



Pleurotoid fungi are rather similar to agarics, and often it is a matter of taste in which group a certain species might better suit. Most pleurotoid fungi are somewhat more tough than typical agarics. The stipe is short and lateral, or the fruit body is sessile, without a distinct stipe. On the underside there are gills, like in agarics. These are wood-decaying fungi, living on fallen trees, stumps and even on living trees.

Cantharelloid fungi or *chanterelles* resemble agarics: they usually have gills. Other species have just low veins on the underside, or the surface may be smooth. If there are gills, they are thick and strongly decurrent. Cantharelloid fungi are more tough than typical agarics, and most of them are edible and favoured. Cantharelloid fungi have an ectomycorrhizal relationship with trees.

Boletes are fleshy, soft and quickly decaying. Like agarics, they also have a distinct cap and stipe, but on the cap's underside there are pores, and if the cap is cut in half, a tube layer can be seen. Boletes are often robust in their shape, and many of them are edible while others are bitter-tasting. They do not belong to the most favoured fungi in the African tradition. Most of them are ectomycorrhizal in their way of life.

Polypores resemble boletes in having pores on the underside, and a tube layer if the same thing is observed from a section. Most polypores have sessile fruit bodies, and typically they are tough or even woody hard. Also the stipitate polypores are hard. Polypores make the most important group of wood-decaying fungi, some being trunk or root parasites of living trees, others living on fallen or otherwise dead trees.

Thelephoroid fungi are soft felty, funnel-shaped, and their underside is wrinkled. However, there are no pores, nor gills or spines on the underside. These fungi usually decay wood and emerge from fallen branches and dead roots, but some species grow on the ground and these may be mycorrhizal. Thelephoroid fungi are often dull coloured and fairly inconspicuous.

Figs. 32–36. Shapes of pleurotoid fungi, chanterelles, boletes, polypores and thelephoroid fungi.



Figs. 37–41. Shapes of corticioid fungi, ramarioid fungi, hydnceous fungi, jelly fungi and earthstars.

Corticioid fungi also have a fairly smooth underside. These may be totally resupinate, without any projecting cap. Often they appear as skin- or mould-like cover on decaying wood. White, cream, grey and other inconspicuous colours are common. If these fungi do have a cap, they are called *stereoid*. In thicker, waxy species the underside may have irregular wrinkles, folds or swellings, and it can then be called *meruloid*.

Ramarioid fungi grow upwards like tiny shrubs. These fungi live mostly by decaying woody litter, and they are best seen in moist sites, for instance riverine forests. A few species are edible, for instance in the genus *Clavulina*, but mostly they are too tough and small to be consumed.

Tooth fungi or *hydnceous fungi* make a small but peculiar group. Their fruit bodies may be stipitate and fleshy, or they may be bracket-shaped like polypores, or resupinate. In any case they have on their underside crowded, thin, sharp spines or teeth. They are rather common in cooler climates, but less numerous in the tropics. Most tooth fungi decay wood, but the stipitate ones are usually mycorrhizal.

Jelly fungi have fruit bodies soaked with water-rich flexible substance, and so they often look translucent or cartilaginous when fresh, but shrink and become brittle when dry. Many African species look like little cups or saucers turned upside down, attached to fallen branches and other dead wood. The concave lower side of the "cup" is smooth in many species, but wrinkled in others. Some of these are good edible fungi.

Gastroid fungi are globose; they grow on the ground or on rotten wood. They are solid inside, with a harder outer crust. During maturation the whole inside turns into a fibrous stuff, containing masses of brown spores. These are released in different ways in different genera. The crust of a *puffball* breaks or wears off randomly. In *earthstars* the outer crust splits in a star-like fashion and spores are released from a small pore on the top. *Stinkhorns* are a special group of gastroid fungi with strongly smelling fruit bodies.

All the groups listed above belong to the basidiomycete fungi.



Fig. 81. Miombo woodland in a natural condition is park-like, with tall trees, and ground layer covered with tall grass. There are plenty of tree species, most of them being ectomycorrhizal, and each of them having specialised mushroom symbionts. Zambia, Mkushi Dist., North Swaka Forest Reserve, Feb 2013 (TN).

Untouched miombo

Old miombos are the best areas for mushroom hunting. The trees offer shade and enhance humidity even on sunny days. There are plenty of tree species, each of them having their own mycorrhizal mushrooms. The trees live long, and the basic situation stays unchanged: when good sites for mushrooms are found, they can be harvested year after year. It is worthwhile observing which fungi grow around a certain tree. Picking causes no harm to the mushrooms, as the important underground mycelia stay in good condition.

It is possible, but unconfirmed, that mature trees support a better mushroom harvest than young trees. A contrary situation occurs in North European forests, where mid-aged forests tend to offer a better mushroom yield than tree stands at their maximal age. There is need for a follow-up in the woodlands of the tropics.

Help the trees, and the mushrooms will thank you

The native trees of the miombo woodlands are priceless when saving African edible mushrooms. No alien tree species can replace them.

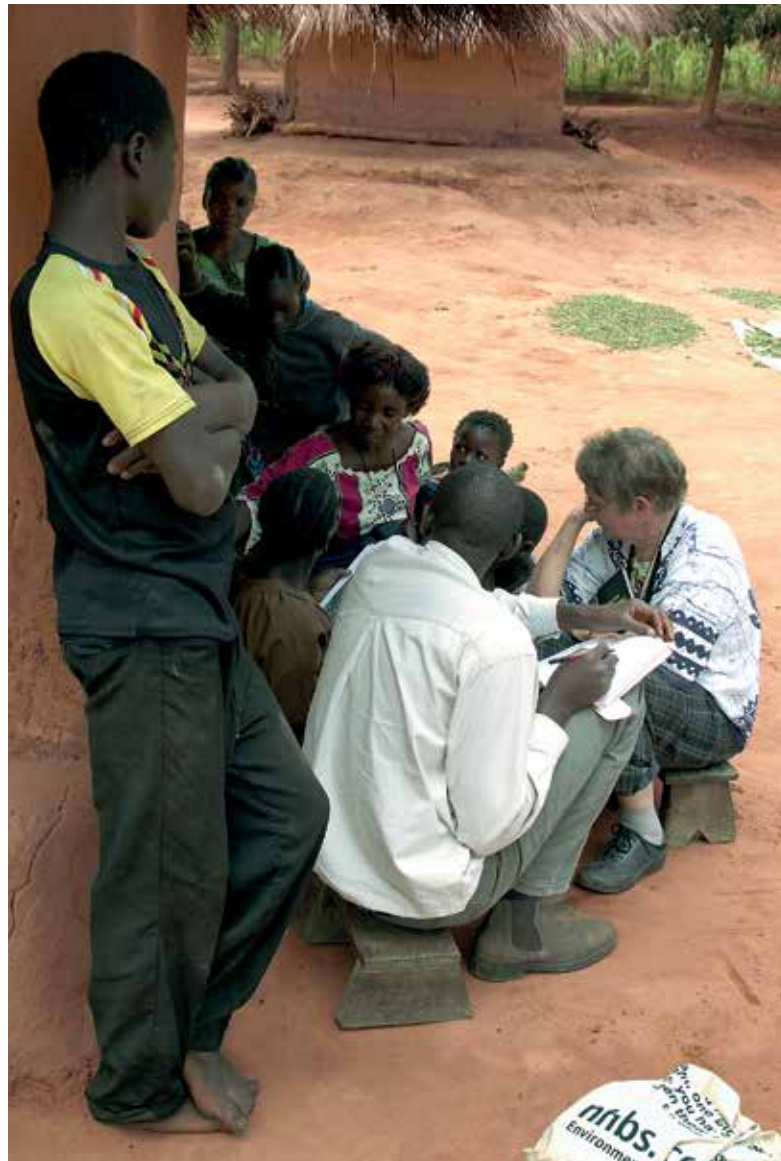
It would pay to save *Brachystegia*, *Julbernardia*, *Isoberlinia*, *Uapaca* and other native trees even around houses. There the mushrooms are easily harvested, and they do not “fall into the wrong hands”. Naturally arising trees may be the best, but trees could be planted as well.

No need to worry about the mushrooms! They will find their way to the trees. Fungal spores travel long distances in the wind, and the right mycelia will start growing as soon as the tree seedlings are sprouting. The stand of trees should be dense enough in order to cast sufficient shade and keep the soil moist. Nature will take care of the rest.



Figs. 82–85. Mushrooms collected in the above miombo woodland. **82:** *Amanita miomboensis* (2013169). **83:** *Amanita* species (2013176). **84:** *Cantharellus symoensii* (2013183). **85:** *Cantharellus afrociarius* (2013172). Photo TN.

Fig. 108. During our interviews the family or even the whole village took part in the discussion. Marja Härkönen and Keddy Mbindo interviewing in Chiyanga village near Mambwe, Feb 2013. Photo TN.



ing to the ethnic group. The knowledge of a person may depend on her/his age and sex. Activity in collecting, identifying, preparing and selling wild mushrooms certainly has an effect on the level of knowledge.

Usually the interview began with one person, sometimes with a couple. Often a large number of people gathered around, giving their opinions and additions to the conversation. The addresses of the interviewees were asked to find out differences between information collected in different parts of the country, and in towns *versus* countryside. The best informants had lived all their lives in the same area.

Fourteen women and eight men were interviewed. Most of them were middle-aged, but the youngest was 9 years and the oldest 75 years old.

The mother tongue is not a simple question nowadays, since inter-tribal marriages are common. An interviewee's mother may speak another language than the father. A third language might have been used in the elementary school. English is the *lingua franca* when people of distant language groups communicate. We got information from people belonging to the following tribes: Bemba, Ila, Kaonde, Lala, Lamba, Lozi, Lunda, Luvale, Mambwe, Soli, Swaka, Tonga and Tumbuka.



Fig. 109. During the rainy season mushrooms are commonly sold along roadsides. The income goes directly to the pickers. Customers usually prefer to buy this kind of sorted mushrooms, each heap consisting of one species only, rather than mixed collections in which the identification is more uncertain. Specimens 2013106–2013108. Along the Lusaka – Kabwe main road, Feb 2013. Photo HK.

Most of the informants were farmers and/or mushroom dealers, including a school-girl. Also some highly educated persons (a university English teacher, a forester, a former minister, a business lady, a gemstone dealer) were asked, but they didn't have personal contact with wild mushrooms anymore, and so we just wrote down their opinions and ideas.

We conducted complete interviews only with people who had personal experience in mushroom hunting. All of them had learned their knowledge from their parents and grandparents during long trips in the miombo. General theory about fungi, their structure and role in nature are taught at school, but the traditional use of indigenous species is overlooked. People whose families had become urbanized two or more generations earlier had not been taught to identify mushrooms.

Different traditions, different attitudes

“Do you eat mushrooms?” Every Zambian answered “Yes” with no hesitation. Using mushrooms is a widespread and deep-rooted tradition in Africa. Many people of European descent living in Zambia have never even tasted wild mushrooms. In Tanzania we found sharp differences between tribes, but the attitude was uniform within each tribe. The Chagga, Arusha, Meru and Maasai, for example, would not eat mushrooms at all, but the majority of people liked them very much. We got an impression that in Zambia a positive attitude was even stronger.

Some European nationals reject all kinds of wild mushrooms, while others like them very much. These mushroom enthusiasts include the French, Italians and Russians. The Chinese consider mushrooms healthy and include them almost in every meal.



Fig. 133. Tente, *Amanita loosei*, is one of the most loved mushrooms in Zambia and in neighbouring countries. Zambia, Northern Prov., Milamba, Feb 2013 (2013278, MH).

Amanita loosei ***

Vernacular names *Tente*, *telya*, *ndeleva* (Bemba), *bandelema*, *bundeleva*, *ndeleva* (Kaonde), *telya*, *tente* (Lala), *telya* (Lamba), *ndeleva* (Lunda), *telya* (Mabmwe).

Amanita loosei is a tall and fleshy species, familiar to all Zambians. It pushes up from the ground as a white ball. The surface of the ball then ruptures and a sticky, roundish cap pushes up. Its colour is at first greyish or ochraceous yellowish, but fades quickly into white. From the protective outer tissues a ring around the stipe and a sac-like volva at the base of the stipe are left.

Cap 10–25 cm in diam., at first hemispherical, then expanding to convex or applanate, surface viscid, smooth, yellowish or olivaceous brown at centre, fading to ivory towards the margin, old specimens nearly white. Gills crowded, thin, and having many lamellulae, their margin smooth or sometimes crenulate. Stipe stout, cylindrical 8–18 × 2–3 cm, white, fibrillose, equal and having a large, saccate, greyish white volva. The surface of the volva has a tendency to crack into rough plates, which become more visible if some soil adheres to them. Ring superior, broad, large, thin and white, upper side finely plicate. Context in cap white, firm to soft, in stipe fibrous and rather brittle, usually hollow. Smell and taste sweetish, mild. Spore print white.

Habitat Distributed in the Zambezian miombo woodland, where it fruits in large quantities.

Notes Many Zambians consider *Amanita loosei* the best of all mushrooms. Most favoured are the young ball-like fruit bodies. From older, expanded fruit bodies the stipe is often removed and discarded. Because of soft and quickly deteriorating context, the species is not easy to preserve. It is always cooked briefly before drying. Problems arise if one collects mushrooms in tree plantations. It is possible, but not yet proved, that a poisonous exotic *Amanita phalloides* (Death cap) has been accidentally imported to Zambia as a



Fig. 134. These young specimens of *Amanita loosei* were bought from a market and they are more expensive than fully opened fruit bodies. Mozambique, Nampula Prov., Malema, Jan 2011 (201102, TN).

Fig. 135. The stipe has usually been removed from the expanded caps of *tente* when they are offered for sale or collected for own use. Zambia, Northern Prov., Mungwi Dist., Chipalila, Feb 2013 (2013231, MH).

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Fig. 157. *Lactarius heimii* has a button-like cap and a narrow ring on the top of the stipe. Zambia, Northwestern Prov., Solwezi Dist., Chisalala, Dec 2013 (2013358, HK).

Lactarius heimii

Vernacular names Not recorded by us.

Lactarius heimii is a middle-sized, pale brownish orange milk cap. Fully grown fruit bodies have a narrow, white ring around the stipe. The taste is acrid.

Cap 3–9 cm in diam., first convex with a central depression, in young fruit bodies the edge strongly incurved, then uplifted; surface pale brownish orange, smooth, matt, edge striate and with a thin whitish cobweb-like hair. Gills adnate to subdecurrent, subdistant, fairly thin, yellowish white, with a few lamellulae. Stipe 1.5–4 × 0.5–1.5 cm, cylindrical, cream-coloured, smooth and having a narrow, white ring. Context whitish, firm but breakable. Latex rather scanty, watery white. Smell acidic. Taste at first slightly acrid, after-taste stronger, bitter-acrid. Spore print cream coloured.

Habitat Found in several countries in Zambezan miombo woodlands.

Notes Species of *Lactarius* bearing a ring have been found only in Africa, and there are also other similar species in addition to *Lactarius heimii*. The two people whom we were able to show this species in Zambia considered it to be inedible, even poisonous. Opinions about its edibility vary a lot in Tanzania.

Spores 8–10 × 6.5–8 μm, broadly ellipsoid, ornamentation amyloid with very small warts and thin connective lines.



Fig. 158. *Lactarius kabansus*. Zambia, Central Prov., Myafi Forest Reserve, Feb 2013 (2013152, TN).



Fig. 159. *Lactarius kabansus*, one of the mushroom-market favourites. The originally almost white gills attain pale brown colours soon after collecting. Zambia, Northern Prov., Kasama, Feb 2013 (2013234, HK).

Lactarius kabansus ***

Vernacular names *Kabansa* (Bemba), *chamakupe*, *kabanse*, *kamanse* (Ila), *kabanse*, *kamanse* (Kaonde), *kabanse* (Lamba), *kansalela*, *nakandoma* (Lozi), *kasalela* (Lunda), *kambanze* (Luvale), *kabanse* (Nyanja), *kombowa-mbova* (Tonga).

Lactarius kabansus is a rather small milk cap with blackish brown cap and stipe. It is common from the beginning of the rains up to their end in March–April. It is offered for sale in market places all over the country, in fresh as well as in dried condition.

Cap 2–8 cm in diam., at first convex with a central depression, then uplifted, slightly umbilicate, margin incurved, surface blackish brown, smooth, matt. Gills decurrent, crowded, fairly thin, pale buff yellow, margin smooth, several lamellulae present. Stipe 2–4 × 0.5–1.5 cm, evenly thick or slightly expanded downwards, concolorous with the cap surface, dry, smooth; apex longitudinally wrinkled. Context thin, first white, but changes into pinkish on exposure to air, fistulous in stipe. Latex watery, milky white, getting scanty in old specimens. Smell weak, pleasant, fruity. Taste mild. Spore print white.

Habitat *Lactarius kabansus* is common in open Zambezan miombo woodlands, especially on sandy soils. It has a long growing season, being especially common in the early rains.

Notes *Lactarius kabansus* was scientifically described and named as late as in 1980 (Pegler & Pearce 1980) although it has been a popular, well-known edible species in Zambia and neighbouring countries from times immemorial. Already Livingstone observed in 1867 how people in the area which is now the Northern Province of Zambia, during famine, lived on leaves and mushrooms, one of which was called *nakabansa* (Pearce 1985). After one version of that name, *kabansa*, the species got its Latin name. According to Pearce (1981), *kabansa* is so mild that it is commonly eaten raw.

Spores 7–9 × 5.5–7 μm, ellipsoid, ornamentation amyloid, composed of ridges up to 1 μm forming an irregularly interconnected reticulum.



Russula ciliata *

Vernacular name *Chiteleshi* (Bemba).

Russula ciliata is a fairly small species. Its cap may be green, yellow or red and usually a combination of these colours. The taste is mild.

Cap 3.5–5 cm in diam., convex to flat with a central depression, bright or dull yellow-green to yellowish orange, striate at margin, pellicle peeling easily. Gills adnexed, creamy white, close, margin entire. Stipe 2–4 × 1.5–1.8 cm, cylindrical, slightly tapering downwards, white, smooth. Context white, brittle. Smell and taste mild. Spore print cream coloured.

Habitat Miombo woodland, common also in neighbouring countries.

Notes This species is considered delicious in Tanzania and Mozambique. Some Makua people think it to be so lovely that they call it *muarusi*, referring to a young girl. We did not have a chance to ask many Zambians about the use of this species and the result was rather controversial: some people considered it edible but nothing special, and others do not collect it at all.



Fig. 175. The colour of *Russula ciliata* is a mixture of olivaceous green and purple tints. Mozambique, Nampula Prov., Malema, Jan 2011 (201162, TN).

Fig. 176. *Russula ciliata*. Here only a hint of purple is seen along the margin, which is striate, meaning that the radial grooves of the upper side reflect the gills below. Zambia, Northwestern Prov., Kapunta, Dec 2013 (2013374, MH).

Spores broadly ellipsoid, 7–9 × 6–7.5 μm, densely ornamented with low (up to 0.5 μm), obtuse elements which are united with ridges into an incomplete net. Suprahilar element inamyloid.



Russula compressa *

Vernacular name *Ifilume fyatente* (Kaonde, Ila).

Russula compressa is a rather tall species with bright red surface and white stipe. The gills are at first white, but turn ochraceous yellow in older age. This species appears rather early in the mushroom season, about at the same time as *tente* (*Amanita loosei*).

Cap 6–11 cm in diam., at first convex, then flattened to depressed, surface blood red, darker at centre, margin slightly striate. Pellicle smooth, in moist weather viscid, totally peelable. Gills adnate to adnexed, close, at first white, then ochraceous. No lamellulae nor forkings. Stipe 3–7 × 1–3 cm, equal to slightly clavate, white, matt. Context soft and brittle, white, becoming slightly yellowish at older age, in stipe chambered. No special smell, taste absolutely mild. Spore print pale ochraceous.

Fig. 177. *Russula compressa* is one of the many scarlet-coloured species in the genus *Russula*. Mild-tasting species in this group are edible, while there may be unbearably hot-tasting species, too. The gills are initially white (the smallest cap), but later the ripening of ochraceous coloured spores tint them pale creamy brownish. The colour of the stipe is an important character for identification – in this species the stipe is white. Zambia, Copperbelt Prov., Chingola Dist., Mupitanshi, Kakundwe Forest, Dec 2013 (2013327, MH).

Habitat Miombo woodland. Found also in Burundi, DR Congo and Tanzania.

Notes The Ila name of this species means “The bride of *tente* (*Amanita loosei*)”. This bride grows at the same period and in the same kind of habitat with the eagerly hunted *Amanita loosei*, but because of its bright colour it is easier to find. It is edible, but not as liked as *tente*.

Spores ellipsoid, 7.5–9 × 6.5–7.5 μm, densely ornamented with low, irregular and obtuse elements which are isolated, but locally joined to form an incomplete reticulum, suprahilar plage amyloid.



Fig. 203. *Termitomyces titanicus* has a gently down-curved cap, white edge, and gradually darkening centre. Zambia, Northwestern Prov., west of Solwezi, Dec 2013 (2013330, HK).

Termitomyces titanicus ***

Vernacular names *Bkungwa*, *bukungwa*, *chikolowa*, *chingu lugulu*, *ichikalbwa*, *ichikolowa* (Bemba), *chikolowa*, *indyu*, *zanda* (Ila), *bukulumbwe*, *chikolowa*, *kulumbwe*, *zanda* (Kaonde), *bukungwa*, *ulonlikungwa*, *ubukungwa* (Lala), *bukungwa* (Lamba), *uhavwa* (Lunda), *komo* (Mambwe), *bubandanbambi* (Mbunda).

Termitomyces titanicus is a giant among mushrooms, having whitish cap with a smoky brown centre. It has very thick but relatively short stipe with a hanging ring situated just below the gills. Pseudorrhiza is long, but it takes patience and power to get it up from the soil. With a careful pull it can be stretched and released, while a quick tug makes it break. Pseudorrhiza is edible, too, although more tough than the cap.

Cap 40–80 cm in diam., at best 1 m across, young caps dome-shaped, expanded ones with only gently rising light brown umbo, the

colour becoming gradually paler toward the edges; edge down curved, cream coloured. Surface is tomentose, somewhat striate and splitting at the margin. Gills free, crowded, white to pale buff, getting a pinkish tone with age. Stipe 18–35 × 3–6 cm, central, short and stout, white, and having about 6 cm wide, thick and hanging ring; pseudorrhiza relatively thin, up to 1 m long. Context white, soft at the cap, fibrous at the stipe. Smell and taste mild, agreeable. Spore print pinkish cream.

Habitat Arises early in the rainy season in miombo woodlands from old, grass- and shrub-covered termite mounds, usually solitarily.

Notes According to the Guinness Book of Records *Termitomyces titanicus* is the largest mushroom in the world. It is well known and eagerly hunted in Zambia, and one fruit



Fig. 204. Lower side of *Termitomyces titanicus*. Muddy parts of the stipe are usually peeled off from specimens offered for sale. Zambia, Northwestern Prov., Solwezi Dist., Kylabankanka, Dec 2013 (2013331, TN).

body will suffice for a good meal to a large family. A weight of 2.5 kg was reported by Pearce (1987) and the biggest examples certainly exceed 3 kg. People often warn that care should be taken when picking it because a snake may hide under its large cap which is fairly appressed over a grassy ground. The stipe is thick but short in relation to the wide cap.

Spores (4.9–)5.2–7.1(–7.8) × (3.2–)3.3–4(–4.1) μm, long ellipsoid, hyaline, inamyloid.

Fig. 205. Measuring a giant. This specimen of *Termitomyces titanicus* was 75 cm across. Keddy Mbindo holding the fruit body, Marja Härkönen measuring. Zambia, Northwestern Prov., Solwezi Dist., Kylabankanka, Dec 2013 (2013331, HK).



Chanterelles

Chanterelles (genus *Cantharellus*) are fleshy but firm, small to medium sized mushrooms. Thick cap tapers gradually into the stipe, which is thick as well. Most chanterelles have gills, which tend to be thick, low and distant, and the spaces in between the gills are interveined in some species. Most species are bright yellow or orange coloured; some are hot-red all over, or even grey or black. The smell is usually fruity and pleasant. Most species have a delicious taste, although some of them may have a sharp aftertaste.

Chanterelles belong to the most important edible mushrooms in Zambia, not only because of their good taste, but also thanks to their abundance, and solid structure which makes them easy to handle and transport. There is no volva protecting young fruit bodies (like, for instance, in *Amanita*) which is the reason for almost the only negative feature: chanterelles collected in the wild are often sandy. They are important mycorrhizal partners of *Uapaca* and many other miombo trees. Chanterelles cannot be cultivated because of their symbiotic way of life.



Fig. 208. A bowl full of chanterelles. The big yellow fruit body is *Cantharellus afrociarius*, most of the others are *Cantharellus rufopunctatus*. All the species are edible in this genus. Zambia, Northern Prov., Mbala Dist., Chingila, Feb 2013 (2013253, MH).

Cantharellus addaiensis *

Vernacular names Not recorded by us.

The intensively red colour makes this chanterelle easy to find, even though it is one of the smallest species in the genus.

Cap 1–2.5 cm in diam., thin, funnel-shaped with expanded margin, smooth and intensively red all over. Gills equally red or just a little paler, decurrent, close, thin, forked but not interveined. Stipe 1–3 × 0.2–0.5 cm, relatively long if compared to the width of the cap, cylindrical or tapering downwards, smooth. Context in cap very thin, reddish, in stipe concolorous but slightly fibrous. Smell faint, fruity; taste mild.

Habitat Miombo woodland, growing in gregarious troops. Common throughout the African miombo zone.

Notes Also this is an edible chanterelle, in spite of its small size. Some people said it was delicious, but others considered it too small and thus too laborious to pick. There are also other, small, intensively red chanterelles in the area, for instance *Cantharellus floridula*,



Fig. 209. *Cantharellus addaiensis*. Zambia, Central Prov., Mkushi Dist., Myafi Forest Reserve, Feb 2013 (2013160, TN).

which has whitish gills. They are all equally edible.

Spores (6.7–)7–8(–8.2) × (4.5–)4.6–5.3(–5.6) μm, ellipsoid, smooth. Hyphae with clamp connections.



Fig. 210. *Cantharellus afrociarius*. Zambia, Central Prov., Mkushi Dist., North Swaka Forest Reserve, Feb 2013 (2013172, MH).

Cantharellus afrociarius ***

Vernacular names *Chitondo*, *lutenga* (Bemba), *bumpukutu*, *butondo* (Kaonde), *witondwe*, *bwitondwe* (Lala), *bumpukutu*, *zanzakeni* (Lamba), *balula mutu* (Lunda), *butondo* (Luwale).

***Cantharellus afrociarius* is a robust, yellow species. It is easy to recognize by its clumpy appearance and white, mealy tone at the surface of young fruit bodies. The rooting, often forked stipe carries several caps, which merge partly together side by side.**

Cap 2–6 cm in diam., thick and robust, irregular, several caps joined together and the whole entity up to 12–15 cm in diam. Surface smooth, clumpy, yellow but some specimens with a white mealy bloom. Edge sharp, strongly lobed and undulating. Gills decurrent, yellow, fairly thin and low, rather crowded, forked and anastomosing. Stipe pale yellow, thick; lower part buried in the soil, apically divided to short stipes with complete but partly merged-together caps.

Context thick, rather soft, whitish but yellow under the surface; in stipe more tough and hollow. Smell weak, taste mild.

Habitat Until now reported only from Zambian miombo woodlands.

Notes Buyck *et al.* (2013) described *Cantharellus afrociarius* for science as recently as in 2013, and considered it to be an uncommon species. It may be rather widely distributed, growing solitarily or in small groups. However, people seem to collect it and commonly offer it for sale among some more abundant yellow chanterelles, like *Cantharellus rufopunctatus*. Reports of "*Cantharellus cibarius*" in tropical Africa (e.g. Ryvardeen *et al.* 1994, Smith & Allen 2004) may refer at least partly to this species. The true *Cantharellus cibarius* is a species of northern, cool climates.

Spores (7.3–)7.8–8.8(–9.5) × (4–)4.5–5.2(–5.4) μm, ellipsoid but slightly reniform in side view. Hyphae with clamp connections.



Fig. 242. *Funalia polyzona* has a thick cover of hairs on its upper side. Sometimes the zones are clear, but in other specimens fairly indistinct. These were growing on fallen branches of *Uapaca*. Zambia, Central Prov., Kapiri Mposhi Dist., Chibwe National Forest, Feb 2013 (HK 26010).

Funalia polyzona

Funalia polyzona is easy to identify on the basis of its hairy surface and pale brownish colour.

Fruit body annual or living a couple of seasons, shelf-shaped, semicircular, with broadly attached base, flexibly corky; cap 3–14 cm wide, projecting 2–7 cm, 3–5 mm thick, usually a few caps growing side by side or overlapping. Upper surface hairy, usually distinctly zonate, at first brownish cream, older bright orange-brown, light yellow-brown or tan, sometimes with a greenish tint. Edge sharp, stiff. Pore surface light ochraceous when young and fresh, pale golden-brown in old and dry specimens; pores angular, 1–2 per mm. Context layered, with 1–2 mm thick soft tomentum and 1–2 mm thick corky layer beneath; context and tube layer concolorous, light ochraceous.

Habitat On fallen tree trunks and thick branches in miombo woodland. A common species throughout tropical Africa.

Notes This species is also known as *Coriopsis occidentalis*, *Coriopsis polyzona*, and *Trametes polyzona*. Fruit bodies are rather large and make this species conspicuous. However, they are fairly thin and stiff like thick cardboard. This is a harmless white-rot species, growing only on dead wood.

Spores (5.2–)5.5–6.4(–7) × (1.9–)2–2.2(–2.4) μm, cylindrical. Hyphal structure trimitic with clamp connections, skeletal hyphae thick-walled, yellow, cyanophilous, binding hyphae narrow and richly branched.



Fig. 243. *Funalia telfairii* has long, thread-like hairs on its cap. Pores are irregularly angular. Zambia, Northern Prov., Kasama Dist., Chishimba Falls Nature Reserve, Feb 2013 (TN 9033).

Funalia telfairii

Funalia telfairii is characterized by a pale brownish colour, hairy upper surface, and fairly large and shallow pores.

Fruit body annual, sessile, semi-circular or fan-shaped with a constricted attachment to the wood, flexible when fresh, papery thin, stiff and light-weight when dry; cap 3–10 cm wide, 1–3 mm thick, projecting 2–5 cm. Upper surface covered with sparse, thread-like hairs which are often branched or glued together at their bases; pellicle beneath the hairs well visible, matt when fresh, silky lustrous when dry; with faint concentric zones and radial ridges, hairs and pellicle straw coloured or pale brown like old paper, or even greenish. Edge papery thin, concolorous with upper surface. Lower surface concolorous but paler towards the margin, pores angular, 1–2 per mm, sometimes divided by incomplete walls into stall-like compartments. Context ca. 1

mm, straw coloured, tube layer concolorous, 1–2 mm.

Habitat On fallen branches and other woody debris in dense miombo and riverine forests. Common, causing white-rot.

Notes This is fairly easily recognizable species because of its long, branched hairs, which tend to arise along the radial ridges. Overall colour of a dry specimen is reminiscent of the paper used for cardboard boxes (kraft paper).

Spores (7.9–)8.3–12.1(–14.6) × (3.1–)3.3–4(–4.7) μm, cylindrical, thin-walled. Hyphal structure trimitic with clamp connections. Skeletal hyphae wide and straight, binding hyphae narrow and richly branched, both of them yellowish, thick-walled, and cyanophilous.