France and northern Spain (Læssøe & Petersen, 2019), being in this way excluded, for instance, Portugal and Italy, which other literature sources (**b** and **c**) included. That can explain the differences in species found in the different literature sources.

Description’s exactitude

The descriptions are different in their levels of exactitude. Some terms are so specific that the smell they refer to is only one, without space for doubts. Some examples: “horseradish”, “very ripe watermelon”, “banana peel”, etc.

Others are not precise enough or are confusing, leaving too much place for subjective interpretation or questions. A few examples of not exact or confusing descriptions:

“*Pelargonium* leaves” could be referring to the rose-scented leaves of *Pelargonium graveolens*, one of the *Pelargonium* species widely used in perfumery. But it could also refer to any other of the about 250-280 species in the genus *Pelargonium* whose leaf-scent are diverse, from fresh, lemon and minty, through floral, rose, fruity up to spicy and camphor-like smells. Their essential oils are well-known and used in cosmetic, perfume, food and pharmaceutical industries (Szutt *et al.*, 2019). The same stands for “*Pelargonium*” and “*Pelargonium* = pot geraniums” that do not specify which part of the plant the smell is comparable with. “Pot geraniums” does not add specificity to the description. Geranium is the common name of the plants in the genus *Pelargonium* (Wei *et al.*, 2015).

“Irises and violets” and “iris roots”, are the scent descriptions of *Lepista irina*. “Irises and violets” likely refers to iris roots as well, since the roots are the scented part of the plant used for perfumery, plus their scent is similar to some violets (Baser *et al.*, 2011). Yet this is only a subjective interpretation, as the descriptions would need to be more specific, not only regarding the part of the plant but what species it is referring to, from the over 300 species of Iris (Roguz *et al.*, 2020) and 580-620 species of the genus *Viola* (Cheon *et al.*, 2019), commonly called violets.

According to the literature, some mushrooms smell like “ink”, such as *Leucoagaricus meleagris* and *Agaricus praeclaresquamosus* (described in source **b**), without other details. The Inky Mushroom (*Agaricus moelleri*), already given away by his common name, also smells like “ink”. In “Fungi of Temperate Europe” ink is associated with carbolic smell, here to

describe *Agaricus phaeolepidotus* and *A. xanthodermus*, as well. Source **a** has a more extended description for *A. moelleri* of “unpleasant smell (ink-like, for those who remember fountain-pen ink, or somewhat similar to carbolic soap) most noticeably when the flesh is bruised or cut” (First Nature², n.d.). Even if this description is more detailed, the two used references of comparison may be not available. “Carbolic soap” likely refers to the smell of carbolic acid. And “fountain-pen ink” is a possible synonym of “iron gall ink” previously used to describe fungi odours (Erker, 2021; Ludwig, 2001) but characterising other species (*Agaricus xanthodermus*), while *A. moelleri* smells “strongly carbolic”, according to Ludwig.

Both descriptions: “chewing gum” and “perfumed chewing gum”, are very unclear. There are numerous different aromas and smells of chewing gum. The adjective “perfumed” can be associated with any fruity or floral scent, which does not make the description clearer. And “perfume” could be related to a specific existing perfume or any of the numerous components used to make perfumes.

“Rubber” is not precise enough as a description. Rubber, a widely used polymer, is used by numerous and different industries and products, such as tyres, toys, shoes, isolation material, etc. Besides “rubber”, the following descriptions are part of the results: “rubber boots”, “old rubber-bands”, “old or burnt rubber”. Even if those are a little more detailed, without knowing what kind of rubber, the interpretation is somehow subjective, as one may not have the same reference object available. Nowadays, many industries try to mask or change the smell of their products to make them more pleasing for the consumer (Ludden *et al.*, 2009), for instance, the rubber soles (Nautiyal, 2012).

Among others, terms as “insignificant” and “not distinctive” are very confusing, without other specifying details that could have different interpretations. Either the species is odourless, or it’s not possible to identify the smell, or the species smell is not different from other very similar ones and in this case, the smell is not a helpful trait for the species identification. This interpretation derives from the idea that, often, authors compare between species, both if they have a very similar smell or if the species are anatomically very alike but with a very different smell, having the identification facilitated by this trait. However, only more precise descriptions would make this clear.

Considering the category “Odour development describing adjectives”, just a few examples were recorded. And since it describes the smell behaviour over time, it would be essential to mention precisely the time when the assessment was made, describing the evaluation process and any other external relevant conditions that could influence it, such as the state of maturity of the mushroom.

Availability of the reference-smell

While some of the objects used to describe the smell of fungi are easy to find to mostly everybody or everywhere, for instance, apples and oranges, the reference smell for other descriptions, even if very exact, might be very hardly available. Some examples could be: “dead shad, the most malodorous freshwater fish”, “crushed/injured larvae of Goat Moth (*Cossus cossus*)”, “bed bugs”, “chicken manure”, among others. Besides, referring to other species, animals or plants, might require extra knowledge of zoology or botany.

Subjective assessment

Smell has an emotional impact on people (Rolls, 2015; Shabgou & Daryani, 2014), but terms such as the adjectives in the “emotional valuing adjectives” category do not help with fungi identification. And in practice, the same situation applies to the category “intensity”. While in essence quantifiable, the expressions used to describe it are not. There is always a subjective component associated, as people have different perceptions to different intensity levels (Hutter *et al.*, 2007). The information on the intensity can be understood as an approximate orientation so that the person assessing the smell can imagine something weak or strong (Erker, 2021).

Lack of data

Several reasons could explain the low number of fungi species whose description includes the smell. It might be that the authors do not consider it relevant, not helping differentiate from other species, there is no smell, or it is not possible to describe how they smell.

Indeed, it might be complicated to smell some fungi, or this may not appeal to people because of the substrate where they grow, e.g., dung, rotten vegetation or other rotted mushrooms, etc. Some examples, retrieved from “Fungi of Temperate Europe”: all species in the group “Bird’s nest” (e.g., *Cyathus stercoreus*) are decomposers and occur typically on large herbaceous stems, wood or old dung, both from larger animals and from rabbits and hares. Operculate cup fungi: some species are decomposers of dead organic material, e.g., dung, wood or debris. And among others, species such as *Myxotrichum deflexum*: occurs on various substrates, e.g., paper, excrement and animal fur; *Aphanoascus fulvescens*: occurs on animal remnants, including excrement, old nests, owl pellets, etc.; *Gymnoascus reessii*: occurs on excrement, remnants of dead animals and in soil (Læssøe & Petersen, 2019).

Literature comparison

Some species have different smell descriptions, depending on the source of information. This fact raises many questions about the correctness of the descriptions, doubts about which ones are correct or not, or if it's possible that, the smells could differ between different locations, habitats, seasons, and all descriptions could be somewhat correct. Examples of descriptions mismatch:

- *Agaricus dulcidulus* and other species are described as smelling like “aniseed” (in Fungi of Temperate Europe) and smelling like “almonds” (in source **a**).
- *Lepiota cristata*, described as “unpleasant metallic or gas-like” and “sharply fragrant (**d**)” and “unpleasant rubbery (**a**)”.
- *Mycena inclinata*: “strong wet paint” and “slightly farinaceous or rancid (**a**)”

Some of the reasons that could explain the descriptions mismatch would be: the descriptions are not complete enough and may refer to different conditions upon which the smells are different, misidentification of species or the smells change with external factors, etc.

1) Factors that change smell or its development

The smell of a mushroom changes with its age, which is properly mentioned in some descriptions as is the case with *Choiromyces meandriformis* which is “practically odourless when young. but as it matures it acquires a very strong and characteristic odour that is difficult to define, like a tomato concentrate that becomes unpleasant” (source **a**).

The smell can also vary depending on the place (cap, stem, etc.), storage (e.g., in a closed box), stage of ripeness (“young fruitbodies”, “mature” etc.) and general condition of the mushroom flesh (“after breaking”, “before bruising”, “cooked”, “when being dried”, “when crushed”, etc.). Those are complicating factors. For instance, the smell from unbroken and broken fruitbodies can be very different. e.g., the farinaceous smell found in *Calocybe gambosa* is easier to sense when broken. All fungi that smell farinaceous also have a strong farinaceous taste. So, if in doubt concerning this smell-type, Læssøe & Petersen suggest that tasting a sample will usually help. It is safe to taste even the most poisonous species (Foraging Guide, n.d.), which can be the case, as perceiving a smell or taste as pleasant is not an indication of edibility. Some deadly poisonous mushrooms smell extremely tempting for many human noses, such as fresh flour (e.g., the poisonous tiger knight *Tricholoma pardinum*) or radish-like (e.g., *Cortinarius rubellus*) (Læssøe & Petersen, 2019).

Often, many species develop an unpleasant smell when the fruitbodies are getting old (Læssøe & Petersen, 2019), already caused by the decomposition process, moreover, most fungi are prone to get infested by maggots (First Nature³, n.d).

2) A comparison with previous work

By last, a comparison with a similar work that recorded and analysed the smell descriptions of over 3,000 fungi species, from the literature publications “Pilzkompedium” (vol. 1-4) and “Handbuch für Pilzfreunde” (vol. 1-5), in which smells take part in 96.44% and 74.12% of the described species, respectively (Erker, 2021). Those numbers are higher than for “Fungi of Temperate Europe” which counts only 24%. And for the other sources, it was not possible to quantify the percentage. Regardless of the principal literature used for this work being the most recent, the outcome is a smaller number of species and fewer smell descriptions.

Regarding the descriptions, many of them coincide with the two works results – e.g., aniseed, liquorice, farinaceous, herring, etc. There are new ones, e.g., orange, banana peel, *Prunus padus* flowers, etc. And some terms are not part of the present work but appeared previously, e.g., jasmine flowers, plastic, mustard, etc. But since the species whose descriptions were collected are different, it wouldn't be valuable to make any further comparisons. It is possible to compare only between the same species descriptions (similar to the comparison already done between the literature sources used for the present work). Some examples would be:

- *Cortinarius citrinus*: Faint of fresh pepper ⁽¹⁾, absent or slightly malty ⁽²⁾, insignificant and changing ⁽³⁾
- *Hemimycena epichloe*: odourless ⁽¹⁾, odourless ⁽²⁾
- *Lepiota helveola*: Slightly sweet (**b**), insignificant ⁽²⁾, almost odourless ⁽³⁾
- *Pluteus cervinus*: radish ⁽¹⁾, slightly to distinctly like radish or raw potatoes (old also with an unpleasantly sweet, almost honey-like component) ⁽²⁾

Legend: ⁽¹⁾ “Fungi of Temperate Europe”; ⁽²⁾ “Pilzkompedium”; ⁽³⁾ “Handbuch für Pilzfreunde”;

A complete comparison and discussion of the descriptions between the different literature would be enough material for future works. As a note of conclusion, studies with the main focus on fungi smells are lacking, and the principal issue of the existing data is the lack of accuracy. To have a better quality of data regarding fungi smells, it would be essential to have and follow defined guidelines during the collection of data.

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Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
<i>Abortiporus biennis</i> (Bull. : Fr.) Singer		<i>a</i>	not significant
<i>Acetabula leucomelas</i> (Pers.) Boud.		<i>b</i>	no smell
<i>Agaricales</i> spec.	mostly sour-unpleasant	1/513	
<i>Agaricus abruptibulbus</i> Peck		<i>d</i>	reminiscent of almonds
<i>Agaricus altipes</i> (F. H. Møller) Pilát	faint	1/511	
<i>Agaricus aristocratus</i> Gulden		<i>d</i>	not reminiscent of almonds
<i>Agaricus arvensis</i> Schaeff. : Fr.	aniseed	1/37	strong odour of aniseed fresh young fruitbodies smell strongly of bitter
<i>Agaricus augustus</i> Fr.	aniseed	1/503	almonds
<i>Agaricus augustus</i> Fr. var. <i>albus</i> M. M. Moser ined.		<i>d</i>	reminiscent of almonds
<i>Agaricus benesii</i> (Pilát) Pilát	faint	1/513	
<i>Agaricus bernardii</i> Quéf.	unpleasant sour	1/513	strong aniseed (<i>a</i>); briny (<i>d</i>)
<i>Agaricus bisporus</i> (J. E. Lange) Imbach	faint	1/514	mushroomy (<i>a</i>)
<i>Agaricus bisporus</i> (J. E. Lange) Imbach var. <i>albidus</i> (J. E. Lange) Singer		<i>a</i>	mushroomy
<i>Agaricus bitorquis</i> (Quéf.) Sacc.	+/- sour, urine-like smell	1/512	
<i>Agaricus bohusii</i> Bon		<i>a</i>	faintly mushroomy
<i>Agaricus campestris</i> L.	+/- sour (like commercial mushrooms)	1/510	
<i>Agaricus chionodermus</i> Pilát		<i>d</i>	phenolic or not distinctive
<i>Agaricus comtulus</i> Fr.		<i>a</i>	bitter almonds or aniseed
<i>Agaricus cupreobrunneus</i> (F. H. Møller) Pilát	+/- sour	1/515	
<i>Agaricus devoniensis</i> P. D. Orton	faint (flesh)	1/511	
<i>Agaricus dulcidulus</i> Schulzer	aniseed	1/506	Almonds (<i>a</i>)
<i>Agaricus impudicus</i> (Rea) Pilát	somewhat metallic	1/518	strong, unpleasant, reminiscent of radish (<i>a</i>)
<i>Agaricus iodosmus</i> Heinem.		<i>d</i>	strongly ammonia like, iodine-like, or phenolic
<i>Agaricus langei</i> (F. H. Møller) F. H. Møller		<i>b</i>	weak pleasant and acidulous
<i>Agaricus lanipes</i> (F. H. Møller & Jul. Schäff.) Hlaváček	lacks a distinct smell	1/518	
<i>Agaricus litoralis</i> (Wakef. & A. Pearson) Pilát	does not have a distinct smell	1/515	
<i>Agaricus lutosus</i> (F. H. Møller) F. H. Møller	aniseed	1/507	unpleasant (ink-like “fountain-pen” or somewhat similar to carbolic soap) most noticeably when the
<i>Agaricus moelleri</i> Wasser	ink like (carbolic)	1/509	flesh is bruised or cut (<i>a</i>)
<i>Agaricus osecanus</i> Pilát	aniseed	1/505	faint of crushed almonds (<i>a</i>)
<i>Agaricus phaeolepidotus</i> (F. H. Møller) F. H. Møller	ink like (carbolic)	1/509	

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<i>Agaricus placomyces</i> Peck		<i>d</i>	phenolic
<i>Agaricus porphyizon</i> P. D. Orton	aniseed (flesh)	1/507	
<i>Agaricus porphyrocephalus</i> F. H. Møller		<i>a</i>	faintly mushroomy but not distinctive
<i>Agaricus praeclaresquamosus</i> A. E. Freeman		<i>b</i>	unpleasant sweat, fresh flour, ink
<i>Agaricus subfloccosus</i> (J. E. Lange) Pilát	sour smelling flesh	1/514	mushroomy, becoming more like liquorice when old
<i>Agaricus subperonatus</i> (J. E. Lange) Singer	sour	1/516	(<i>a</i>)
<i>Agaricus subrufescens</i>		<i>d</i>	reminiscent of almonds
<i>Agaricus sylvaticus</i> Schaeff.		<i>a</i>	not distinctive
		1/504/	
<i>Agaricus sylvicola</i> (Vittad.) Peck	aniseed / sweet marzipan	320	young: faint but pleasant smell of almonds; as it ages: its smell becomes increasingly ammoniacal (or like
<i>Agaricus urinascens</i> (F. H. Møller & Jul. Schäff.) Singer	aniseed	1/504	urine (<i>a</i>)
	ink like (carbolic), especially evident when heated		noticeable odour of ink, phenol or iodine, especially when the flesh is bruised or cut (<i>a</i>); aniseed and paint
<i>Agaricus xanthodermus</i> Genevier		1/508	when cooking (<i>c</i>)
<i>Agrocybe dura</i> (Bolton) Singer		<i>a</i>	slightly mealy
<i>Agrocybe firma</i> (Peck) Singer	farinaceous	1/624	
<i>Agrocybe pediades</i> (Fr. : Fr.) Fayod		<i>a</i>	faint farinaceous, foury
<i>Agrocybe praecox</i> (Pers. : Fr.) Fayod		<i>d</i>	mealy
<i>Agrocybe praecox</i> (Pers. : Fr.) Fayod f. <i>sphaleromorpha</i> (Bull. : Fr.) Migliozi & Coccia		<i>a</i>	slightly mealy
<i>Aleuria aurantia</i> (Pers. : Fr.) Fuckel		<i>c</i>	no smell
<i>Amanita battarrae</i> (Boud.) Bon		<i>a</i>	not significant
<i>Amanita ceciliae</i> (Berk. & Broome) Bas		<i>a</i>	not significant
			flesh of young specimens smells like a cut raw potato
<i>Amanita citrina</i> (Schaeff.) Pers.	raw potato	1/358	(or cut radish) (<i>a</i>)
<i>Amanita citrina</i> (Schaeff.) Pers. var. <i>alba</i> (Gillet) E.-J. Gilbert	raw potato	1/358	
<i>Amanita crocea</i> (Quél.) Singer		<i>a/b</i>	sweet (<i>a</i>); not distinct (<i>b</i>)
<i>Amanita echinocephala</i> (Vittad.) Quél.		<i>a</i>	faint unpleasant
	does not normally smell of raw potato (although some reports suggest it can)		
<i>Amanita excelsa</i> (Fr. : Fr.) Bertillon		1/362	faint of radish (<i>a</i>)
<i>Amanita franchetii</i> (Boud.) Fayod		<i>a</i>	not distinctive

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<i>Amanita fulva</i> (Schaeff. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Amanita gemmata</i> (Fr.) Bertillon		<i>a</i>	not significant
<i>Amanita muscaria</i> (L. : Fr.) Lam.		<i>c</i>	no smell
<i>Amanita ovoidea</i> (Bull. : Fr.) Link		<i>a</i>	slightly sweet at maturity not distinctive, but when bruised the flesh smells
<i>Amanita pantherina</i> (DC. : Fr.) Krombh.	no distinct smell	1/361	slightly of radish (<i>a</i>)
<i>Amanita phalloides</i> (Fr. : Fr.) Link	somewhat nauseous; spermatic or	1/359/	not distinctive when young, but old specimens have a
<i>Amanita porphyria</i> Alb. & Schwein. : Fr.	unpleasantly sweetish	665	most unpleasant sickly sweet (<i>a</i>)
<i>Amanita regalis</i> (Fr.) Michael	raw potato	1/362	unpleasant, earthy (<i>a</i>)
<i>Amanita rubescens</i> Pers. : Fr.		<i>a</i>	not distinctive
<i>Amanita spissa</i> (Fr.) P. Kumm.	rather neutral	1/360	
<i>Amanita strobiliformis</i> (Vittad.) Bertillon		<i>a</i>	faint unpleasant (not of radish)
<i>Amanita submembranacea</i> (Bon) Gröger		<i>a</i>	when cut or bruised smells like cut radishes
<i>Amanita vaginata</i> (Bull. : Fr.) Quél.		<i>a</i>	not distinctive
			mature specimens have a faint sickly and unpleasant
<i>Amanita virosa</i> (Fr.) Bertillon	faintly nauseous	1/357	odour (<i>a</i>)
<i>Ampulloclitocybe clavipes</i> (Pers. : Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys		<i>a</i>	slight pleasant
<i>Amyloporia spec.</i>	fresh fruitbodies smell like lemon-scented soap	1/935	
	fresh fruitbodies smell like lemon-scented soap	2/935	
<i>Antrodia xantha</i> (Fr. : Fr.) Ryvarden			coumarin (Amoopour <i>et al.</i> , 2016)
<i>Antrodiella fragrans</i> (A. David & Tortic) A. David & Tortic		2/1002	
<i>Aphanobasidium pseudotsugae</i> (Burt) Boidin & Gilles	tar-like or phenolic	1/101	
<i>Aphroditeola olida</i> (Quél.) Redhead & Manfr. Binder	strong nauseous-sweet		
<i>Armillaria borealis</i> Marxm. & Korhonen		<i>a</i>	slight mushroomy
<i>Armillaria gallica</i> Marxm. & Korhonen		<i>a</i>	sweet
<i>Armillaria mellea</i> (Vahl : Fr.) P. Kumm. agg.		<i>a</i>	faint acidic
<i>Armillaria ostoyae</i> (Romagn.) Herink		<i>a</i>	faint acidic
<i>Arrhenia rickenii</i> (Hora) Watling		<i>a</i>	usually faint of pelargoniums
<i>Arrhenia velutipes</i> (P. D. Orton) Redhead, Lutzoni, Moncalvo & Vilgalys	<i>Pelargonium</i>	1/137	
<i>Ascocoryne cylichnium</i> (Tul.) Korf		<i>a</i>	not distinctive

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<i>Ascocoryne sarcoides</i> (Jacq. : Fr.) J. W. Groves & D. E. Wilson			<i>a</i> not distinctive unpleasant (strong enough to attract flies, but not so smelly that people are driven to move home to escape it) reminiscent of rotting meat (<i>a</i>)
<i>Aseroë rubra</i>	foul smelling spore mass	2/1227	
<i>Aseroë spec.</i>	foul smelling spore mass	2/1227	
<i>Asterophora lycoperdoides</i> (Bull.) Ditmar		<i>a</i>	not significant
<i>Asterophora parasitica</i> (Bull. : Fr.) Singer		<i>a</i>	not significant immature specimens have a mushroomy odour when cut open
<i>Astraeus hygrometricus</i> (Pers. : Pers.) Morgan		<i>a</i>	very faint
<i>Atheniella flavoalba</i> (Fr.) Redhead, Moncalvo, Vilgalys, Desjardin & B. A. Perry			
<i>Atractosporocybe inornata</i> (Sowerby) P. Alvarado, G. Moreno & Vizzini	unpleasant recalling half rotten fish	1/118	
<i>Aurantiorporus fissilis</i> (Berk. & M. A. Curtis) H. Jahn	sour	2/904	
<i>Aurantiporus fissilis</i> (Berk. & M. A. Curtis) H. Jahn	sour	2/905	
<i>Auricularia auricula-judae</i> (Bull. : Fr.) Wettst.		<i>a</i>	not distinctive
<i>Auricularia mesenterica</i> (Dicks. : Fr.) Pers.		<i>a</i>	not distinctive
<i>Baeospora myosura</i> (Fr. : Fr.) Singer		<i>a</i>	not distinctive
<i>Bankera fuligineoalba</i> (Schmidt : Fr.) Pouzar	curry	2/1061	
<i>Bankera spec.</i>	curry	2/1061	
<i>Bankera violascens</i> (Alb. & Schwein. : Fr.) Pouzar	strong and curry like	2/1061	
<i>Basidioradulum radula</i> (Fr. : Fr.) Nobles		<i>a</i>	not distinctive
<i>Battarrea phalloides</i> (Dicks. : Pers.) Pers.		<i>a</i>	not distinctive
<i>Bisporella citrina</i> (Batsch : Fr.) Korf & S. E. Carp.		<i>a</i>	not distinctive
<i>Bjerkandera adusta</i> (Willd. : Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Bjerkandera fumosa</i> (Pers. : Fr.) P. Karst.	may have a somewhat liquorice like	2/913	
<i>Bolbitius aleuriatus</i> (Fr. : Fr.) Singer		<i>b</i>	no particular smell
<i>Bolbitius titubans</i> (Bull. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Bolbitius vitellinus</i> (Pers. : Fr.) Fr.		<i>b</i>	no smell
<i>Boletus aereus</i> Bull. : Fr.		<i>a</i>	earthy
<i>Boletus badius</i> Fr.		<i>a</i>	mushroomy but not distinctive
<i>Boletus edulis</i> Bull. : Fr.		<i>a</i>	faint but pleasant
<i>Boletus reticulatus</i> Schaeff.		<i>a</i>	earthy
<i>Bonomyces sinopicus</i> (Fr.) Vizzini	strong farinaceous	1/101	

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<i>Bovista plumbea</i> Pers. : Pers.		<i>a</i>	not significant
<i>Buchwaldoboletus lignicola</i> (Kallenb.) Pilát		<i>a</i>	faint of oranges
<i>Buglossoporus quercinus</i> (Schräd.) Kotl. & Pouzar	perfumed	2/833	
<i>Bulgaria inquinans</i> (Pers. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Butyriboletus fechtneri</i> (Velen.) D. Arora & J. L. Frank		<i>a</i>	not distinctive
<i>Butyriboletus regius</i> (Krombh.) D. Arora & J. L. Frank		<i>a</i>	pleasant but not distinctive
<i>Byssomerulius corium</i> (Pers. : Fr.) Parmasto		<i>a</i>	not noticeable
<i>Byssonectria fusispora</i> (Berk.) Korf & Rogerson		<i>a</i>	not distinctive
<i>Byssonectria terrestris</i> (Alb. & Schwein. : Fr.) Pfister		<i>a</i>	not distinctive
<i>Caloboletus calopus</i> (Pers.) Vizzini		<i>a</i>	strong and unpleasant fungal smell
	it may also have a pungent, curry-like smell, mostly from the cap cuticle	1/773	
<i>Caloboletus radicans</i> (Pers.) Vizzini		<i>a</i>	not distinctive
<i>Calocera cornea</i> (Batsch : Fr.) Fr.		<i>a</i>	not distinctive
<i>Calocera viscosa</i> (Pers. : Fr.) Fr.			
<i>Calocybe carnea</i> (Bull. : Fr.) Donk	somewhat perfumed, not farinaceous	1/241	
<i>Calocybe cerina</i> (Pers. : Fr.) Donk ss. auct.	farinaceous	1/242	
<i>Calocybe gambosa</i> (Fr. : Fr.) Donk	farinaceous	1/37	
<i>Calocybe ionides</i> (Bull. : Fr.) Donk	farinaceous	1/242	
<i>Calocybe obscurissima</i> (A. Pearson) M. M. Moser	farinaceous	1/241	
<i>Calvatia gigantea</i> (Batsch : Pers.) Lloyd		<i>a</i>	very faint, pleasant
<i>Camarophylloporus schulzeri</i> (Bres.) Herink	+/- odourless	1/165	
<i>Cantharellus amethysteus</i> Quél.		<i>a</i>	faint of apricots
			faint of apricots (<i>a</i>); sweet and fragrant, reminiscent of
<i>Cantharellus cibarius</i> Fr. : Fr.		<i>a/d</i>	apricots or not distinctive (<i>d</i>)
			+/- intense fruity; mirabelle plums (Chiron & Michelot,
<i>Cantharellus cinereus</i> Pers. : Fr.		<i>c</i>	2005)
<i>Cantharellus lutescens</i> (Pers. : Fr.) Fr.		<i>c</i>	very strong, fruity
<i>Cantharellus subpruinatus</i> Eyssart. & Buyck		<i>a</i>	very pleasant fruity
<i>Cantharellus tubaeformis</i> (Bull. : Fr.) Fr.		<i>c</i>	damp or mouldy
<i>Catathelasma imperiale</i> (Fr.) Singer	farinaceous	1/105	
<i>Cerrena unicolor</i> (Bull. : Fr.) Murrill		<i>a</i>	not distinctive
<i>Chalciporus piperatus</i> (Bull. : Fr.) Bataille		<i>c</i>	barely noticeable
<i>Chamaemyces fracidus</i> (Fr.) Donk	strong ± gas-like or sour	1/349	
<i>Cheilymenia stercorea</i> (Pers. : Fr.) Boud.		<i>a</i>	difficult to discern because of the smelly nature of the

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			growing substrate
<i>Chlorociboria aeruginascens</i> (Nyl.) Ramamurthi, Korf & L. R. Batra		<i>a</i>	not distinctive
<i>Chlorociboria aeruginosa</i> (Pers.) Ramamurthi, Korf & L. R. Batra		<i>a</i>	not distinctive
<i>Chlorophyllum agaricoides</i>	lacks a distinct smell	2/1247	
<i>Chlorophyllum brunneum</i> (Farl. & Burt) Vellinga	sweetish to curry like	2/1263	
<i>Chlorophyllum rachodes</i> (Vittad.) Vellinga ss. orig.		<i>c</i>	fungal practically odourless when young. Ageing, it acquires a very strong and characteristic odour, difficult to define, like a tomato concentrate that becomes
<i>Choiromyces meandriformis</i> Vittad.		<i>a</i>	unpleasant
<i>Choiromyces venosus</i> (Fr.) Th. Fr.	very heavy and somewhat nauseous	2/1272	
<i>Chroogomphus fulmineus</i> (R. Heim) Courtec.		<i>a</i>	not significant
<i>Chroogomphus rutilus</i> (Schaeff. : Fr.) O. K. Mill.		<i>c</i>	almost odourless
<i>Ciboria amentacea</i> (Balb. : Fr.) Fuckel		<i>c</i>	no smell
<i>Ciboria caucus</i> (Fr.) Fuckel		<i>a</i>	not distinctive
<i>Ciboria viridifusca</i> (Fuckel) Höhn.		<i>a</i>	not distinctive strong, unpleasant odour reminiscent of rotting meat
<i>Clathrus archeri</i> (Berk.) Dring	very foul smelling	2/1226 (<i>a</i>)	
<i>Clathrus ruber</i> Pers. : Pers.	very foul smelling spore mass is located on the inside of the lattice	2/1002	strong, unpleasant reminiscent of rotting meat (<i>a</i>)
<i>Clathrus spec.</i>	extremely foul-smelling Spore mass	2/1226	
<i>Clavaria argillacea</i> Pers. : Fr.		<i>a</i>	not distinctive
<i>Clavaria fragilis</i> Holmsk. : Fr.		<i>c</i>	not significant
<i>Clavaria fumosa</i> (Pers.) Fr.		<i>a</i>	not distinctive
<i>Clavaria zollingeri</i> Lév.		<i>a</i>	not distinctive developing an unpleasant sickly odour when fully
<i>Clavariadelphus pistillaris</i> (Fr. : Fr.) Donk		<i>a/c</i>	mature (<i>a</i>); mild, not significant (<i>c</i>)
<i>Clavicornia pyxidata</i> (Pers. : Fr.) Donk		<i>b</i>	slight
<i>Clavulina cinerea</i> (Bull. : Fr.) J. Schröt.		<i>a</i>	earthy or mouldy
<i>Clavulina coralloides</i> (L. : Fr.) J. Schröt. var. <i>bicolor</i>		<i>a</i>	not distinctive
<i>Clavulina rugosa</i> (Bull. : Fr.) J. Schröt.		<i>a</i>	not distinctive
<i>Clavulinopsis corniculata</i> (Schaeff. : Fr.) Corner		<i>a/c</i>	not distinctive (<i>a</i>); weak odour (<i>c</i>)

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<i>Clavulinopsis fusiformis</i> (Sowerby : Fr.) Corner		<i>c</i>	almost odourless
<i>Clavulinopsis laeticolor</i> (Berk. & M. A. Curtis) R. H. Petersen	odourless	2/1127	
	it can either have or lack an evident		
	farinaceous or mouldy smell	2/1127	slightly musty (<i>a</i>)
<i>Clavulinopsis luteoalba</i> (Rea) Corner		<i>a</i>	not distinctive
<i>Clavulinopsis umbrinella</i> (Sacc.) Corner		1/106	
<i>Clitocella fallax</i> (Quél.) Kluting, T. J. Baroni & Bergemann	farinaceous		
<i>Clitocella popinalis</i> (Fr.) Kluting, T. J. Baroni & Bergemann		<i>a</i>	mealy like wet flour
<i>Clitocybe acicola</i>	aniseed	1/125	
<i>Clitocybe agrestis</i> Harmaja	coumarin	1/123	
<i>Clitocybe alexandri</i> (Gillet) Gillet		<i>c</i>	freshly-mown grass
<i>Clitocybe augeana</i>	farinaceous	1/121	
<i>Clitocybe diatrete</i> (Fr. : Fr.) P. Kumm.	somewhat aromatic	1/125	
<i>Clitocybe ditopus</i> (Fr. : Fr.) Gillet	farinaceous	1/123	
<i>Clitocybe fragrans</i> (With. : Fr.) P. Kumm.	aniseed	1/125	
<i>Clitocybe geotropa</i> (Bull. : Fr.) Quél.		<i>a</i>	faint of bitter almonds
		<i>a/c</i>	very faint of almonds or new-mown hay (<i>a</i>); pleasant (<i>c</i>)
<i>Clitocybe gibba</i> (Pers. : Fr.) P. Kumm.		1/119	
<i>Clitocybe houghtonii</i> (W. Phillips) Dennis	crushed tomato leaves		
<i>Clitocybe nebularis</i> (Batsch : Fr.) P. Kumm.	+/- perfumed smell	1/126	sweet fruity or turnip (<i>a</i>)
<i>Clitocybe odora</i> (Bull. : Fr.) P. Kumm.	aniseed	1/126	strong of aniseed (<i>a</i>)
	unpleasant smell like a chicken run or a wet		
	chicken (also described as smelling like		
	honey	1/120	reminiscent of a chicken run or a hen house (<i>a</i>)
<i>Clitocybe phaeophthalma</i> (Pers.) Kuyper	spicy but not perfumed	1/119	sweet (<i>a</i>); pleasant fungal odour (<i>c</i>)
<i>Clitocybe phyllophila</i> (Pers. : Fr.) P. Kumm.	somewhat sweetish	1/121	little noticeable fungal odour (<i>c</i>)
<i>Clitocybe rivulosa</i> (Pers. : Fr.) P. Kumm.	faint nitrous	1/122	
<i>Clitocybe subspadicea</i> (J. E. Lange) Bon & Chevassut	rancid	1/122	
<i>Clitocybe vibecina</i> (Fr.) Quél.	recalls that of <i>Hygrophorus discoxanthus</i>		
	(page 167)	1/238	
<i>Clitocybula lacerata</i> (Lasch) Singer	+/- aromatic	1/127	
<i>Clitopaxillus fibulatus</i>	farinaceous	1/88	
<i>Clitopilus ammophilus</i> Malençon			
<i>Clitopilus ardosiacus</i> (E. Horak & Grieser) Noordel. & Co-David	farinaceous	1/88	
<i>Clitopilus caelatus</i> (Fr.) Kühner & Romagn.	farinaceous	1/88	

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<i>Clitopilus cedretorum</i>	farinaceous	1/88	
<i>Clitopilus cretatus</i> (Berk. & Broome) Sacc.	farinaceous	1/88	
<i>Clitopilus cupreus</i>	farinaceous	1/88	
<i>Clitopilus cystidiatus</i> Hauskn. & Noordel.	farinaceous	1/88	
<i>Clitopilus damsii</i> Noordel.	farinaceous	1/88	
<i>Clitopilus fasciculatus</i> Noordel.	farinaceous	1/88	
<i>Clitopilus fuscofarinaceus</i> (Kosonen & Noordel.) Noordel. & Co-David	farinaceous	1/88	
<i>Clitopilus geminus</i> (Paulet) Noordel. & Co-David	farinaceous	1/88	
<i>Clitopilus geminus</i> (Paulet) Noordel. & Co-David var. <i>subvermicularis</i> (Maire) Noordel. & Co-David	farinaceous	1/88	
<i>Clitopilus giovanellae</i> (Bres.) Singer	farinaceous	1/88	
<i>Clitopilus hobsonii</i> (Berk. & Broome) P. D. Orton	farinaceous	1/88	
<i>Clitopilus mairei</i>	farinaceous	1/88	
<i>Clitopilus mundulus</i> (Lasch) P. Kumm.	farinaceous	1/88	
<i>Clitopilus omphaliformis</i> Joss.	farinaceous	1/88	
<i>Clitopilus parilis</i> (Fr.) Kühner & Romagn. var. <i>wagramensis</i> (Hauskn. & Noordel.) Noordel. & Co-David	farinaceous	1/88	
<i>Clitopilus passeckerianus</i> (Pilát) Singer	farinaceous	1/88	
<i>Clitopilus paxilloides</i>	farinaceous	1/88	
<i>Clitopilus popinalis</i> Fr.	farinaceous	1/88	
<i>Clitopilus prunulus</i> (Scop. : Fr.) P. Kumm.	farinaceous	1/88	smell of white flour (b)
<i>Clitopilus reticulosporus</i> Noordel., Co & Hauskn.	farinaceous	1/88	
<i>Clitopilus scyphoides</i> (Fr. : Fr.) Singer	farinaceous	1/88	
<i>Clitopilus scyphoides</i> (Fr. : Fr.) Singer f. <i>reductus</i> Noordel.	farinaceous	1/88	
<i>Clitopilus scyphoides</i> (Fr. : Fr.) Singer var. <i>intermedius</i> (Romagn.) Noordel.	farinaceous	1/88	
<i>Clitopilus scyphoides</i> (Fr. : Fr.) Singer var. <i>omphaliformis</i> (Joss.) E. Ludw.	farinaceous	1/88	
<i>Clitopilus spec.</i>	farinaceous	1/140	
<i>Clitopilus tillii</i> (Krisai & Noordel.) Noordel. & Co-David	farinaceous	1/88	
<i>Clitopilus wagramensis</i> (Hauskn. & Noordel.) Hauskn. & Krisai	farinaceous	1/88	
<i>Collybia maculata</i> (Alb. & Schwein. : Fr.) Quél.		b	insignificant
<i>Coltricia perennis</i> (L. : Fr.) Murrill		a	not distinctive

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<i>Conocybe apala</i> (Fr. : Fr.) Arnolds		<i>a</i>	not distinctive
<i>Conocybe blattaria</i> (Fr. : Fr.) Kühner		<i>c</i>	flowery
<i>Conocybe filaris</i> (Fr.) Kühner		<i>c</i>	fungal
<i>Conocybe pubescens</i> (Gillet) Kühner		<i>a</i>	not distinctive
<i>Conocybe rugosa</i> (Peck) Watling		<i>a</i>	not distinctive
<i>Conocybe tenera</i> (Schaeff. : Fr.) Fayod		<i>a</i>	not distinctive
<i>Coprinellus disseminatus</i> (Pers. : Fr.) J. E. Lange		<i>a</i>	not distinctive
<i>Coprinellus domesticus</i> (Bolton) Vilgalys, Hopple & Jacq. Johnson		<i>a</i>	not distinctive
<i>Coprinellus impatiens</i> (Fr. : Fr.) J. E. Lange		<i>a</i>	not distinctive
<i>Coprinellus micaceus</i> (Bull.) Vilgalys, Hopple & Jacq. Johnson		<i>a</i>	not distinctive
<i>Coprinellus xanthothrix</i> (Romagn.) Vilgalys, Hopple & Jacq. Johnson		<i>a</i>	not distinctive
<i>Coprinopsis atramentaria</i> (Bull.) Redhead, Vilgalys & Moncalvo		<i>c</i>	barely perceptible
<i>Coprinopsis martinii</i> (P. D. Orton) Redhead, Vilgalys & Moncalvo		<i>a</i>	not distinctive
<i>Coprinopsis narcotica</i> (Batsch) Redhead, Vilgalys & Moncalvo	very strong fetid	1/536	
<i>Coprinopsis nivea</i> (Pers.) Redhead, Vilgalys & Moncalvo		<i>a</i>	not distinctive
<i>Coprinopsis picacea</i> (Bull.) Redhead, Vilgalys & Moncalvo	young fruitbodies in particular smell strongly fetid	1/523	
<i>Coprinopsis stercorea</i> (Fr.) Redhead, Vilgalys & Moncalvo		<i>a</i>	reported to be unpleasant (but given the growing substrate this is not easy to assess)
<i>Coprinopsis tuberosa</i> (Quél.) Doveri, Granito & Lunghini	rather weak, somewhat like raw potato	1/536	
<i>Coprinopsis xenobia</i> (P. D. Orton) Redhead, Vilgalys & Moncalvo		<i>a</i>	not distinctive
<i>Coprinus atramentarius</i> (Bull. : Fr.) Fr.		<i>b</i>	not distinct
<i>Coprinus comatus</i> (O. F. Müll. : Fr.) Pers.		<i>a/c</i>	faint and quite pleasant, but not distinctive (<i>a</i>); mild fungal odour (<i>c</i>)
<i>Coprinus heptemerus</i> M. Lange & A. H. Sm.		<i>a</i>	not distinctive
<i>Coprinus lagopus</i> (Fr. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Coprinus sterquilinus</i> (Fr. : Fr.) Fr.		<i>a</i>	faint and quite pleasant, but not distinctive
<i>Cordyceps militaris</i> (L. : Fr.) Link		<i>c</i>	no smell
<i>Cortinarius acetosus</i> (Velen.) Melot	iodoform	1/749	
<i>Cortinarius acutus</i> (Pers. : Fr.) Fr.	iodoform during drying	1/735	

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<i>Cortinarius alboviolaceus</i> (Pers. : Fr.) Fr. agg.	+/- odourless	1/743	not strong, but detectable odour of radish (a)
<i>Cortinarius anomalus</i> (Fr. : Fr.) Fr. agg.	odourless	1/699	slight, pleasant but becoming sickly sweet in old fruitbodies (a)
<i>Cortinarius anserinus</i> (Velen.) Rob. Henry	may recall plums or celeriac, or later be earthy musty	1/712	
<i>Cortinarius anthracinus</i> (Fr.) Fr.		a	not distinctive
<i>Cortinarius aprinus</i> Melot agg.	weak og flower-like	1/752	
<i>Cortinarius armeniacus</i> (Schaeff. : Fr.) Fr. agg.	indistinct	1/749	
<i>Cortinarius armillatus</i> (Fr. : Fr.) Fr.		a	slight of radish
<i>Cortinarius atrocoeruleus</i> (M. M. Moser) M. M. Moser	recalling cedar wood	1/736	
<i>Cortinarius atrovirens</i> Kalchbr.	recalls black pepper	1/716	
	distinct strong, earth like smell recalling raw beetroot	1/737	
<i>Cortinarius bibulus</i> Quél. agg.		a	not significant
<i>Cortinarius bolaris</i> (Pers. : Fr.) Fr.		a	slightly earthy
<i>Cortinarius caerulescens</i> (Schaeff.) Fr.	ozone (warm metal, steam engine or extinguished candle)	1/731	
<i>Cortinarius callisteus</i> (Fr. : Fr.) Fr. agg.	typically has a +/- apple like	1/731	
<i>Cortinarius callisteus</i> (Fr. : Fr.) Fr. var. <i>infucatus</i> (Fr.) Melot			reminiscent of camphor, mature goat's cheese, rotting potatoes or sweaty feet (a)
<i>Cortinarius camphoratus</i> Fr.	distinctive pungent recalls burnt horn or hair	1/743	
<i>Cortinarius caninus</i> (Fr.) Fr.	weak	1/746	
<i>Cortinarius caperatus</i> (Pers. : Fr.) Fr.		a	not distinctive
	distinct strong, earth like smell recalling raw beetroot	1/737	
<i>Cortinarius carbunculus</i>		a	faintly of radish
<i>Cortinarius cinnamomeus</i> (L. : Fr.) Fr.	faint of fresh pepper	1/714	
<i>Cortinarius citrinus</i> P. D. Orton	recalls raw maize cobs	1/699	
<i>Cortinarius cliduchus</i> Fr.	somewhat metallic	1/721	
<i>Cortinarius coerulescentium</i> Rob. Henry	odourless	1/697	
<i>Cortinarius collinitus</i> (Pers.) Fr.	evident radish-like	1/729	
<i>Cortinarius cotoneus</i> Fr.		a	strongly sweet and unpleasant; camphor
<i>Cortinarius cupreorufus</i> Brandrud		c	mild fungal odour
<i>Cortinarius decipiens</i> (Pers. : Fr.) Zaw.	faint	1/736	faint of radish (a)
<i>Cortinarius delibutus</i> Fr.	maize	1/695	

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<i>Cortinarius diasemospermus</i> Lamoure	faint of <i>Pelargonium</i>	1/733	
<i>Cortinarius duracinus</i> Fr.	indistinct	1/749	
	after bruising, it has a smell of honey at the		
<i>Cortinarius elatior</i> Fr.	stem base	1/696	
<i>Cortinarius eucaeruleus</i> Rob. Henry	+/- metallic	1/709	
<i>Cortinarius flavovirens</i> Rob. Henry	farinaceous	1/714	
<i>Cortinarius flexipes</i> (Pers. : Fr.) Fr.	usually distinct <i>Pelargonium</i> like	1/732	
<i>Cortinarius flexipes</i> (Pers. : Fr.) Fr. var. <i>inolens</i> H. Lindstr.	odourless	1/732	
	at first malt-like, later unpleasant earthy-		
<i>Cortinarius foetens</i> (M. M. Moser) M. M. Moser	musty.	1/721	
<i>Cortinarius fragrantior</i>	cedar wood	1/749	
<i>Cortinarius gossypinus</i>	indistinct	1/733	
<i>Cortinarius hemitrichus</i> (Pers. : Fr.) Fr.	odourless	1/732	not distinctive (<i>a</i>)
<i>Cortinarius hinnuleus</i> (Sowerby) Fr. agg.	pungent, earthy	1/749	odour slight, of radish (<i>a</i>)
<i>Cortinarius humicola</i> (Quél.) Maire	faint like cedar wood	1/729	
<i>Cortinarius imbutus</i> Fr.	strong damp cellar	1/751	
<i>Cortinarius infractus</i> (Pers. : Fr.) Fr. agg.	usually odourless	1/702	
<i>Cortinarius langeorum</i>	lacks a distinct smell	1/718	
<i>Cortinarius largus</i> Fr.	faint	1/706	
<i>Cortinarius leucophanes</i> P. Karst.	lacks a distinct smell	1/700	
<i>Cortinarius limonius</i> (Fr. : Fr.) Fr.	indistinct	1/731	
<i>Cortinarius luhmannii</i>	lacks a distinct smell	1/712	
<i>Cortinarius lustratus</i> Fr. agg.	farinaceous	1/700	
<i>Cortinarius malachius</i> Fr.	insignificant	1/743	
<i>Cortinarius moenne-locozii</i> Bidaud	malty or indistinct	1/709	
<i>Cortinarius mucosus</i> (Bull. : Fr.) Kickx	odourless	1/697	
<i>Cortinarius multiformis</i> (Fr.) Fr. agg.	faint honey like	1/719	
<i>Cortinarius nanceiensis</i> Maire	rather like that of unripe bananas	1/704	
<i>Cortinarius obsoletus</i>	indistinct	1/701	
			stem base smells initially of radish and later iodoform
<i>Cortinarius obtusus</i> (Fr. : Fr.) Fr.	iodoform during drying	1/734	(<i>a</i>)
<i>Cortinarius odoratus</i> Velen.	<i>Prunus padus</i> flowers	1/720	
<i>Cortinarius odorifer</i> Britzelm.	aniseed	1/717	
<i>Cortinarius orellanus</i> (Fr.) Fr.		<i>a</i>	slight of radish

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<i>Cortinarius osmophorus</i>	<i>Prunus padus</i> flowers	1/719	
<i>Cortinarius parvannulatus</i> Kühner agg.	strongly of cedar wood	1/733	
	very distinct smell of marjoram (<i>Origanum</i>)		
<i>Cortinarius percomis</i> Fr.	or apples	1/704	
<i>Cortinarius phaeosmus</i> Rob. Henry	distinctive parsley or nutmeg	1/753	
<i>Cortinarius praestans</i> (Cordier) Gillet		a	not distinctive
<i>Cortinarius pseudosalor</i> J. E. Lange		a	honey especially when cut at stem base
<i>Cortinarius purpurascens</i> (Fr.) Fr.		a	pleasant but not significant
<i>Cortinarius raphanoides</i> (Pers. : Fr.) Fr.	radish	1/745	
<i>Cortinarius rubellus</i> Cooke	faintly of radish	1/730	
<i>Cortinarius sanguineus</i> (Wulfen : Fr.) Fr.		a	not significant
<i>Cortinarius saporatus</i> Britzelm.	malty to yeast-like	1/719	
<i>Cortinarius saturninus</i> (Fr. : Fr.) Fr.		a	not distinctive
<i>Cortinarius semisanguineus</i> (Fr.) Gillet		a	slight, when cut or crushed, of radish
<i>Cortinarius sodagnitus</i> Rob. Henry	lacks a distinct smell	1/708	
<i>Cortinarius sphagnophilus</i> Peck	honey	1/703	
<i>Cortinarius splendens</i> Rob. Henry	insignificant	1/714	
<i>Cortinarius stillatitius</i> Fr.	strong honey at the stem base	1/696	
	characteristic smell of <i>Prunus padus</i> flowers		
<i>Cortinarius suaveolens</i> Bataille & Joachim	(or as <i>Hebeloma sacchariolens</i> , page 684)	1/708	
<i>Cortinarius subtortus</i> (Pers. : Fr.) Fr.	cedar wood	1/702	
	evident honey like, especially from the stem		
<i>Cortinarius talus</i> Fr.	base after bruising	1/718	
<i>Cortinarius terpsichores</i> Melot	metallic	1/710	
<i>Cortinarius tortuosus</i> (Fr. : Fr.) Fr.	faint of cedar wood	1/751	
<i>Cortinarius torvus</i> (Fr. : Fr.) Fr.	distinctive, fruity	1/754	strongly sweet and unpleasant like camphor (a)
<i>Cortinarius traganus</i> (Fr. : Fr.) Fr.	characteristic, pleasant, fruity	1/742	
<i>Cortinarius triumphans</i> Fr.	not distinctive	1/705	
<i>Cortinarius trivialis</i> J. E. Lange		a	not distinctive
<i>Cortinarius uliginosus</i> Berk.		a	radish, when cut or crushed
	distinct strong, earth like smell recalling raw		
<i>Cortinarius umbrinolens</i> P. D. Orton	beetroot	1/737	
<i>Cortinarius valgis</i> Fr.	lacks the radishy smell	1/745	
<i>Cortinarius variicolor</i> (Pers.) Fr.	strong, unpleasant earthy-musty, or like	1/706	

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<i>Cortinarius varius</i> (Schaeff. : Fr.) Fr.	banana peel		
<i>Cortinarius venetus</i> (Fr.) Fr.	does not have a distinctive smell	1/705	
<i>Cortinarius venustus</i> P. Karst.	faintly of radish	1/729	
<i>Cortinarius violaceus</i> (L. : Fr.) Gray	characteristic, sweetish, fruity	1/742	
<i>Cortinarius violilamellatus</i>	cedar	1/728	cedar oil (<i>c</i>)
	faint of <i>Pelargonium</i>	1/732	
	earthy musty – especially during drying and when old		
<i>Cortinarius vulpinus</i> (Velen.) Rob. Henry agg.		1/701	
<i>Cortinarius vulpinus</i> (Velen.) Rob. Henry ssp. <i>pseudovulpinus</i> (Rob. Henry) Brandrud	old cheese	1/701	
<i>Cortinarius xantho-ochraceus</i>	malty to yeast-like	1/719	
<i>Craterellus cinereus</i> (Pers.) Pers.		<i>d</i>	sweet or not distinctive
<i>Craterellus cornucopioides</i> (L. : Fr.) Pers.	very pleasant	1/47	fruity-fragrant aroma (<i>d</i>)
<i>Crepidotus applanatus</i> (Pers.) P. Kumm.		<i>a</i>	not distinctive
<i>Crepidotus calolepis</i> (Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Crepidotus cesatii</i> (Rabenh.) Sacc.		<i>a</i>	not distinctive
<i>Crepidotus epibryus</i> (Fr. : Fr.) Quél.		<i>a</i>	not distinctive
<i>Crepidotus mollis</i> (Schaeff. : Fr.) Staude		<i>a</i>	not distinctive
<i>Crepidotus variabilis</i> (Pers. : Fr.) P. Kumm.		<i>a</i>	not distinctive
<i>Crinipellis scabellus</i> (Alb. & Schwein. : Fr.) Murrill	odourless	1/303	
<i>Crucibulum laeve</i> (Relhan) Kambly		<i>c</i>	no smell
<i>Cuphophyllus colemannianus</i> (A. Bloxam) Bon		<i>a</i>	not distinctive
<i>Cuphophyllus flavipes</i> (Britzelm.) Bon		<i>a</i>	not distinctive
<i>Cuphophyllus fornicatus</i> (Fr.) Lodge, Padamsee & Vizzini	+ - unpleasant	1/161	
<i>Cuphophyllus pratensis</i> (Pers.) Fr.	does not have a distinctive smell	1/162	
<i>Cuphophyllus russocoriaceus</i> (Berk. & T. K. Mill.) Bon	cedar wood	1/163	
	not distinctive, but infected specimens may smell like coconut cookies	1/163	
<i>Cuphophyllus virgineus</i> (Wulfen : Fr.) Kovalenko			
<i>Cuphophyllus virgineus</i> (Wulfen : Fr.) Kovalenko var. <i>ochraceopallidus</i>	lacks the smell	1/163	
<i>Cyanoboletus pulverulentus</i> (Opat.) Gelardi, Vizzini & Simonini		<i>a</i>	not distinctive
<i>Cyathus olla</i> Batsch : Pers.		<i>c</i>	no smell
<i>Cyathus striatus</i> (Huds. : Pers.) Willd.		<i>c</i>	not significant
<i>Cyclocybe cylindracea</i> (DC.) Vizzini & Angelini	farinaceous	1/624	pleasant (<i>a</i>)

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<i>Cyclocybe erebia</i> (Fr.) Vizzini & Matheny	either no or a different smell	1/627	not distinctive (a)
<i>Cystoderma amianthinum</i> (Scop.) Fayod	unpleasant, musty-earthly	1/316	
<i>Cystoderma amianthinum</i> (Scop.) Fayod f. <i>rugulosoreticulatum</i> Bon		d	similar to corn
<i>Cystoderma carcharias</i> (Pers.) Fayod	unpleasant, musty-earthly	1/317	
<i>Cystoderma jasonis</i> (Cooke & Massee) Harmaja	mostly faint	1/317	strong and unpleasant mouldy odour (a)
<i>Cystoderma simulatum</i>		c	not significant
<i>Cystodermella adnatifolia</i> (Peck) Harmaja	faint somewhat sweetish	1/319	
<i>Cystodermella cinnabarina</i> (Alb. & Schwein. : Fr.) Harmaja	faint	1/319	
<i>Cystodermella granulosa</i> (Batsch : Fr.) Harmaja	faint	1/318	
<i>Cystolepiota bucknallii</i> (Berk. & Broome) Singer & Cléménçon	very strong and highly nauseous, gas like	1/325	
<i>Cystolepiota pulverulenta</i> (Huijsman) Vellinga		c	not significant
<i>Cystostereum murrayi</i> (Berk. & M. A. Curtis) Pouzar	coconut cake	2/968	
<i>Dacrymyces chrysospermus</i> Berk. & M. A. Curtis		a	not distinctive
<i>Dacrymyces stillatus</i> Nees : Fr.		a	not distinctive
<i>Dacryobolus karstenii</i> (Bres.) Parmasto	distinctly sour-aromatic	2/1017	
<i>Daedalea quercina</i> (L. : Fr.) Fr.		a/b	slight acrid odour (a); without smell (b)
<i>Daedaleopsis confragosa</i> (Bolton : Fr.) J. Schröt.		a	not distinctive
<i>Daedaleopsis tricolor</i> (Bull.) Bondartsev & Singer		a	not distinctive
<i>Daldinia concentrica</i> (Bolton : Fr.) Ces. & De Not.		a	not distinctive
<i>Daldinia fissa</i> Lloyd		a	not distinctive
<i>Delicatula integrella</i> (Pers. : Fr.) Fayod	odourless	1/186	
<i>Dendropolyporus umbellatus</i> (Pers. : Fr.) Jülich		b	farinaceous, it decomposes easily emitting a bad smell
<i>Dendrothele acerina</i> (Pers. : Fr.) P. A. Lemke	when bruised it has a chlorine like	2/1003	
<i>Dermoloma atrocinerium</i> (Pers. : Pers.) Herink	strong farinaceous	1/179	
<i>Dermoloma coryleti</i> Singer & Cléménçon	strong farinaceous	1/179	
<i>Dermoloma cuneifolium</i> (Fr. : Fr.) Bon	very strong farinaceous	1/245	
<i>Dermoloma cuneifolium</i> (Fr. : Fr.) Bon var. <i>punctipes</i> Arnolds	strong farinaceous	1/179	
<i>Dermoloma hygrophorus</i> (Joss. ex) Joss.	strong farinaceous	1/179	
<i>Dermoloma josserandii</i> Dennis & P. D. Orton	strong farinaceous	1/179	
<i>Dermoloma josserandii</i> Dennis & P. D. Orton var. <i>phaeopodium</i> (P. D. Orton) Arnolds	strong farinaceous	1/179	
<i>Dermoloma phaeopodium</i> P. D. Orton	strong farinaceous	1/179	
<i>Dermoloma pragensis</i> Kubicka ss. Ballero & Contu	strong farinaceous	1/179	

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<i>Dermoloma pseudocuneifolium</i> Bon	strong farinaceous	1/179	
<i>Dermoloma</i> spec.	strongly farinaceous	1/165	
<i>Descolea antarctica</i>	insignificant	1/621	
<i>Dichomitus campestris</i> (Quél.) Domanski & Orlicz		a	not significant strong odour of bleach when fruitbody is cut or crushed (a)
<i>Disciotis venosa</i> (Pers.) Fr.	distinct nitrous/ chlorine	2/1293	
<i>Ditiola radicata</i> (Alb. & Schwein. : Fr.) Fr.	distinctive chewing gum like almost metallic, somewhat like that of <i>Lepiota cristata</i>	2/1157	
<i>Echinoderma asperum</i> (Pers.) Bon		1/335	
<i>Echinoderma echinaceum</i> (J. E. Lange) Bon		a	slightly unpleasant
<i>Echinoderma hystrix</i> (F. H. Møller & J. E. Lange) Bon	very unusual, somewhat like <i>Sambucus</i> flowers or cat urine	1/335	
<i>Elaphomyces cyanosporus</i>	strong	2/1277	
<i>Entoloma ameides</i> (Berk. & Broome) Sacc.	very distinct, sweetish, <i>Prunus padus</i> like	1/471	
<i>Entoloma anatinum</i> (Lasch : Fr.) Donk	lacks a distinct smell	1/461	
<i>Entoloma bloxamii</i> (Berk. & Broome) Sacc.	indistinct to farinaceous	1/480	
<i>Entoloma caccabus</i> (Kühner) Noordel.	strong farinaceous	1/456	
<i>Entoloma caeruleum</i> (P. D. Orton) Noordel.		a	indistinct or slightly sweet
<i>Entoloma cetratum</i> (Fr. : Fr.) M. M. Moser	indistinct	1/472	
<i>Entoloma chalybaeum</i> (Fr. : Fr.) Noordel.	indistinct	1/462	
<i>Entoloma chloropolium</i> (Fr.) M. M. Moser	does not have a distinctive smell	1/468	
<i>Entoloma clypeatum</i> (L.) P. Kumm.		b	fresh flour +- pronounced farinaceous odour depending on the hydration of the specimen (c)
<i>Entoloma conferendum</i> (Britzelm.) Noordel.	insignificant to mealy	1/474	
<i>Entoloma conferendum</i> (Britzelm.) Noordel. var. <i>pusillum</i> (Velen.) Noordel.		c	not farinaceous
<i>Entoloma conferendum</i> (Britzelm.) Noordel. var. <i>rickenii</i> (Romagn.) Bon & Courtec.		c	not farinaceous
<i>Entoloma elodes</i> (Fr.) P. Kumm.	farinaceous	1/479	
<i>Entoloma euchroum</i> (Pers. : Fr.) Donk	aromatic	1/457	
<i>Entoloma fridolfingense</i> Noordel. & Lohmeyer	when bruised is ± farinaceous	1/454	
<i>Entoloma griseocyaneum</i> (Fr. : Fr.) P. Kumm.		a	not distinctive
<i>Entoloma hebes</i> (Romagn.) Trimbach	rancid	1/469	
<i>Entoloma hirtipes</i> (Schumach. : Fr.) M. M. Moser		c	farinaceous

Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
	very distinct, recalling burnt rubber or mouse urine	1/464	mice (a)
<i>Entoloma incanum</i> (Fr. : Fr.) Hesler			
<i>Entoloma infula</i> (Fr. : Fr.) Noordel.	somewhat farinaceous	1/470	
<i>Entoloma infula</i> (Fr. : Fr.) Noordel. var. <i>chlorinosum</i> (Arnolds & Noordel.) Noordel.	chlorine	1/470	
<i>Entoloma iodolens</i> Arnolds & Noordel.	iodoform	1/454	
<i>Entoloma jubatum</i> (Fr. : Fr.) P. Karst.	rancid-farinaceous	1/479	
<i>Entoloma juncinum</i> (Kühner & Romagn.) Noordel.	+/- farinaceous	1/470	
<i>Entoloma lampropus</i> (Fr. : Fr.) Hesler		a	not significant
<i>Entoloma lividoalbum</i> (Kühner & Romagn.) Kubicka	mealy	1/484	
			not unpleasant of flour in young specimens, only in
<i>Entoloma lividum</i> (Bull.) Fr.		c	more developed specimens it becomes unpleasant
<i>Entoloma lucidum</i> (P. D. Orton) M. M. Moser		a	slight, farinaceous (like wet flour) or rancid
<i>Entoloma madidum</i> (Fr.) Gillet	farinaceous	1/481	
<i>Entoloma mougeotii</i> (Fr.) Hesler		a	not distinctive
<i>Entoloma nausiosme</i> Noordel.	very strong, unpleasant	1/454	
<i>Entoloma nidorosum</i> (Fr.) Noordel.		b	+/- strong odour of hypochlorite
<i>Entoloma nigroviolaceum</i> (P. D. Orton) Hesler	+/- rancid-farinaceous	1/461	
<i>Entoloma niphoides</i> Noordel.	farinaceous	1/485	
<i>Entoloma nitidum</i> Quél.	somewhat farinaceous	1/473	mild but not distinctive (a)
<i>Entoloma papillatum</i> (Bres.) Dennis	farinaceous	1/472	
<i>Entoloma pleopodium</i> (DC. : Fr.) Noordel.	distinctly sweetish-nauseous	1/469	
<i>Entoloma politum</i> (Pers. : Fr.) Donk	mostly nitrous	1/456	
<i>Entoloma porphyrophaeum</i> (Fr.) P. Karst.	lacks a distinct smell	1/478	
<i>Entoloma prunuloides</i> (Fr. : Fr.) Quél.	farinaceous	1/481	
<i>Entoloma pseudoturbidum</i> (Romagn.) M. M. Moser	farinaceous	1/473	
	It may be almost odourless or distinctly		
<i>Entoloma queletii</i> (Boud.) Noordel.	perfumed, recalling that of <i>Lepista irina</i>	1/466	
<i>Entoloma rhodopolium</i> (Fr. : Fr.) P. Kumm.	no, or only a weak, nitrous smell	1/482	
<i>Entoloma rhombisporum</i> (Kühner & Boursier) E. Horak	farinaceous	1/474	
<i>Entoloma sacchariolens</i> (Romagn.) Noordel.	very distinct, sweetish, <i>Prunus padus</i> like	1/471	
<i>Entoloma scabrosum</i> (Fr.) Noordel.	+/- aromatic	1/461	
<i>Entoloma sepium</i> (Noulet & Dass.) Richon & Roze	mealy	1/485	
<i>Entoloma sericatum</i> (Britzelm.) Sacc.	faint ± mealy	1/482	

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<i>Entoloma sericellum</i> (Fr. : Fr.) P. Kumm.	not distinctive	<i>a</i>	
<i>Entoloma sericeum</i> (Bull.) Quél.	rancid farinaceous	1/471	
<i>Entoloma serrulatum</i> (Fr. : Fr.) Hesler		<i>a</i>	slightly mealy
<i>Entoloma sinuatum</i> (Bull. : Fr.) P. Kumm.		<i>a</i>	vague but rather unpleasant
<i>Entoloma sodale</i> Noordel.	indistinct	1/463	
<i>Entoloma sordidulum</i> (Kühner & Romagn.) P. D. Orton	strong mealy	1/483	
<i>Entoloma turbidum</i> (Fr. : Fr.) Quél.	insignificant	1/473	
<i>Entoloma verum</i> S. Lundell	insignificant	1/472	slightly mealy (farinaceous) but not distinctive (<i>a</i>)
<i>Entolomas asprellum</i>	+/- rancid-farinaceous	1/461	
<i>Entolomas nigroviolaceum</i>	+/- rancid-farinaceous	1/461	
<i>Entonaema cinnabarina</i>	lovage	2/1555	
<i>Exidia glandulosa</i> (Bull.) Fr. ss. auct.		<i>a</i>	not distinctive
<i>Exidia nigricans</i> (With.) P. Roberts		<i>a</i>	not distinctive
<i>Exidia recisa</i> (Ditmar : Fr.) Fr.		<i>a</i>	not distinctive
<i>Exidia thuretiana</i> Lév.		<i>a</i>	not distinctive
<i>Favolaschia calocera</i> R. Heim		<i>a</i>	not distinctive
<i>Fistulina hepatica</i> (Schaeff. : Fr.) With.	weak	2/845	
<i>Flammulaster muricatus</i> (Fr. : Fr.) Watling		<i>a</i>	very faint of Pelagoniums
<i>Flammulina elastica</i> (Lasch) Redhead & R. H. Petersen		<i>a</i>	not distinctive
<i>Flammulina spec.</i>	mostly odourless	1/300	
<i>Flammulina velutipes</i> (Curtis : Fr.) Singer		<i>a</i>	not distinctive
<i>Floccularia spec.</i>		<i>d</i>	mealy
<i>Fomes fomentarius</i> (L. : Fr.) J. J. Kickx	smells less strongly	2/867	faintly fruity (<i>a</i>)
		2/867/	
<i>Fomitopsis pinicola</i> (Swartz : Fr.) P. Karst.	distinctly sour-aromatic / strong	870	
<i>Fuscoporia ferrea</i> (Pers. : Fr.) G. Cunn.		<i>a</i>	not significant
<i>Fuscoporia torulosa</i> (Pers.) T. Wagner & M. Fisch.		<i>a</i>	not significant
<i>Galerina calyptrata</i> P. D. Orton	farinaceous	1/640	
<i>Galerina cephalotricha</i> Kühner	farinaceous	1/642	
<i>Galerina graminea</i> (Velen.) Kühner		<i>a</i>	not significant
<i>Galerina hypnorum</i> (Schränk : Fr.) Kühner	farinaceous	1/640	
<i>Galerina marginata</i> (Batsch) Kühner	rancid farinaceous	1/638	mealy (<i>a</i>)
<i>Galerina mniophila</i> (Lasch : Fr.) Kühner	indistinct	1/642	
<i>Galerina paludosa</i> (Fr.) Kühner	farinaceous	1/643	

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<i>Galerina pumila</i> (Pers. : Fr.) Singer		<i>a</i>	not significant
<i>Ganoderma applanatum</i> (Pers.) Pat.		<i>a</i>	mushroomy
<i>Ganoderma australe</i> (Fr.) Pat.		<i>a</i>	weak
<i>Ganoderma lucidum</i> (Curtis : Fr.) P. Karst.		<i>c</i>	no smell
<i>Ganoderma pfeifferi</i> Bres.	pleasantly sweetish	2/871	pore surface is sweet-smelling, somewhat like honey or beeswax (<i>a</i>)
<i>Ganoderma resinaceum</i> Boud.		<i>a</i>	Spicy
<i>Gautieria morchelliformis</i> Vittad.	rather foul	2/1261	
<i>Geastrum coronatum</i> Pers. : Pers.		<i>a</i>	not significant
<i>Geastrum elegans</i> Vittad.		<i>a</i>	not significant
<i>Geastrum fimbriatum</i> Fr.		<i>a</i>	not significant
<i>Geastrum floriforme</i> Vittad.		<i>a</i>	not noticeable
<i>Geastrum fornicatum</i> (Huds.) Hook.		<i>a</i>	not noticeable
<i>Geastrum pectinatum</i> Pers. : Pers.		<i>a</i>	not noticeable
<i>Geastrum schmidelii</i> Vittad.		<i>a</i>	not significant
<i>Geastrum striatum</i> DC.		<i>a</i>	not noticeable
<i>Geastrum triplex</i> Jungh.		<i>a</i>	not noticeable
<i>Geoglossum cookeanum</i> Nannf.		<i>a</i>	not distinctive
<i>Geoglossum fallax</i> E. J. Durand		<i>a</i>	not distinctive
<i>Geopora arenicola</i> (Lév.) Kers		<i>a</i>	not distinctive
<i>Geopora clausa</i>	foul smelling spore mass	2/1227	unpleasant (strong enough to attract flies, but not so smelly that people are driven to move home to escape it) reminiscent of rotting meat (<i>a</i>)
<i>Geopora sumneriana</i> (Cooke) M. Torre		<i>a</i>	not distinctive
<i>Gliophorus irrigatus</i> (Pers.) A. M. Ainsw. & P. M. Kirk	does not have a distinctive smell	1/145	
<i>Gliophorus laetus</i> (Pers. : Fr.) Herink	strongly of burnt rubber	1/149	
<i>Gliophorus laetus</i> (Pers. : Fr.) Herink var. <i>flavus</i>		<i>a</i>	not distinctive
<i>Gliophorus psittacinus</i> (Schaeff. : Fr.) Herink	without a distinct smell	1/146	
<i>Gliophorus psittacinus</i> (Schaeff.) Herink var. <i>perplexus</i> (A. H. Sm. & Hesler) auct.		<i>a</i>	not distinctive
<i>Gliophorus spec.</i>	may have strange smell	1/145	
<i>Gloeohypochnicium analogum</i> (Bourdot & Galzin) Hjortstam	penetrating, ± nauseous fruity smell that is almost impossible to remove from the fingers after having touched the fruitbody	2/1010	

Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
<i>Gloeophyllum odoratum</i> (Wulfen : Fr.) Imazeki		<i>b</i>	very strong and persistent pleasant
<i>Gomphidius glutinosus</i> (Schaeff. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Gomphidius roseus</i> (Fr.) Fr.		<i>a</i>	not distinctive
<i>Guepinia helvelloides</i> (DC. : Fr.) Fr.		<i>c</i>	mild and pleasant
<i>Gymnopilus decipiens</i> (W. G. Sm.) P. D. Orton		<i>a</i>	not significant
<i>Gymnopilus junonius</i> (Fr. : Fr.) P. D. Orton		<i>a/c</i>	faint fruity (<i>a</i>); mild of turnip (<i>c</i>)
<i>Gymnopilus penetrans</i> (Fr.) Murrill		<i>a</i>	faint fruity
<i>Gymnopilus sapineus</i> (Fr. : Fr.) Maire		<i>a</i>	Slightly mushroomy
<i>Gymnopus acervatus</i> (Fr.) Murrill	insignificant	1/291	
<i>Gymnopus androsaceus</i> (L. : Fr.) L. J. Mata & R. H. Petersen	odourless	1/306	
<i>Gymnopus aquosus</i> (Bull. : Fr.) Antonín & Noordel.	no smell	1/290	
<i>Gymnopus brassicolens</i> (Romagn.) Antonín & Noordel.	cabbage	1/295	
<i>Gymnopus confluens</i> (Pers. : Fr.) Antonín, Halling & Noordel.	lacks a distinctive smell	1/292	
<i>Gymnopus dryophilus</i> (Bull. : Fr.) Murrill	odourless	1/290	
<i>Gymnopus erythropus</i> (Pers. : Fr.) Antonín, Halling & Noordel.	odourless	1/291	
<i>Gymnopus fagiphilus</i>	odourless	1/292	
<i>Gymnopus foetidus</i> (Sowerby : Fr.) J. L. Mata & R. H. Petersen	cabbage	1/294	
<i>Gymnopus fusipes</i> (Bull. : Fr.) Gray		<i>a</i>	not distinctive
<i>Gymnopus hariolorum</i> (Bull. : Fr.) Antonín, Halling & Noordel.	cabbage	1/293	
<i>Gymnopus impudicus</i> (Fr.) Antonín, Halling & Noordel.	cabbage	1/294	
<i>Gymnopus inodorus</i> (Pat.) Antonín & Noordel.	odourless	1/294	
<i>Gymnopus obscuroides</i>	odourless	1/292	
<i>Gymnopus ocior</i> (Pers.) Antonín & Noordel.		<i>a</i>	not distinctive
<i>Gymnopus perforans</i> (Hoffm. : Fr.) Antonín & Noordel.	rotten cabbage	1/306	
<i>Gymnopus peronatus</i> (Bolton : Fr.) Antonín, Halling & Noordel.	no smell	1/293	
<i>Gymnopus quercophilus</i> (Pouzar) Antonín & Noordel.	odourless	1/307	
<i>Gyromitra esculenta</i> (Pers. : Fr.) Fr.	spicy and pleasant	2/1285	
<i>Gyroporus cyanescens</i> (Bull. : Fr.) Quél.		<i>a</i>	not distinctive
<i>Haploporus odorus</i>	very strong aniseed like	2/858	
<i>Hebeloma crustuliniforme</i> (Bull.) Quél.	strong of radish	1/686	
<i>Hebeloma cylindrosporum</i> Romagn.	variable, often somewhat cacao like	1/685	
<i>Hebeloma helodes</i> J. Favre	radish	1/687	
	variable smell, from earthy or soap like to		
<i>Hebeloma laterinum</i> (Batsch) Vesterh.	cacao-like, but sometimes almost absent	1/685	

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<i>Hebeloma mesophaeum</i> (Pers.) Quél.	radish	1/682	
<i>Hebeloma odoratissimum</i>	strong nauseous-sweet	1/684	
<i>Hebeloma pusillum</i> J. E. Lange	radish	1/688	
<i>Hebeloma radicosum</i> (Bull. : Fr.) Ricken	striking marzipan or bitter almond	1/681	
	very strong nauseous-sweet, somewhat like		
<i>Hebeloma sacchariolens</i> Quél.	the flowers of <i>Prunus padus</i>	1/684	
<i>Hebeloma sinapizans</i> (Paulet) Sacc.	strongly radish like	1/689	
<i>Hebeloma spec.</i>	mostly earth- or radish-like	1/690	
<i>Hebeloma theobrominum</i> Quadr.	radish to cacao like	1/688	
<i>Hebeloma velutipes</i> Bruchet	radish	1/687	
<i>Helvella atra</i> J. König		<i>a</i>	faint pleasant
<i>Helvella crispa</i> (Scop. : Fr.) Fr.		<i>a</i>	faint
<i>Helvella elastica</i> Bull. : Fr.		<i>b</i>	peculiar
<i>Helvella lacunosa</i> Afzel. : Fr.		<i>a</i>	not distinctive
<i>Helvella leucomelaena</i> (Pers.) Nannf.		<i>b</i>	no smell
<i>Helvella macropus</i> (Pers. : Fr.) P. Karst.		<i>a</i>	faint pleasant
			no distinctive odour except when the lower part of the stem is cut and releases a distinctly iodoform odour
<i>Hemileccinum impolitum</i> (Fr.) Šutara	iodoform at the stem base	1/774	(<i>a</i>)
<i>Hemimycena delectabilis</i> (Peck) Singer	strong nitrous	1/190	bleach like (<i>d</i>)
<i>Hemimycena epichloe</i> (Kühner) Singer	odourless	1/189	
<i>Hemimycena mairei</i> (M. E. Gilbert) Singer	lacks any smell	1/214	
<i>Hemimycena mauretanica</i> (Maire) Singer	odourless	1/188	
<i>Hemimycena tortuosa</i>	odourless	1/188	
<i>Hemipholiota heteroclita</i> (Fr.) Bon	striking sweetish, aromatic	1/607	
<i>Hemipholiota populnea</i> (Pers. : Fr.) Bon	insignificant	1/607	
			not distinctive when young, although decaying
<i>Hericium cirrhatum</i> (Pers.) Nikol.	lacks a striking smell	2/1058	specimens give off a nauseating smell (<i>a</i>)
<i>Hericium coralloides</i> (Scop.) Pers.		<i>a</i>	not distinctive
<i>Hericium erinaceum</i> (Bull. : Fr.) Pers.		<i>a</i>	not distinctive
<i>Hericium erinaceus</i> (Bull. : Fr.) Pers.	somewhat fruity	2/1058	
<i>Heterobasidion annosum</i> (Fr. : Fr.) Bref.		<i>a</i>	not distinctive
<i>Hodophilus atropunctus</i> (Pers. : Fr.) Birkebak & Adamcik	not distinct	1/164	
<i>Hodophilus foetens</i> (W. Phillips) Birkebak & Adamcik agg.	naphthalene	1/164	

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<i>Hortiboletus engelii</i> (Hlaváček) Biketova & Wasser		<i>a</i>	not distinctive
<i>Hortiboletus rubellus</i> (Krombh.) Simonini, Vizzini & Gelardi		<i>a</i>	faint pleasant
<i>Humidicutis calyptriformis</i> (Berk.) Vizzini & Ercole		<i>a</i>	not distinctive
<i>Hydnellum caeruleum</i> (Hornem. : Fr.) P. Karst.	almost odourless or smells farinaceous	2/1068	
<i>Hydnellum conrescens</i> (Pers.) Banker		<i>a</i>	slightly farinaceous
<i>Hydnellum ferrugineum</i> (Fr. : Fr.) P. Karst.	farinaceous	2/1064	
<i>Hydnellum peckii</i> Banker		<i>a</i>	not significant
<i>Hydnellum scrobiculatum</i> (Fr.) P. Karst.		<i>a</i>	not significant
<i>Hydnellum spongiosipes</i> (Peck) Pouzar	mealy	2/1065	
<i>Hydnellum suaveolens</i> (Scop. : Fr.) P. Karst.	strong coumarin, aniseed or lavender	2/1068	
<i>Hydnum albidum</i> Peck	pleasant	2/1074	
<i>Hydnum magnorufescens</i>	fruity	2/1073	
<i>Hydnum repandum</i> L. : Fr.		<i>a</i>	not distinctive
<i>Hydnum rufescens</i> Fr. : Fr.		<i>a</i>	not distinctive
<i>Hydropus floccipes</i> (Fr.) Singer	no significant smell	1/184	
<i>Hygrocybe acutoconica</i> (Clem.) Singer		<i>a</i>	not distinctive
<i>Hygrocybe acutoconica</i> (Clem.) Singer var. <i>konradii</i> (R. Haller Aar.) Boertm.		<i>a</i>	not distinctive
<i>Hygrocybe acutoconica</i> (Clem.) Singer var. <i>langei</i> (Kühner) Bon		<i>a</i>	not distinctive
<i>Hygrocybe aurantiosplendens</i> R. Haller Aar.		<i>a</i>	not distinctive
<i>Hygrocybe calyptriformis</i> (Berk. & Broome) Fayod		<i>a</i>	not distinctive
<i>Hygrocybe cantharellus</i> (Schwein. : Fr.) Murrill	insignificant	1/152	
<i>Hygrocybe ceracea</i> (Fr. : Fr.) P. Kumm.	insignificant	1/151	
<i>Hygrocybe chlorophana</i> (Fr. : Fr.) Wünsche	not distinct	1/150	
<i>Hygrocybe citrinovirens</i> (J. E. Lange) Jul. Schäff.		<i>a</i>	not distinctive
<i>Hygrocybe coccinea</i> (Schaeff. : Fr.) P. Kumm.	does not have a distinct smell	1/155	
<i>Hygrocybe coccinea</i> (Schaeff. : Fr.) P. Kumm. var. <i>umbonata</i> Herink		<i>a</i>	not distinctive
<i>Hygrocybe conica</i> (Schaeff. : Fr.) P. Kumm. var. <i>conicoides</i> (P. D. Orton) Boertm.		<i>a</i>	not distinctive
<i>Hygrocybe conicoides</i> (P. D. Orton) P. D. Orton & Watling		<i>a</i>	no smell
<i>Hygrocybe fornicata</i> (Fr.) Singer		<i>a</i>	not distinctive
<i>Hygrocybe glutinipes</i> (J. E. Lange) R. Haller Aar.		<i>a</i>	not distinctive
<i>Hygrocybe helobia</i> (Arnolds) Bon	garlic	1/153	not distinctive; the crushed gills smell like garlic (to

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			detect the odour it may be necessary to enclose the material in a sealed box for a while) (<i>a</i>)
<i>Hygrocybe insipida</i> (S. Lundell) M. M. Moser	insignificant	1/154	
<i>Hygrocybe intermedia</i> (Pass.) Fayod	not distinct	1/153	
<i>Hygrocybe laeta</i> (Pers. : Fr.) P. Kumm.	strange like burnt rubber	1/145	
<i>Hygrocybe miniata</i> (Fr. : Fr.) P. Kumm.	no smell	1/154	
			slightly nitrous, and old fruitbodies may smell
<i>Hygrocybe ovina</i> (Bull. : Fr.) Kühner		<i>a</i>	unpleasant
<i>Hygrocybe pratensis</i> (Pers. : Fr.) Murrill		<i>a</i>	not distinctive
<i>Hygrocybe punicea</i> (Fr. : Fr.) P. Kumm.	insignificant	1/157	
			slight soapy or oily odour reminiscent of bed bugs or shield bugs (<i>a</i>)
<i>Hygrocybe quieta</i> (Kühner) Singer	stink bugs	1/151	
	during decay emits a characteristic honey-like smell	1/154	
<i>Hygrocybe reidii</i> Kühner			
<i>Hygrocybe russocoriacea</i> (Berk. & T. K. Mill.) P. D. Orton & Watling		<i>a</i>	Russian leather or sandalwood
<i>Hygrocybe spadicea</i> (Scop. : Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Hygrocybe splendidissima</i> (P. D. Orton) M. M. Moser	honey like during the decay process	1/155	
<i>Hygrophoropsis aurantiaca</i> (Wulfen : Fr.) Maire		<i>a</i>	mild mushroomy but not distinctive
<i>Hygrophoropsis spec.</i>	odourless	1/101	
<i>Hygrophorus agathosmus</i> (Fr.) Fr.	strong almond soap	1/172	
<i>Hygrophorus atramentosus</i> H. Haas & R. Haller Aar.	lacks a distinctive odour	1/175	
<i>Hygrophorus chrysodon</i> (Batsch : Fr.) Fr.	odourless	1/167	mushroomy (<i>a</i>)
<i>Hygrophorus cossus</i> (Sowerby) Fr. ss. Bres., M. Moser		<i>a</i>	like injured larvae of the Goat Moth, <i>Cossus cossus</i>
<i>Hygrophorus discoideus</i> (Pers. : Fr.) Fr.	no distinct smell	1/171	
<i>Hygrophorus discoxanthus</i> (Fr.) Rea	aromatic	1/167	
			like injured larvae of the Goat Moth, <i>Cossus cossus</i>
<i>Hygrophorus eburneus</i> (Bull. : Fr.) Fr.	somewhat smelly	1/166	(<i>a</i>)
<i>Hygrophorus exiguus</i>	odourless	1/172	
<i>Hygrophorus hedrychii</i> (Velen.) K. Kult		<i>a</i>	strong reminiscent of crushed Goat Moth larvae
<i>Hygrophorus hypothejus</i> (Fr. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Hygrophorus latitabundus</i> Britzelm.	± sweetish	1/173	faintly mushroomy (<i>a</i>)
<i>Hygrophorus lindtneri</i> M. M. Moser ss. str.	lacks a distinct smell	1/171	
<i>Hygrophorus mesotephrus</i> Berk.	+ - odourless	1/172	

Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
<i>Hygrophorus nemoreus</i> (Pers. : Fr.) Fr.		<i>a</i>	faint mealy / floury
<i>Hygrophorus penarius</i> Fr.	weak	1/167	
<i>Hygrophorus piceae</i> Kühner	rather weak	1/166	
<i>Hygrophorus poetarum</i> R. Heim	fruity	1/170	
<i>Hygrophorus pustulatus</i> (Pers. : Fr.) Fr.	odourless	1/172	
<i>Hygrophorus russula</i> (Schaeff. : Fr.) Quél.		<i>b</i>	no smell
<i>Hygrophorus unicolor</i> Gröger	lacks a distinct smell	1/171	
<i>Hymenochaete corrugata</i> (Fr. : Fr.) Lév.		<i>a</i>	not distinctive
<i>Hymenochaete rubiginosa</i> (Dicks. : Fr.) Lév.		<i>a</i>	not distinctive
<i>Hymenopellis radicata</i> (Relhan) R. H. Petersen		<i>a</i>	not significant
<i>Hymenoscyphus fagineus</i> (Pers. : Fr.) Dennis	markedly of perfumed chewing gum	2/1433	
<i>Hypholoma capnoides</i> (Fr. : Fr.) P. Kumm.		<i>a</i>	not significant
<i>Hypholoma fasciculare</i> (Huds. : Fr.) P. Kumm.		<i>b</i>	slight
<i>Hypholoma lateritium</i> (Schaeff. : Fr.) P. Kumm.		<i>a</i>	not significant
<i>Hypholoma marginatum</i> (Pers. : Fr.) J. Schröt.		<i>a</i>	not significant
<i>Hypholoma radicosum</i> J. E. Lange	perfumed	1/586	
<i>Hypoxylon fragiforme</i> (Pers. : Fr.) J. Kickx f.		<i>a</i>	not distinctive
<i>Hypoxylon fuscum</i> (Pers. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Hypoxylon macrocarpum</i> Pouzar	young stromata and the wood underneath		
<i>Hypsizygus ulmarius</i> (Bull. : Fr.) Redhead	smell strongly of vanilla	2/1560	
<i>Imleria badia</i> (Fr. : Fr.) Vizzini		<i>a</i>	insignificant or sometimes slightly mealy
<i>Infundibulicybe geotropa</i> (Bull.) Harmaja		<i>a</i>	not distinctive
<i>Inocybe adaequata</i> (Britzelm.) Sacc.	sweetish-aromatic	1/114	
<i>Inocybe aeruginascens</i> Babos	strong earthy-sweetish or like beetroot	1/656	
<i>Inocybe agardhii</i> (N. Lund) P. D. Orton	soap like	1/658	
<i>Inocybe bongardii</i> (Weinm.) Quél.	do not smell spermatic	1/678	
<i>Inocybe bongardii</i> (Weinm.) Quél. var. <i>pisciodora</i> (Donadini & RiOUSset) Kuyper	distinct, sweetish, nauseous soap like	1/655	
<i>Inocybe calamistrata</i> (Fr. : Fr.) Gillet	+ - fishy	1/655	
<i>Inocybe cookei</i> Bres.	faint to strong fish-like	1/658	
<i>Inocybe corydalina</i> Quél.	honey	1/654	
<i>Inocybe corydalina</i> Quél. var. <i>erinaceomorpha</i> (Stangl & J. Veselský) Kuyper	sweetish, perfume-like, nauseating	1/653	
	distinct, cider	1/561	

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<i>Inocybe dulcamara</i> (Alb. & Schwein.) P. Kumm.	do not smell spermatic	1/678	
<i>Inocybe erubescens</i> A. Blytt	unpleasant, somewhat ± sweetish soap like	1/657 1/653/	
<i>Inocybe fraudans</i> (Britzelm.) Sacc.	sweetish odours /nauseatingly cider-smelling	654	
<i>Inocybe geophylla</i> (Fr. : Fr.) P. Kumm.	spermatic	1/670	slightly earthy or mealy (a)
<i>Inocybe geophylla</i> (Fr. : Fr.) P. Kumm. var. <i>lilacina</i> (Peck) Gillet	distinctly spermatic	1/671	slightly earthy or mealy (a)
<i>Inocybe glabripes</i> Ricken	spermatic	1/674	
<i>Inocybe godeyi</i> Gillet	somewhat sour	1/656	slightly spermatic (b)
<i>Inocybe griseolilacina</i> J. E. Lange		d	spermatic (or not recorded)
<i>Inocybe haemacta</i> (Berk. & Cooke) Sacc.	strong horse stable	1/658	
<i>Inocybe hirtella</i> Bres.	marzipan or bitter almond	1/655	
<i>Inocybe melanopus</i> D. E. Stuntz	not striking	1/675	
<i>Inocybe mixtilis</i> (Britzelm.) Sacc.	+ - spermatic	1/659	
<i>Inocybe muricellata</i> Bres.	spermatic	1/662	
<i>Inocybe pelargonium</i> Kühner	<i>Pelargonium</i>	1/663	
<i>Inocybe personata</i> Kühner		d	distinctive but not spermatic
<i>Inocybe praetervisa</i> Quél.	+ - spermatic	1/659	
<i>Inocybe pusio</i> P. Karst.		a	slightly spermatic
<i>Inocybe quietiodor</i> Bon	stink bugs	1/654	
<i>Inocybe rimosa</i> (Bull. : Fr.) P. Kumm.	spermatic	1/676	slightly mealy (a)
<i>Inocybe sambucina</i> (Fr. : Fr.) Quél.	+ - spermatic	1/669	
<i>Inocybe serotina</i>	+ - odourless	1/665	
<i>Inocybe sindonia</i> (Fr.) P. Karst.		a	not distinctive
<i>Inocybe stellatospora</i> (Peck) Sacc.		a	not distinctive
<i>Inocybe terrigena</i> (Fr.) Kuyper	do not smell spermatic	1/678	
<i>Inocybe whitei</i> (Berk. & Broome) Sacc.	spermatic	1/657	
<i>Inonotus hispidus</i> (Bull. : Fr.) P. Karst.		a	not distinctive
<i>Inonotus radiatus</i> (Sowerby : Fr.) P. Karst.		a	not distinctive
<i>Ischnoderma resinosum</i> (Fr.) P. Karst.	somewhat like oranges (flesh)	2/925	
<i>Kretzschmaria deusta</i> (Hoffm.) P. M. D. Martin		a	not distinctive
<i>Kuehneromyces mutabilis</i> (Schaeff. : Fr.) Singer & A. H. Sm.	aromatic	1/606	
<i>Laccaria amethystina</i> (Huds.) Cooke		b	slightly fruity
<i>Laccaria bicolor</i> (Maire) P. D. Orton		a	not distinctive
<i>Laccaria fraterna</i> (Cooke & Massee) Pegler		a	faintly earthy but not distinctive

Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
<i>Laccaria laccata</i> (Scop. : Fr.) Cooke agg.		<i>a</i>	not distinctive
<i>Laccaria proxima</i> (Boud.) Pat.		<i>a</i>	mild but not distinctive
<i>Laccaria tortilis</i> (Bolton) Cooke		<i>a</i>	not distinctive
<i>Lacrymaria lacrymabunda</i> (Bull. : Fr.) Pat.	lacks a distinct smell	1/558	
<i>Lactarius aurantiacus</i> (Pers. : Fr.) Gray	almost odourless	1/431	faint but unpleasant (<i>a</i>)
<i>Lactarius azonites</i> (Bull.) Fr.		<i>a</i>	faint but pleasant fruity
<i>Lactarius blennius</i> (Fr. : Fr.) Fr.		<i>a</i>	not significant
			not distinctive when fresh, but they release a strong odour very reminiscent of curry (or freshly-mown grass) when being dried, or similar to maple syrup (<i>a</i>)
<i>Lactarius camphoratus</i> (Bull. : Fr.) Fr.	camphorous to curry-like smell	1/429	
<i>Lactarius chrysorrheus</i> Fr.	weak	1/439	
<i>Lactarius decipiens</i> Quél.	<i>Pelargonium</i>	1/429	
<i>Lactarius deliciosus</i> (L. : Fr.) Gray		<i>a</i>	fruity
<i>Lactarius deterrimus</i> Gröger		<i>a</i>	slightly fruity
<i>Lactarius evosmus</i> Kühner & Romagn.	strongly fruity	1/420	
		1/431/	
<i>Lactarius fulvissimus</i> Romagn.	pungent / strong	428	unpleasant spicy (<i>a</i>)
	coconut / pleasant smell of cakes made using coconut	1/433	
<i>Lactarius glyciosmus</i> (Fr. : Fr.) Fr.		1/447	fenugreek (Chiron & Michelot, 2005)
<i>Lactarius helvus</i> (Fr. : Fr.) Fr.	strong curry, stock cubes or lovage	1/431	
<i>Lactarius hepaticus</i> Plowr.	somewhat stinkbug like		
	recalling that of <i>Hygrophorus discoxanthus</i> (page 167) or the larvae of <i>Cossus cossus</i>	1/426	
<i>Lactarius hysginus</i> (Fr. : Fr.) Fr.	after breaking is distinctly earthy	1/433	earthy or of raw potato (<i>a</i>)
<i>Lactarius mammosus</i> Fr.		<i>a</i>	slight fruity
<i>Lactarius pallidus</i> (Pers. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Lactarius piperatus</i> (L. : Fr.) Pers.		<i>a</i>	slight of turpentine or <i>Pelargonium</i>
<i>Lactarius pubescens</i> (Schrad.) Fr.		<i>a</i>	slight fruity
<i>Lactarius pyrogalus</i> (Bull. : Fr.) Fr.		1/432	unpleasant oily smell of bedbugs (<i>a</i>)
<i>Lactarius quietus</i> (Fr. : Fr.) Fr.	stink bug	1/436	
<i>Lactarius repraesentaneus</i> Britzelm.	recalls hyacinth flowers		
<i>Lactarius rufus</i> (Scop. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Lactarius scrobiculatus</i> (Scop. : Fr.) Fr.		<i>a</i>	faintly fruity
<i>Lactarius serifluus</i> (DC. : Fr.) Fr.	stink bug or lovage like	1/432	slight, of Fenugreek or bugs (<i>a</i>)
<i>Lactarius subdulcis</i> (Pers. : Fr.) Gray	rubber	1/429	

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<i>Lactarius tabidus</i> Fr.	almost odourless	1/429	
<i>Lactarius torminosus</i> (Schaeff. : Fr.) Pers.		a/b	slight odour of turpentine (a); fruity (b)
<i>Lactarius turpis</i> (Weinm.) Fr.		a	not significant
<i>Lactarius uvidus</i> (Fr. : Fr.) Fr.		a	slightly fruity but indistinctive
<i>Lactarius vellereus</i> (Fr. : Fr.) Fr.		a	not distinctive
<i>Lactarius vietus</i> (Fr. : Fr.) Fr.		a	not distinctive
			herring (b); rather fishy (like a dead shad, the most
<i>Lactarius volemus</i> (Fr. : Fr.) Fr.		b/d	malodorous freshwater fish) (d)
<i>Lactifluus subvolemus</i> Van de Putte & Verbeke	shellfish	1/416	
<i>Lactifluus volemus</i> (Fr.) Kuntze agg.	shellfish	1/416	
<i>Laetiporus sulphureus</i> (Bull. : Fr.) Murrill		a	mushroomy
<i>Lanzia echinophila</i> (Bull. : Fr.) Korf		a	not distinctive
<i>Leccinum aurantiacum</i> (Bull.) Gray		a	faint pleasant but not distinctive
<i>Leccinum crocipodium</i> (Letell.) Watling		a	not distinctive
<i>Leccinum cyaneobasileucum</i> Lannoy & Estadès var.			
<i>brunneogriseolum</i> (Lannoy & Estadès) Lannoy & Estadès		a	faint pleasant but not distinctive
<i>Leccinum holopus</i> (Rostk.) Watling		a	not distinctive
<i>Leccinum pseudoscabrum</i> (Kallenb.) Šutara		a	not distinctive
<i>Leccinum scabrum</i> (Bull. : Fr.) Gray		a	faint pleasant but not distinctive
<i>Leccinum variicolor</i> Watling		a	faint pleasant but not distinctive
<i>Leccinum versipelle</i> (Fr.) Snell		a	not distinctive
<i>Lentinellus auricula</i> (Fr.) E. Ludw.	do not smell of aniseed	1/76	
<i>Lentinellus bisus</i> (Quél.) Kühner & Maire	do not smell of aniseed	1/76	
<i>Lentinellus castoreus</i> (Fr.) Konrad & Maubl.	do not smell of aniseed	1/76	
<i>Lentinellus cochleatus</i> (Pers. : Fr.) P. Karst.	strong aniseed smell or, rarely, no odour	1/76	
<i>Lentinellus cochleatus</i> var. <i>inolens</i>	odourless (Chiron & Michelot, 2005)		
<i>Lentinellus degener</i> Kalchbr.	do not smell of aniseed	1/76	
<i>Lentinellus flabelliformis</i> (Bolton : Fr.) S. Ito	do not smell of aniseed	1/76	
<i>Lentinellus herbarum</i>	odourless	1/77	
<i>Lentinellus inolens</i> (Konrad & Maubl.) Konrad & Maubl.	do not smell of aniseed	1/76	
<i>Lentinellus laurocerasi</i> (Berk. & Broome) P. D. Orton	do not smell of aniseed	1/76	
<i>Lentinellus micheneri</i> (Berk. & M. A. Curtis) Pegler	do not smell of aniseed	1/76	
<i>Lentinellus omphalodes</i> (Fr.) P. Karst.	do not smell of aniseed	1/76	
<i>Lentinellus tridentinus</i> (Sacc. & Syd.) Singer	do not smell of aniseed	1/76	

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<i>Lentinellus ursinus</i> (Fr. : Fr.) Kühner	do not smell of aniseed	1/76	
<i>Lentinellus vulpinus</i> (Sowerby : Fr.) Kühner & Maire	do not smell of aniseed	1/76	
<i>Lentinus tigrinus</i> (Bull. : Fr.) Fr.	odourless	1/80	faint fruity (a)
<i>Lenzites betulinus</i> (L. : Fr.) Fr.		a	not distinctive
<i>Leotia lubrica</i> (Scop. : Fr.) Pers.		a	not distinctive
<i>Lepiota aspera</i> (Pers. : Fr.) Quél.		b	strong
<i>Lepiota boudieri</i> Bres.	faint	1/331	
<i>Lepiota brunneoincarnata</i> Chodat & C. Martin		a	faint fruity
<i>Lepiota castanea</i> Quél.	cedar wood	1/331	
<i>Lepiota clypeolaria</i> (Bull. : Fr.) P. Kumm.		b	unpleasant
<i>Lepiota cristata</i> (Bolton : Fr.) P. Kumm.	unpleasant metallic or gas like	1/326	unpleasant rubbery (a); sharply fragrant (d)
<i>Lepiota felina</i> (Pers.) P. Karst.		a	earthy
<i>Lepiota grangei</i> (Eyre) Kühner		a	unpleasant sickly sweet
<i>Lepiota helveola</i> Bres.		b	slightly sweet
<i>Lepiota ignivolvata</i> Bousset & Joss.	unpleasant, ± like <i>Lepiota cristata</i>	1/328	reminiscent of rubber (a)
<i>Lepiota lilacea</i> Bres.	sweetish	1/327	
<i>Lepiota magnispora</i> Murrill		a	not significant
<i>Lepiota oreadiformis</i> Velen.		a	not significant
<i>Lepiota subincarnata</i> J. E. Lange		a	faint sweet
<i>Lepista flaccida</i> (Sowerby : Fr.) Pat.	neutral	1/112	pleasantly sweet (a)
<i>Lepista flaccida</i> (Sowerby : Fr.) Pat. var. <i>gilva</i> (Pers. : Fr.) Krieglst.	neutral	1/112	
<i>Lepista irina</i> (Fr.) H. E. Bigelow	strongly perfumed smell like that of Iris roots	1/249	flowery; perfumed, like flowers (irises and violets) (a)
<i>Lepista martiorum</i> (J. Favre) Bon	apparently have a more noticeable odour	1/243	
<i>Lepista multiformis</i> (Romell) Gulden		a	slightly aromatic
<i>Lepista nuda</i> (Bull. : Fr.) Cooke	perfumed	1/251	faint aniseed (a)
<i>Lepista ovispora</i> (J. E. Lange) Gulden	neutral	1/113	
<i>Lepista panaeolus</i> (Fr.) P. Karst.	± perfumed	1/249	
<i>Lepista saeva</i> (Fr.) P. D. Orton		a	strongly perfumed
<i>Lepista sordida</i> (Schumach. : Fr.) Singer var. <i>aianthina</i> (Bon) Bon		a	slight
<i>Leptopodia elastica</i> (Bull. : Fr.) Boud.		b	peculiar
<i>Leratiomyces ceres</i> (Cooke & Masee) Spooner & Bridge		a	not distinctive
<i>Leratiomyces squamosus</i> (Pers.) Bridge & Spooner		a	not distinctive

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<i>Leucoagaricus crystallifer</i> Vellinga		<i>a</i>	not significant
<i>Leucoagaricus leucothites</i> (Vittad.) Wasser		<i>a</i>	not significant
<i>Leucoagaricus meleagris</i> (Sowerby) Singer		<i>b</i>	unpleasant sweat, fresh flour, ink
<i>Leucocoprinus badhamii</i> (Berk. & Broome) Locq.		<i>a</i>	mushroomy
<i>Leucocoprinus birnbaumii</i> (Corda) Singer		<i>a</i>	not significant
<i>Leucocortinarius bulbiger</i> (Alb. & Schwein. : Fr.) Singer	insignificant	1/257	
<i>Leucocybe candicans</i> (Pers.) Vizzini, P. Alvarado, G. Moreno & Consiglio	variable, from almost absent to somewhat sour, grass-like or like crushed tomato leaves	1/120	
<i>Leucocybe connata</i> (Schumach.) Vizzini, P. Alvarado, G. Moreno & Consiglio	characteristic: perfumed sweetish nauseous, or like bitter almond	1/119	
<i>Leucopaxillus cerealis</i> (Lasch) Singer	pleasant	1/109	
<i>Leucopaxillus giganteus</i> (Sowerby : Fr.) Singer		<i>a</i>	faint but pleasant
<i>Leucopaxillus nauseosodulcis</i>	very unpleasant	1/109	
<i>Leucopaxillus tricolor</i> (Pers.) Kühner	somewhat nauseous	1/107	
<i>Limacella delicata</i> (Fr.) A. H. Sm.	almost odourless	1/351	
<i>Loweomyces wynneae</i> (Berk. & Broome) Jülich	aromatic	2/909	
<i>Lycoperdon echinatum</i> Pers. : Pers.		<i>a</i>	not distinctive
<i>Lycoperdon excipuliforme</i> (Scop.) Pers.		<i>a</i>	not distinctive faint but rather unpleasant gassy smell when the flesh
<i>Lycoperdon foetidum</i> Bonord.		<i>a</i>	is cut
<i>Lycoperdon lividum</i> Pers.		<i>a</i>	not distinctive
<i>Lycoperdon mammiforme</i> Pers.		<i>a</i>	not distinctive faint but rather unpleasant gassy smell when the flesh
<i>Lycoperdon nigrescens</i> Pers.		<i>a</i>	is cut
<i>Lycoperdon perlatum</i> Pers. : Pers.		<i>a</i>	not distinctive
<i>Lycoperdon pratense</i> Pers. : Pers.		<i>a</i>	not significant
<i>Lycoperdon pyriforme</i> Schaeff. : Pers.		<i>a</i>	unpleasant gas like
<i>Lycoperdon utriforme</i> Bull.		<i>a</i>	not distinctive
<i>Lyomyces sambuci</i> (Pers. : Fr.) P. Karst.	odourless	2/1007	
<i>Lyophyllum anthracophilum</i> (Lasch) M. Lange & Sivertsen	+/- evident rancid-farinaceous	1/287	
<i>Lyophyllum connatum</i> (Schumach. : Fr.) Singer		<i>a</i>	not significant
<i>Lyophyllum decastes</i> (Fr. : Fr.) Singer	spermatic	1/254	
<i>Lyophyllum favrei</i> R. Haller Aar. & R. Haller Suhr	strongly farinaceous	1/243	
<i>Lyophyllum fumosum</i> (Pers. : Fr.) P. D. Orton	± odourless	1/254	

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<i>Lyophyllum hebelomoides</i> (Gerhardt) E. Ludw.	+ - inodorous	1/243	
<i>Lyophyllum incarnatobrunneum</i> Ew. Gerhardt	faint farinaceous	1/244	
<i>Lysurus cruciatus</i>	unpleasant	2/1227	
<i>Macrocystidia cucumis</i> (Pers. : Fr.) Joss.	strongly of cucumber or pickled herring	1/288	strong, reminiscent of cucumbers or fish (<i>d</i>)
<i>Macrocystidia cucumis</i> (Pers. : Fr.) Joss. var. <i>latifolia</i> (J. E. Lange) Imazeki & Hongo	possibly weaker than in the main variety	1/288	
<i>Macrolepiota excoriata</i> (Schaeff. : Fr.) Wasser		<i>a</i>	faint
<i>Macrolepiota mastoidea</i> (Fr. : Fr.) Singer		<i>a</i>	slight mushroomy
<i>Macrolepiota phaeodisca</i>		<i>a</i>	not distinctive
<i>Macrolepiota procera</i> (Scop. : Fr.) Singer		<i>a</i>	not distinctive
<i>Macrotyphula fistulosa</i> (Holmsk. : Fr.) R. H. Petersen		<i>a</i>	not distinctive
<i>Macrotyphula juncea</i> (Alb. & Schwein. : Fr.) Berthier		<i>a</i>	sour and unpleasant
<i>Marasmiellus candidus</i> (Bolton : Fr.) Singer		<i>d</i>	not distinctive
<i>Marasmiellus ramealis</i> (Bull. : Fr.) Singer		<i>a</i>	not distinctive
<i>Marasmius bulliardii</i> Quél.		<i>a</i>	not distinctive
<i>Marasmius cohaerens</i> (Pers. : Fr.) Cooke & Quél.	odourless	1/309	
<i>Marasmius collinus</i> (Scop. : Fr.) Singer	unpleasant metallic or gas like	1/308	
<i>Marasmius hudsonii</i> (Pers. : Fr.) Fr.		<i>a</i>	not distinctive
	recalling bitter almonds or more pleasantly spicy	1/308	
<i>Marasmius oreades</i> (Bolton : Fr.) Fr.		<i>d</i>	not distinctive
<i>Marasmius quercophilus</i> Pouzar		<i>a</i>	not distinctive
<i>Marasmius rotula</i> (Scop. : Fr.) Fr.		<i>b</i>	garlic
<i>Marasmius scorodonius</i> (Fr. : Fr.) Fr.		<i>d</i>	not distinctive
<i>Marasmius siccus</i>		<i>a</i>	not distinctive
<i>Marasmius wynneae</i> Berk. & Broome		<i>a</i>	not distinctive
<i>Marasmius wynnei</i> Berk. & Broome		<i>a</i>	not distinctive
<i>Megacollybia platyphylla</i> (Pers. : Fr.) Kotl. & Pouzar		<i>a</i>	not significant
<i>Melanogaster ambiguus</i> (Vittad.) Tul. & Tul.	unpleasant	2/1264	
<i>Melanogaster broomeanus</i> Berk.	sweetish-nauseous	2/1264	
<i>Melanogaster spec.</i>	+ - foul	2/1264	
<i>Melanogaster variegatus</i> (Vittad.) Tul. & C. Tul.	strong fruity	2/1268	
<i>Melanoleuca cognata</i> (Fr.) Konrad & Maubl.		<i>a</i>	farinaceous
<i>Melanoleuca grammopodia</i> (Bull. : Fr.) Pat.		<i>a</i>	mice or boiled cabbage
<i>Melanoleuca melaleuca</i> (Pers. : Fr.) Murrill ss. Funga Nordica		<i>a</i>	not distinctive

Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
<i>Melanoleuca polioleuca</i> (Fr. : Fr.) Kühner & Maire		<i>a</i>	faintly mealy
<i>Melanoleuca verrucipes</i> (Fr.) Singer	somewhat aniseed	1/248	faint, of aniseed or of almonds (<i>a</i>)
<i>Meripilus giganteus</i> (Pers. : Fr.) P. Karst.		<i>a</i>	not distinctive
			pleasant sweet odour when young; less so when
<i>Meripilus spec.</i>		<i>a</i>	decaying
<i>Merulicium fusisporum</i> (Romell) J. Erikss. & Ryvarden	phenolic to naphthalene like	2/976	
			not distinctive, any odour tends to be masked by the
<i>Microcollybia tuberosa</i> (Bull. : Fr.) Lennox		<i>a</i>	smell of the rotting mushroom on which they grow
<i>Microglossum olivaceum</i> (Pers. : Fr.) Gillet		<i>a</i>	not significant
<i>Micromphale perforans</i> (H. Hoffm. : Fr.) Gray		<i>d</i>	strong and foul, but not of garlic or onions
<i>Micropsalliota geesterani</i>	insignificant	1/502	
<i>Mitrula paludosa</i> Fr. : Fr.		<i>a</i>	not distinctive
<i>Mollisia cinerea</i> (Batsch : Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Morchella elata</i> Fr. : Fr.		<i>a</i>	not distinctive
<i>Morchella esculenta</i> (L.) Pers.	pleasant, spicy	2/1281	
<i>Mutinus caninus</i> (Huds. : Pers.) Fr.		<i>b</i>	slightly unpleasant
<i>Mycena abramsii</i> (Murrill) Murrill	faint nitrous when picked	1/218	
<i>Mycena acicula</i> (Schaeff. : Fr.) P. Kumm.		<i>a</i>	not distinctive
<i>Mycena adonis</i> (Bull. : Fr.) Gray		<i>a</i>	not distinctive
<i>Mycena aetites</i> (Fr.) Quél.	radishy	1/218	faint, of bleach (ammonia) or of radish (<i>a</i>)
<i>Mycena alcalina</i> (Fr. : Fr.) P. Kumm. ss. auct. p. p.		<i>d</i>	bleach like odour or reminiscent of iodine
<i>Mycena arcangeliana</i> Bres.	strongly of iodoform (keep in a box first)	1/220	iodine (<i>a</i>)
<i>Mycena bulbosa</i> (Cejp) Kühner	inodorous	1/206	
<i>Mycena capillaripes</i> Peck	nitrous	1/201	radish-like (<i>d</i>)
<i>Mycena chlorantha</i>	iodoform when drying	1/220	
<i>Mycena cinerella</i> (P. Karst.) P. Karst.	strong farinaceous	1/214	
<i>Mycena citrinomarginata</i> Gillet	faint ± radish like	1/199	
<i>Mycena corynephora</i> Maas Geest.	odourless	1/208	
<i>Mycena crocata</i> (Schrad. : Fr.) P. Kumm.		<i>a</i>	faint of bleach (ammonia) or of radish
	cedar wood like smell before bruising. when		
<i>Mycena diosma</i> Krieglst. & Schwöbel	bruised it smells of radish	1/196	
<i>Mycena epipterygia</i> (Scop. : Fr.) Gray		<i>a</i>	faintly mealy
<i>Mycena filopes</i> (Bull. : Fr.) P. Kumm.	iodoform	1/221	bleachlike or reminiscent of iodine (<i>d</i>)
<i>Mycena flavescens</i> Velen.	after breaking is distinctly earthy	1/219	earthy or of raw potato (<i>a</i>)

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<i>Mycena floridula</i> (Fr.) P. Karst.			<i>a</i> not distinctive
<i>Mycena galericulata</i> (Scop. : Fr.) Gray			<i>d</i> not distinctive, or very slightly mealy
<i>Mycena galopus</i> (Pers. : Fr.) P. Kumm.	insignificant	1/205	odour slight, earthy or faintly of radish (<i>a</i>)
<i>Mycena haematopus</i> (Pers. : Fr.) P. Kumm.			<i>a</i> not distinctive
<i>Mycena inclinata</i> (Fr.) Quél.	strong wet paint	1/221	slightly farinaceous or rancid (<i>a</i>)
<i>Mycena latifolia</i> (Peck) A. H. Sm.	no smell	1/219	mealy (<i>d</i>)
<i>Mycena leptcephala</i> (Pers. : Fr.) Gillet	nitrous	1/178	bleach-like (<i>d</i>)
<i>Mycena maculata</i> P. Karst.	odourless	1/222	
<i>Mycena megaspora</i> Kauffman			<i>a</i> slight of radish
<i>Mycena metata</i> (Fr. : Fr.) P. Kumm.	iodoform	1/221	
<i>Mycena niveipes</i> (Murrill) Murrill	faint nitrous when picked	1/218	bleach like or reminiscent of iodine (<i>d</i>)
<i>Mycena olida</i> Bres.			<i>d</i> mealy
<i>Mycena pearsoniana</i> Singer	radish	1/197	
<i>Mycena pelianthina</i> (Fr. : Fr.) Quél.	radish	1/198	
<i>Mycena plumipes</i> (Kalchbr.) P.-A. Moreau	nitrous	1/219	
<i>Mycena polygramma</i> (Bull. : Fr.) Gray			<i>a</i> not distinctive
<i>Mycena pura</i> (Pers.) P. Kumm.	radish before bruising	1/196	strong of radish when crushed (<i>a</i>)
<i>Mycena renati</i> Quél.	nitrous	1/201	
<i>Mycena rosea</i> (Bull.) Gramberg	radish	1/197	
<i>Mycena septentrionalis</i>	<i>Pelargonium</i>	1/220	
<i>Mycena silvae-pristinae</i>	wet paint smell or branching cystidia	1/224	
<i>Mycena silvaepristinae</i>	no smell	1/221	
<i>Mycena stipata</i> Maas Geest. & Schwöbel	strong nitrous (like a swimming pool)	1/218	
<i>Mycena tintinnabulum</i> (Fr.) Quél.	somewhat spermatic	1/214	
<i>Mycena vitilis</i> (Fr.) Quél.	odourless	1/223	
<i>Mycena zephirus</i> (Fr. : Fr.) P. Kumm.	does not have a distinct smell	1/222	
<i>Mycetinis alliaceus</i> (Jacq. : Fr.) Earle	strongly garlic	1/303	
<i>Mycetinis epidryas</i> (Kühner) Antonín & Noordel.			<i>d</i> not distinctive
<i>Mycetinis querceus</i> (Britzelm.) Antonín & Noordel.	strongly garlic	1/303	
<i>Mycetinis scorodoni</i> (Fr. : Fr.) A. W. Wilson & Desjardin	strong garlic	1/303	garlic or onions (<i>d</i>)
<i>Mycetinis spec.</i>	stale garlic or old rubber-bands	1/303	
<i>Myriostoma coliforme</i> (With. : Pers.) Corda			<i>a</i> not significant
<i>Myxarium nucleatum</i> Wallr.			<i>a</i> not distinctive
<i>Myxomphalia maura</i> (Fr.) Hora	spermatic or farinaceous	1/103	

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<i>Naucoria amarescens</i> Quél.	may recall that of <i>Pelargonium</i> leaves	1/629	
<i>Naucoria escharioides</i> (Fr.) Quél.	indistinct	1/628	
<i>Naucoria geraniolens</i> (Courtec.) G. Keller	may recall that of <i>Pelargonium</i> leaves	1/629	
<i>Naucoria scolecina</i> (Fr.) Quél.	indistinct	1/628	
<i>Nectria cinnabarina</i> (Tode : Fr.) Fr.		<i>a</i>	not distinctive
<i>Neoboletus luridiformis</i> (Rostk.) Gelardi, Simonini & Vizzini		<i>a</i>	not distinctive
<i>Neobulgaria pura</i> (Pers. : Fr.) Petr.		<i>a</i>	not distinctive
<i>Neofavolus suavissimus</i> (Fr.) I. V. Zmitrovich & A. E. Kovalenko	strongly aniseed	1/79	
<i>Neohygrocybe ingrata</i> (J. P. Jensen & F. H. Møller) Herink	distinct nitrous	1/160	
<i>Neohygrocybe nitrata</i> (Pers.) Herink	distinct nitrous	1/161	
<i>Neohygrocybe ovina</i> (Bull.) Herink	rather unpleasant, nauseous or faintly nitrous	1/160	
<i>Neolentinus lepideus</i> (Fr. : Fr.) Redhead & Ginns		<i>a</i>	sometimes faintly of aniseed
<i>Neolentinus schaefferi</i> (Weinm.) Redhead & Ginns	lacks a distinct smell	1/81	
<i>Nidularia deformis</i> (Willd. : Pers.) Fr. & Nordholm		<i>a</i>	not significant
<i>Notholepista subzonalis</i>	without a distinct smell	1/106	
	sweetish-aromatic, sometimes almost		
<i>Odoria alborubescens</i>	nauseating	2/904	
<i>Omphalotus illudens</i>	distinctive and may be somewhat rancid	1/110	
<i>Omphalotus olearius</i> (DC. : Fr.) Singer ss. str.		<i>a</i>	strong but pleasant
<i>Osmoporus odoratus</i> (Wulfen : Fr.) Singer	orange to aniseed	2/868	
<i>Ossicaulis lachnopus</i> (Fr.) Contu	very strongly farinaceous	1/239	
<i>Otidea bufonia</i> (Pers. : Fr.) Boud.		<i>a</i>	not distinctive
<i>Otidea onotica</i> (Pers. : Fr.) Fuckel		<i>a</i>	not distinctive
<i>Oudemansiella mucida</i> (Schrader : Fr.) Höhn.		<i>a</i>	not distinctive
<i>Panaeolina foenisecii</i> (Pers. : Fr.) Maire		<i>a</i>	Slightly unpleasant but not distinctive
<i>Panaeolus fimicola</i> (Pers. : Fr.) Gillet		<i>a</i>	not distinctive
<i>Panaeolus papilionaceus</i> (Bull. : Fr.) Quél.		<i>a</i>	not distinctive
<i>Panaeolus semiovatus</i> (Sowerby : Fr.) S. Lundell & Nannf.		<i>a</i>	not distinctive
<i>Panellus stipticus</i> (Bull. : Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Panus conchatus</i> (Bull. : Fr.) Fr.		<i>b</i>	slightly aniseed
<i>Panus rudis</i> Fr.		<i>a</i>	not distinctive
<i>Parasola auricoma</i> (Pat.) Redhead, Vilgalys & Hopple		<i>a</i>	not distinctive
<i>Parasola conopilus</i> (Fr.) Örstadius & E. Larss.		<i>a</i>	not distinctive
<i>Parasola leioccephala</i> (P. D. Orton) Redhead, Vilgalys & Hopple		<i>a</i>	not distinctive

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<i>Parasola plicatilis</i> (Curtis) Redhead, Vilgalys & Hopple		<i>a</i>	not distinctive
<i>Paxillus involutus</i> (Batsch : Fr.) Fr.		<i>a</i>	not distinctive
<i>Paxina leucomelas</i> (Pers.) Kuntze		<i>b</i>	no smell
<i>Penicillium italicum</i>	strong lemon	2/1636	
<i>Peziza ammophila</i> Durieu & Mont.		<i>a</i>	not distinctive
<i>Peziza arvernensis</i> Boud.		<i>a</i>	not distinctive
<i>Peziza badia</i> Pers. : Fr.		<i>a</i>	not distinctive
<i>Peziza micropus</i> Pers. : Fr.		<i>a</i>	not distinctive
<i>Peziza violacea</i> Pers. : Fr. f. <i>terricola</i> Donadini		<i>a</i>	not distinctive
<i>Phaeocollybia arduennensis</i> Bon	earthy	1/623	
<i>Phaeocollybia christinae</i> (Fr.) R. Heim	marzipan	1/622	
<i>Phaeocollybia cidaris</i>	more farinaceous or radish-like odours	1/622	
<i>Phaeocollybia festiva</i> (Fr.) R. Heim	radish	1/623	
<i>Phaeocollybia jennyae</i> (P. Karst.) R. Heim	more farinaceous or radish-like odours	1/622	
<i>Phaeolepiota aurea</i> (Matt. : Fr.) Maire	somewhat like cyanide or bitter almonds	1/315	
<i>Phaeolus schweinitzii</i> (Fr. : Fr.) Pat.		<i>a</i>	not noticeable
<i>Phallus hadriani</i> Vent. : Pers.	foul	2/1225	strong unpleasant (<i>a</i>)
<i>Phallus impudicus</i> L. : Pers.	foul	2/1223	corpse smell (b) strong, unpleasant (<i>a</i>); foul (<i>d</i>)
<i>Phallus impudicus</i> L. : Pers. var. <i>pseudoduplicatus</i> Andersson	radish	2/1224	
<i>Phellinus igniarius</i> (L. : Fr.) Quél.		<i>a</i>	not significant
<i>Phellinus populicola</i> Niemelä		<i>a</i>	not significant
<i>Phellodon connatus</i> (Schultz : Fr.) P. Karst.	pleasantly spicy	2/1062	
<i>Phellodon melaleucus</i> (Sw. : Fr.) P. Karst.		<i>a</i>	slightly spicy when old
<i>Phellodon niger</i> (Fr. : Fr.) P. Karst.		<i>a</i>	not significant
<i>Phlebia radiata</i> Fr. : Fr.		<i>a</i>	not significant
<i>Phlebia tremellosa</i> (Schrad. : Fr.) Nakasone & Burds.		<i>a</i>	not significant
<i>Phlebiella pseudotsugae</i> (Burt) K. H. Larss. & Hjortstam	tar-like or phenolic	1/1002	
<i>Phleogena faginea</i> (Fr. : Fr.) Link	lovage	2/1246	
<i>Pholiota adiposa</i> (Batsch : Fr.) P. Kumm.		<i>a</i>	faint pleasant but not distinctive
<i>Pholiota alnicola</i> (Fr.) Singer		<i>a</i>	not distinct
<i>Pholiota aurivella</i> (Batsch : Fr.) P. Kumm.		<i>a</i>	not distinctive
<i>Pholiota flammans</i> (Batsch : Fr.) P. Kumm.		<i>a</i>	not distinctive
<i>Pholiota gummosa</i> (Lasch : Fr.) Singer		<i>a</i>	not distinctive
<i>Pholiota lubrica</i> (Pers. : Fr.) Singer		<i>a</i>	faint pleasant but not distinctive

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<i>Pholiota squarrosa</i> (Weigel : Fr.) P. Kumm.	indistinct	1/608	radish (<i>a</i>)
<i>Pholiota squarrosoides</i> (Peck) Sacc.	bread yeast	1/609	
<i>Phyllotopsis nidulans</i> (Pers. : Fr.) Singer		<i>d</i>	rotten cabbage when cut these polypores have a faint but not
<i>Piptoporus betulinus</i> (Bull. : Fr.) P. Karst.		<i>a</i>	unpleasant 'mushroomy' odour
<i>Pisolithus arenarius</i> Alb. & Schwein.		<i>a</i>	not significant
<i>Pisolithus arhizos</i> (Scop. : Pers.) Rauschert		<i>a</i>	not significant mushroomy, sometimes with a hint of aniseed (<i>a</i>);
<i>Pleurotus cornucopiae</i> (Paulet) Rolland		<i>a/b</i>	floury (<i>b</i>)
<i>Pleurotus dryinus</i> (Pers. : Fr.) P. Kumm.		<i>a</i>	not significant
<i>Pleurotus eryngii</i> (DC. : Fr.) Quél.		<i>b</i>	no smell
<i>Pleurotus ostreatus</i> (Jacq. : Fr.) P. Kumm.		<i>a</i>	Pleasant but not distinctive
<i>Pleurotus pulmonarius</i> (Fr. : Fr.) Quél.			aniseed (Chiron & Michelot, 2005)
<i>Pluteus atricapillus</i> (Batsch) Fayod		<i>b</i>	radish
<i>Pluteus atromarginatus</i> (Konrad) Kühner		<i>a</i>	not distinctive
<i>Pluteus aurantiorugosus</i> (Trog) Sacc.		<i>a</i>	not distinctive
<i>Pluteus cervinus</i> (Schaeff.) P. Kumm.	radish	1/491	
<i>Pluteus chrysophaeus</i> (Schaeff.) Quél.		<i>a</i>	not distinctive
<i>Pluteus ephebeus</i> (Fr. : Fr.) Gillet		<i>a</i>	not distinctive
<i>Pluteus leoninus</i> (Schaeff. : Fr.) P. Kumm.		<i>a</i>	not distinctive
<i>Pluteus phlebophorus</i> (Ditmar : Fr.) P. Kumm.		<i>a</i>	usually not distinctive, sometimes faint radish like
<i>Pluteus podospileus</i> Sacc. & Cub.		<i>a</i>	pleasant but not distinctive
<i>Pluteus pouzarianus</i> Singer	faint	1/491	
<i>Pluteus romellii</i> (Britzelm.) Sacc.		<i>a</i>	not distinctive
<i>Pluteus roseipes</i> Höhn.		<i>a</i>	not distinctive or faintly fruity or radish
<i>Pluteus salicinus</i> (Pers. : Fr.) P. Kumm.		<i>a</i>	not distinctive
<i>Pluteus umbrosus</i> (Pers. : Fr.) P. Kumm.		<i>a</i>	not distinctive
<i>Pogonoloma spinulosum</i>	strong, perfumed, soap like	1/253	
<i>Polyporus badius</i> (Gray) Schwein.		<i>a</i>	mushroomy but not distinctive
<i>Polyporus brumalis</i> (Pers.) Fr.		<i>a</i>	faintly mushroomy
<i>Polyporus ciliatus</i> (Fr. : Fr.) Fr.		<i>a</i>	faintly mushroomy
<i>Polyporus leptocephalus</i> (Jacq.) Fr.		<i>a</i>	not distinctive
<i>Polyporus squamosus</i> (Huds. : Fr.) Fr.	strongly farinaceous or of very ripe water melon	2/835	

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<i>Polyporus tuberaster</i> Jacq. : Fr.		<i>a</i>	slightly mushroomy farinaceous; it decomposes easily giving off a bad
<i>Polyporus umbellatus</i> (Pers. : Fr.) Fr.		<i>b</i>	smell
<i>Poronia punctata</i> (L. : Fr.) Fr.		<i>a</i>	not distinctive
<i>Porphyrellus porphyrosporus</i> (Fr.) E.-J. Gilbert		<i>a</i>	unpleasant sour
<i>Porphyrellus pseudoscaber</i> (Secr.) Singer		<i>a</i>	unpleasant sour
<i>Porpoloma pes-caprae</i> (Fr.) Singer	farinaceous	1/253	
<i>Postia caesia</i> (Schrad. : Fr.) Jülich		<i>a</i>	mild
<i>Postia stiptica</i> (Pers. : Fr.) Jülich		<i>a</i>	strong fungal odour
<i>Protostropharia semiglobata</i> (Batsch : Fr.) Redhead, Moncalvo & Vilgalys		<i>b</i>	farinaceous
<i>Psathyrella ammophila</i> (Durieu & Lév.) P. D. Orton		<i>a</i>	not distinctive
<i>Psathyrella bipellis</i> (Quél.) A. H. Sm.	peppermint-like or more unpleasant (urine like)	1/571	
<i>Psathyrella candolleana</i> (Fr. : Fr.) Maire		<i>a</i>	not distinctive
<i>Psathyrella caput-medusae</i> (Fr.) Konrad & Maubl.	unusual sweet, perfumed	1/562	
<i>Psathyrella fragrans</i> A. H. Sm.	sweetish	1/572	
<i>Psathyrella leucotephra</i> (Berk. & Broome) P. D. Orton		<i>a</i>	not distinctive
<i>Psathyrella lutensis</i> (Romagn.) Bon	odourless	1/574	
<i>Psathyrella maculata</i> (C. S. Parker) A. H. Sm.	lacks a distinct smell	1/563	
<i>Psathyrella multipedata</i> (Peck) A. H. Sm.		<i>a</i>	not distinctive
<i>Psathyrella pertinax</i> (Fr.) Örstadius	usually has a sweetish, marzipan like	1/572	
<i>Psathyrella piluliformis</i> (Bull. : Fr.) P. D. Orton	may have a sweetish smell	1/572	
<i>Psathyrella pseudocorrugis</i> (Romagn.) Bon	no smell	1/572	
<i>Psathyrella suavissima</i> Ayer	strong, sweetish somewhat like the flowers of <i>Prunus padus</i> (or <i>Hebeloma</i> <i>sacchariolens</i> , page 684)	1/570	
<i>Psathyrella supernula</i> (Britzelm.) Örstadius & Enderle	very unpleasant nauseous odour like sewage water or bad breath	1/574	
<i>Pseudoboletus parasiticus</i> (Bull. : Fr.) Šutara		<i>a</i>	not distinctive
<i>Pseudoclitocybe cyathiformis</i> (Bull. : Fr.) Singer		<i>a</i>	not distinctive
<i>Pseudohydnum gelatinosum</i> (Scop. : Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Pseudoinonotus dryadeus</i> (Pers.) T. Wagner & M. Fisch.		<i>a</i>	strongly unpleasant (old fruitbodies)
<i>Psilocybe cyanescens</i> Wakef.		<i>a</i>	indistinct or very faint mealy

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<i>Psilocybe semilanceata</i> (Fr.) P. Kumm.		<i>a</i>	musty
<i>Pterula multifida</i> E. P. Fr. : Fr.	unpleasantly phenolic	2/1101	
<i>Puccinia punctiformis</i> Dietel & Holw.	nauseous-sweetish	2/1205	
<i>Pucciniastrum areolatum</i> (Fr.) G. H. Otth	strong sweetish	2/1201	
<i>Pycnoporus cinnabarinus</i> (Jacq. : Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Radulomyces confluens</i> (Fr. : Fr.) M. P. Christ.	characteristic phenolic	2/1009	
<i>Radulomyces molaris</i> (Chaillat : Fr.) M. P. Christ.	+/- phenolic	2/1051	
<i>Ramaria abietina</i> (Pers. : Fr.) Quél.		<i>a</i>	not significant
<i>Ramaria botrytis</i> (Pers. : Fr.) Ricken	sweetish	2/1150	slightly fruity (<i>b</i>)
<i>Ramaria flaccida</i> (Fr. : Fr.) Bourdot		<i>a</i>	not significant
<i>Ramaria flava</i> (Schaeff. : Fr.) Quél. var. <i>scandinavica</i> (R. H. Petersen) Christan		<i>a</i>	not distinctive
<i>Ramaria formosa</i> (Pers. : Fr.) Quél.		<i>a</i>	not distinctive
<i>Ramaria gracilis</i> (Pers. : Fr.) Quél.	strong aniseed	2/1141	
<i>Ramaria pallida</i> (Schaeff.) Ricken	not especially pleasant smell of coffee grains, used cloth or similar	2/1150	
<i>Ramaria stricta</i> (Pers. : Fr.) Quél.	spicy with faint aniseed components	2/1139	mature fruitbodies smell faintly of aniseed (<i>a</i>)
<i>Ramaria suecica</i> (Fr. : Fr.) Donk	lacks an aniseed-like smell	2/1141	
<i>Ramariopsis crocea</i> (Pers. : Fr.) Corner	insignificant	2/1124	
<i>Ramariopsis kunzei</i> (Fr.) Corner		<i>a</i>	not noticeable
<i>Ramariopsis spec.</i>	neutral	2/1101	
<i>Ramariopsis subtilis</i> (Pers. : Fr.) R. H. Petersen		<i>a</i>	not noticeable
<i>Rhizocybe vermicularis</i> (Fr.) Vizzini, G. Moreno, P. Alvarado & Consiglio	almost odourless	1/117	
<i>Rhizomarasmius spec.</i>	<i>rhizomarasmius</i> includes odourless species	1/304	
<i>Rhizomarasmius undatus</i> (Berk.) R. H. Petersen	odourless	1/304	
<i>Rhizopogon obtectus</i> (Spreng.) R. Rauschert	fruity at first, later ± rotten and foul	2/1262	
<i>Rhizopogon roseolus</i> (Fr. : Fr.) Th. Fr.	becomes very foul-smelling with age	2/1262	
<i>Rhodocollybia butyracea</i> (Bull. : Fr.) Lennox		<i>b</i>	slight fruity
<i>Rhodocollybia maculata</i> (Alb. & Schwein. : Fr.) Singer		<i>a</i>	not distinctive
<i>Rhodocybe caelata</i> (Fr.) Maire	odourless	1/451	
<i>Rhodocybe gemina</i> (Fr.) Kuyper & Noordel.	perfumed	1/244	mealy (like wet flour) or fruity (<i>a</i>)
<i>Rhodotus palmatus</i> (Bull. : Fr.) Maire	perfumed-fruity	1/231	
<i>Ripartites odoratus</i>	very strong nauseous-sweet, somewhat like	1/651	

Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
<i>Rozites caperatus</i> (Pers. : Fr.) P. Karst.	the flowers of <i>Prunus padus</i>	b	faint
<i>Rubinoletus rubinus</i>		a	pleasant but not distinctive
<i>Rubroboletus satanas</i> (Lenz) Kuan Zhao & Zhu L. Yang	mature specimens smell nauseous, recalling chicken manure, strongest from the cap surface	1/804	
<i>Rugosomyces carneus</i> (Bull. : Fr.) Bon		a	not significant
<i>Russula acrifolia</i> Romagn.		b	no smell
<i>Russula adusta</i> (Pers. : Fr.) Fr.	striking smell of old wine barrels or a damp cellar	1/377	
<i>Russula aeruginea</i> Lindblad : Fr.		b	pleasant
<i>Russula amoenolens</i> Romagn.	camembert cheese or fruit	1/379	
<i>Russula aquosa</i> Leclair	+/- like horseradish	1/389	
<i>Russula atropurpurea</i> (Krombh.) Britzelm.		a	faint of apples
<i>Russula atrorubens</i> Quél.	fruity or coconut like	1/393	
<i>Russula aurea</i> Pers.		a	not significant
<i>Russula badia</i> Quél.	cedar wood	1/413	
<i>Russula caerulea</i> (Pers.) Fr.		a	not distinctive usually a faintly fruity <i>Pelargonium</i> odour, sometimes
<i>Russula chloroides</i> (Krombh.) Bres.	often fish like	1/374	unpleasant (a)
<i>Russula claroflava</i> Grove		a	not significant
<i>Russula clavipes</i> Velen.	shellfish	1/396	
<i>Russula cuprea</i> (Krombh.) J. E. Lange	honey like	1/408	slight fruity (a)
<i>Russula cyanoxantha</i> (Schaeff.) Fr.		a	not distinctive
<i>Russula delica</i> Fr.		a	faintly fishy or oily
<i>Russula densifolia</i> Gillet	insignificant	1/377	
<i>Russula emetica</i> (Schaeff. : Fr.) Pers.		a	faint fruity
<i>Russula faginea</i> Romagn.	shellfish	1/396	
<i>Russula farinipes</i> Romell	somewhat fruity	1/381	slightly fruity (a) stewed apples, or reminiscent of pot geraniums =
<i>Russula fellea</i> (Fr. : Fr.) Fr.	sweetish	1/395	pelargoniums (a)
<i>Russula firmula</i> Jul. Schäff.	<i>Pelargonium</i>	1/409	
<i>Russula foetens</i> Pers. : Fr.	unpleasant	1/380	initially rancid oily smell that with age becomes more like rotting fish (a); hypochlorite (b)

Appendix 1. Species scientific name	Fungi of Temperate Europe	vol/page	Other literature
<i>Russula fragilis</i> (Pers. : Fr.) Fr.	fruity or coconut like	1/392	
<i>Russula fragrantissima</i> Romagn.	+/- like marzipan	1/380	
<i>Russula gracillima</i> Jul. Schäff.	+/- fruity	1/389	
<i>Russula grata</i> Britzelm.	marzipan	1/380	strong of bitter almonds (like marzipan) (<i>a</i>)
<i>Russula graveolens</i> Romell	shellfish	1/396	
	distinctly like marzipan before bruising, but more complex after	1/381	
<i>Russula illota</i> Romagn.		<i>a</i>	not distinctive
<i>Russula ionochlora</i> Romagn.		1/393	
<i>Russula laccata</i> Huijsman	shellfish	<i>b</i>	cedar
<i>Russula lepida</i> Fr.		<i>b</i>	slightly fruity
<i>Russula maculata</i> Quél. & Roze		<i>a</i>	faint of coconut in young specimens
<i>Russula mairei</i> Singer		<i>a</i>	faint of coconut in young specimens
<i>Russula mairei</i> Singer var. <i>fageticola</i> Romagn.			
	the flesh of the stem has a faint honey-like		
<i>Russula melliolens</i> Quél.	smell upon drying	1/388	
<i>Russula mustelina</i> Fr.	almost odourless	1/385	
<i>Russula nigricans</i> (Bull.) Fr.		<i>a</i>	slight fruity
<i>Russula ochroleuca</i> Pers.		<i>a</i>	not distinctive
<i>Russula odorata</i> Romagn.	distinct fruity/flowery	1/399	
<i>Russula olivacea</i> (Schaeff.) Pers.	indistinct	1/404	fruity (<i>b</i>)
<i>Russula paludosa</i> Britzelm.		<i>a</i>	not distinctive
<i>Russula parazurea</i> Jul. Schäff.		<i>a</i>	not distinctive
<i>Russula pectinatoides</i> Peck	rubber boots or fish	1/379	
	flower-like, +/- like <i>Pelargonium</i> , but not very strong	1/392	
<i>Russula pelargonica</i> Niolle		<i>a</i>	old or burnt rubber, oily, or sometimes fishy
<i>Russula praetervisa</i> Sarnari ss. auct.			
	may recall a mixture of menthol and		
<i>Russula pseudointegra</i> Arnould & Goris	<i>Pelargonium</i> , rather weak	1/401	
<i>Russula queletii</i> Fr.	fruity (like gooseberry compote)	1/394	
<i>Russula rosacea</i> Pers. : Gray		<i>b</i>	cedar
<i>Russula rosea</i> Quél.		<i>a</i>	slight fruity
<i>Russula rubra</i> (Lamb. : Fr.) Fr.	farinaceous to honey like	1/410	
<i>Russula rutila</i> Romagn.	only faint	1/410	faint but pleasant, slightly fruity (<i>a</i>)
<i>Russula sanguinaria</i> (Schumach.) Rauschert		<i>a</i>	faint fruity

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<i>Russula sardonia</i> Fr.		<i>a</i>	fruity
<i>Russula sororia</i> Fr.		<i>b</i>	similar to Camembert cheese
<i>Russula subrubens</i> (J. E. Lange) Bon	shellfish	1/396	
<i>Russula turci</i> Bres.	iodoform	1/403	
<i>Russula velutipes</i> Velen.		<i>a</i>	slight fruity
<i>Russula vesca</i> Fr.		<i>a</i>	not distinctive
<i>Russula veteriosa</i> Fr.	somewhat honey like	1/409	
<i>Russula violeipes</i> Quél.	fishy	1/387	
<i>Russula virescens</i> (Schaeff.) Fr.		<i>b</i>	weak
<i>Russula viscida</i> Kuder	mostly odourless	1/388	
			fish or shellfish; boiled shellfish; faint when young but much stronger and eventually rather unpleasant when fully developed (<i>a</i>); fish like or shrimp like, especially in age or when dried (<i>d</i>)
<i>Russula xerampelina</i> (Schaeff.) Fr.	shellfish	1/396	
<i>Sagarinella tylicolor</i> (Fr.) V. Hofstetter, Cléménçon, Moncalvo & Redhead	farinaceous or odourless	1/287	
<i>Sarcodon fennicus</i> (P. Karst.) P. Karst.	bitter almonds	2/1070	
	faintly farinaceous with notes of liquorice or orange	2/1070	
<i>Sarcodon glaucopus</i> Maas Geest. & Nannf.	not distinct	2/1071	
<i>Sarcodon imbricatus</i> (L. : Fr.) P. Karst.	unpleasantly farinaceous	2/1070	
<i>Sarcodon lundellii</i> Maas Geest. & Nannf.	farinaceous	2/1067	
<i>Sarcodon martioflavus</i> (Snell ap. Snell & Dick) Maas Geest.	farinaceous	2/1069	
<i>Sarcodon scabrosus</i> (Fr.) P. Karst.		<i>a</i>	not significant
<i>Sarcodon squamosus</i> (Schaeff.) Quél.	sweetish, recalling liquorice or vanilla	2/1070	
<i>Sarcodon versipellis</i> (Fr.) Quél.	very strong, sweetish-sour, rather like butyric acid	2/1057	
<i>Sarcodontia crocea</i> (Schwein. : Fr.) Kotl.		<i>a</i>	not distinctive
<i>Sarcomyxa serotina</i> (Schrader : Fr.) P. Karst.		<i>a</i>	not distinctive
<i>Sarcoscypha austriaca</i> (Sacc.) Boud.		<i>a</i>	not distinctive
<i>Sarcoscypha coccinea</i> (Scop. : Fr.) Lambotte		<i>a</i>	not distinctive
<i>Scleroderma areolatum</i> Ehrenb.		<i>a</i>	not distinctive
<i>Scleroderma citrinum</i> Pers. : Pers.		<i>a</i>	unpleasant of gas
<i>Scleroderma spec.</i>	metallic	2/1272	
<i>Scleroderma verrucosum</i> (Bull. : Pers.) Pers.		<i>a</i>	not distinctive

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<i>Scutellinia scutellata</i> (L. : Fr.) Lambotte		<i>a</i>	not distinctive (although often the substrate is very smelly)
<i>Scutellinia trechispora</i> (Berk. & Broome) Lambotte		<i>a</i>	not distinctive
<i>Scytinostroma hemidichophyticum</i> Pouzar	incredibly strong smell of naphthaline (moth balls)	2/1027	
<i>Sistotrema confluens</i> Pers. : Fr.	unpleasant, spicy	2/1075	
<i>Skeletocutis nivea</i> (Jungh.) Jean Keller		<i>a</i>	not distinctive
<i>Skeletocutis odora</i> (Sacc.) Ginns	when fresh, smells of garlic or stink bugs	2/941	
<i>Skeletocutis stellae</i> (Pilát) Jean Keller	smells less strongly *(than <i>S. odora</i>)	2/941	
<i>Sparassis brevipes</i> Krombh.		<i>a</i>	faint mushroomy
<i>Sparassis crispa</i> (Wulfen : Fr.) Fr.	aromatic	2/954	faint sweet (<i>a</i>)
<i>Sparassis laminosa</i> Fr.		<i>a</i>	faint mushroomy
<i>Spathularia flavida</i> Pers. : Fr.		<i>a</i>	not distinctive
<i>Squamanita odorata</i>	perfumed / radish	1/228	
<i>Squamanita paradoxa</i> (A. H. Sm. & Singer) Bas		<i>a</i>	slightly perfumed becoming fetid in old fruitbodies
<i>Steccherinum ochraceum</i> (Pers. : Fr.) Gray		<i>a</i>	not significant
<i>Stereum hirsutum</i> (Willd. : Fr.) Gray		<i>a</i>	not noticeable
<i>Stereum rameale</i> (Schwein.) Burt		<i>a</i>	not noticeable
<i>Stereum rugosum</i> (Pers. : Fr.) Fr.		<i>a</i>	not noticeable
<i>Stereum subtomentosum</i> Pouzar		<i>a</i>	not noticeable
<i>Strobilomyces strobilaceus</i> (Scop. : Fr.) Berk.		<i>a</i>	not distinctive
<i>Stropharia aeruginosa</i> (M. A. Curtis : Fr.) Qué.	insignificant	1/594	
<i>Stropharia caerulea</i> Kreisel		<i>a</i>	not distinctive
<i>Stropharia coronilla</i> (Bull. : Fr.) Qué.		<i>a</i>	not distinctive
<i>Stropharia hornemannii</i> (Fr. : Fr.) S. Lundell & Nannf.		<i>a</i>	not distinctive
<i>Stropharia pseudocyanea</i> (Desm. : Fr.) Morgan	distinct, ± like freshly ground black pepper	1/594	freshly ground pepper (<i>a</i>)
<i>Stropharia rugosoannulata</i> Murrill		<i>a</i>	pleasant but not distinctive
<i>Suillellus luridus</i> (Schaeff.) Murrill		<i>a</i>	not distinctive
<i>Suillellus queletii</i> (Schulzer) Vizzini, Simonini & Gelardi		<i>a</i>	not significant
<i>Suillus bovinus</i> (L. : Fr.) Roussel		<i>a</i>	slightly fruity
<i>Suillus cavipes</i> (Opat.) A. H. Sm. & Thiers		<i>a</i>	not distinctive
<i>Suillus collinitus</i> (Fr.) Kuntze		<i>a</i>	fungal but not distinctive
<i>Suillus granulatus</i> (L. : Fr.) Roussel		<i>a</i>	not distinctive
<i>Suillus grevillei</i> (Klotzsch : Fr.) Singer		<i>a</i>	not distinctive

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<i>Suillus luteus</i> (L. : Fr.) Roussel		<i>a</i>	not distinctive
<i>Suillus placidus</i> (Bonord.) Singer		<i>a</i>	not distinctive
<i>Suillus variegatus</i> (Sw. : Fr.) Richon & Roze	metallic	1/802	not distinctive (<i>a</i>)
<i>Suillus viscidus</i> (L.) Roussel		<i>a</i>	not distinctive
<i>Tapinella atrotomentosa</i> (Batsch : Fr.) Šutara		<i>a</i>	not distinctive
<i>Tapinella panuoides</i> (Fr.) E.-J. Gilbert		<i>a</i>	not distinctive
<i>Tarzetta catinus</i> (Holmsk. : Fr.) Korf & J. K. Rogers		<i>a</i>	not distinctive
<i>Tarzetta cupularis</i> (L. : Fr.) Lambotte		<i>a</i>	not distinctive
<i>Tephrocybe rancida</i> (Fr. : Fr.) Donk	rancid-farinaceous	1/286	
<i>Terana caerulea</i> (Lam. : Fr.) Kuntze		<i>a</i>	not noticeable
<i>Thelephora anthocephala</i> (Bull. : Fr.) Pers.	odourless	2/1152	
<i>Thelephora palmata</i> (Scop.) Fr.	strong rotten cabbage	2/1153	
<i>Trametes gibbosa</i> (Pers. : Fr.) Fr.		<i>a</i>	not distinctive
		2/920-	
<i>Trametes hirsuta</i> (Wulfen : Fr.) Pilát	somewhat aniseed / weak, sweetish smell	1	
<i>Trametes ochracea</i> (Pers.) Gilb. & Ryvarden		<i>a</i>	not distinctive
<i>Trametes odorata</i> (Wulfen : Fr.) Fr.		<i>b</i>	very strong and persistent pleasant
<i>Trametes pubescens</i> (Schumach. : Fr.) Pilát		<i>a</i>	not distinctive
<i>Trametes quercina</i> (L. : Fr.) Pilát		<i>b</i>	no smell
<i>Trametes suaveolens</i> (L. : Fr.) Fr.	strong aniseed	2/921	fresh specimens smell strongly of aniseed (<i>a</i>)
<i>Trametes versicolor</i> (L. : Fr.) Pilát		<i>a</i>	not distinctive
<i>Tremella aurantia</i> Schwein.		<i>a</i>	not distinctive
<i>Tremella foliacea</i> Pers. : Fr.		<i>a</i>	not distinctive
<i>Tremella mesenterica</i> Retz. : Fr.		<i>a</i>	not distinctive
<i>Trichaptum abietinum</i> (Pers. : Fr.) Ryvarden		<i>a</i>	not significant
<i>Trichoderma viride</i> Pers. : Fr.		<i>a</i>	not distinctive
<i>Trichoglossum hirsutum</i> (Pers. : Fr.) Boud.		<i>a</i>	not distinctive
<i>Tricholoma acerbum</i> (Bull. : Fr.) Quéf.	indistinct	1/261	very slight fruity odour (<i>a</i>); fragrant, mealy, or foul (<i>d</i>)
<i>Tricholoma albobrunneum</i> (Pers. : Fr.) P. Kumm.	farinaceous	1/263	
			strong of radish when crushed (<i>a</i>); strong and
<i>Tricholoma album</i> (Schaeff. : Fr.) P. Kumm.	honey	1/270	unpleasant (<i>d</i>)
<i>Tricholoma apium</i> Jul. Schäff.	lovage	1/261	
<i>Tricholoma argyraceum</i> (Bull.) Gillet	farinaceous	1/266	
<i>Tricholoma arvernense</i> Bon		<i>d</i>	mealy

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<i>Tricholoma aurantium</i> (Schaeff. : Fr.) Ricken		d	mealy
<i>Tricholoma boudieri</i> (Barla) Barla	recognized by its very strong, nauseous	1/269	
<i>Tricholoma caligatum</i> (Viv.) Ricken		d	mealy
<i>Tricholoma cingulatum</i> (Almfelt : Fr.) Jacobasch	rancid-farinaceous	1/266	
<i>Tricholoma colossus</i> (Fr.) Quél.	weak	1/259	
<i>Tricholoma columbetta</i> (Fr. : Fr.) P. Kumm.	± distinctly farinaceous	1/270	
<i>Tricholoma equestre</i> (L. : Fr.) P. Kumm.		b	no smell
<i>Tricholoma flavovirens</i> (Pers. : Fr.) S. Lundell & Nannf.		b	no smell
<i>Tricholoma focale</i> (Fr.) Ricken	farinaceous	1/258	
<i>Tricholoma fulvum</i> (Bull. : Fr.) Bigeard & H. Guill.		a	slightly farinaceous like flour dough
<i>Tricholoma imbricatum</i> (Fr. : Fr.) P. Kumm.	insignificant	1/260	
<i>Tricholoma inamoenum</i> (Fr. : Fr.) Gillet	strong gaseous	1/271	strong and unpleasant, reminiscent of coal tar (d)
<i>Tricholoma inocybeoides</i> A. Pearson	rancid-farinaceous	1/266	
<i>Tricholoma lascivum</i> (Fr. : Fr.) Gillet	nauseous	1/270	
<i>Tricholoma magnivelare</i>		d	spicy (reminiscent of cinnamon)
<i>Tricholoma matsutake</i> (S. Ito & S. Imai) Singer	perfumed / perfumed-sweetish	1/259	
<i>Tricholoma myomyces</i> (Pers. : Fr.) J. E. Lange		d	not distinctive
<i>Tricholoma orirubens</i> Quél.	honey like and, when bruised, farinaceous	1/265	
<i>Tricholoma pardinum</i> (Pers.) Quél.	somewhat sweetish, but mealy after bruising	1/264	farinaceous (b)
<i>Tricholoma pessundatum</i> (Fr. : Fr.) Quél.	+/- farinaceous	1/263	
<i>Tricholoma populinum</i> J. E. Lange	distinctly farinaceous	1/263	
	may recall the stinkbug smelling T.		
<i>Tricholoma portentosum</i> (Fr. : Fr.) Quél.	josserandii	1/268	
<i>Tricholoma psammopus</i> (Kalchbr.) Quél.	Insignificant	1/260	
			reminiscent of soap, or sometimes mealy or not
<i>Tricholoma saponaceum</i> (Fr. : Fr.) P. Kumm.	evident soapy	1/269	distinctive (d)
<i>Tricholoma scalpturatum</i> (Fr.) Quél.	rancid farinaceous	1/267	mealy (a)
<i>Tricholoma sciodes</i> (Pers.) C. Martín	somewhat earthy	1/267	
<i>Tricholoma sejunctum</i> (Sowerby : Fr.) Quél.	farinaceous after bruising	1/272	
<i>Tricholoma spec.</i>	do not smell nitrous	1/161	
<i>Tricholoma squarrulosum</i> Bres.	spicy, pepper like	1/265	
<i>Tricholoma stans</i> (Fr.) Sacc.		a	indistinct or faintly farinaceous like damp flour
<i>Tricholoma stiparophyllum</i> (N. Lund) P. Karst.	nauseous	1/270	
<i>Tricholoma sudum</i> (Fr.) Quél.	strong farinaceous or soapy odours /	1/255/	

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<i>Tricholoma sulphurescens</i> Bres.	becomes more mealy after bruising	269	d strong and unpleasant (reminiscent of coal tar)
<i>Tricholoma sulphureum</i> (Bull. : Fr.) P. Kumm.	strong gaseous / extremely unpleasant,	1/271	very strong coal gas; sulphur dioxide (a)
<i>Tricholoma terreum</i> (Schaeff. : Fr.) P. Kumm.	penetrating gaseous	1/265	
<i>Tricholoma tigrinum</i> (Schaeff.) Quél.	odourless	b	farinaceous
<i>Tricholoma ustale</i> (Fr. : Fr.) P. Kumm.	faint to ± farinaceous	1/262	
<i>Tricholoma vaccinum</i> (Schaeff. : Fr.) P. Kumm.	+/- farinaceous	1/260	
<i>Tricholoma virgatum</i> (Fr. : Fr.) P. Kumm.		a	rather unpleasant, some say of radish
<i>Tricholomella constricta</i> (Fr.) Kalamees	strong farinaceous	1/244	
<i>Tricholomopsis decora</i> (Fr. : Fr.) Singer		a	not distinctive
<i>Tricholomopsis rutilans</i> (Schaeff. : Fr.) Singer	lacks a distinctive smell	1/236	rotten pinewood (a)
<i>Tubaria conspersa</i> (Pers. : Fr.) Fayod		a	not distinctive
<i>Tubaria dispersa</i> (Pers.) Singer		a	not distinctive
<i>Tubaria furfuracea</i> (Pers. : Fr.) Gillet		a	slightly mushroomy
<i>Tuber mesentericum</i> Vittad.	phenolic at maturity	2/1273	
<i>Tuber spec.</i>	strong at maturity	2/1273	
<i>Tylopilus felleus</i> (Bull. : Fr.) P. Karst.		a	not distinctive
<i>Volvariella bombycina</i> (Schaeff. : Fr.) Singer		a	faintly mushroomy and pleasant
<i>Volvariella caesiointincta</i> P. D. Orton	<i>Pelargonium</i>	1/489	
<i>Volvariella hypopithys</i> (Fr.) Shaffer	<i>Pelargonium</i>	1/490	
<i>Volvariella murinella</i> (Quél.) Courtec.	recalls <i>Pelargonium</i>	1/489	
<i>Volvariella surrecta</i> (Knapp) Singer		b	sweetish
<i>Volvariella taylori</i> (Berk.) Singer	<i>Pelargonium</i>	1/490	
<i>Volvariella volvacea</i> (Bull. : Fr.) Singer	radish	1/489	
<i>Volvophuteus gloiocephalus</i> (DC. : Fr.) Vizzini, Contu & Justo		a	pleasant and mild but not distinctive
<i>Xerocomellus chrysenteron</i> (Bull.) Šutara		a	not distinctive
<i>Xerocomellus cisalpinus</i> (Simonini, Ladurner & Peintner) Klofac		a	not distinctive
<i>Xerocomellus porosporus</i> (Moreno & Bon) Šutara		a	not distinctive
<i>Xerocomellus pruinatus</i> (Fr.) Šutara		a	not distinctive
<i>Xerocomus subtomentosus</i> (L. : Fr.) Quél.		a	not distinctive / fruity (Chiron & Michelot, 2005)
<i>Xylaria hypoxylon</i> (L.) Grev.		a	not distinctive
<i>Xylaria longipes</i> Nitschke		a	not distinctive
<i>Xylaria polymorpha</i> (Pers.) Grev.		a	not distinctive