### DATA BASE ON WILD EDIBLE MUSHROOMS OF KERALA

by





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# **INTRODUCTION**

#### Database on Edible Mushrooms of Kerala

Kerala, a state in the southwestern region of India, is known for its rich biodiversity and lush tropical forests. Among its many natural treasures, mushrooms occupy a unique niche, thriving in the state's warm, humid climate and diverse ecosystems. While a wide variety of fungi grow in Kerala, only a select number are edible and safe for human consumption. This database aims to systematically document the edible mushroom species found across Kerala, highlighting their taxonomy, ecological roles, nutritional value, traditional uses, and potential for sustainable cultivation.

The **Edible Mushroom Database of Kerala** is an effort to bridge this knowledge gap by compiling verified information on the edible fungal species found in the region. This database serves as a centralized resource for researchers, academicians, agricultural practitioners, and policy makers involved in biodiversity conservation, ethnobotany, and sustainable agriculture.

Each entry in the database includes detailed taxonomic information, common names, high-resolution images, fruiting season, locality, parts used etc. By integrating traditional knowledge with modern taxonomic and ecological insights, the database contributes to the broader goals of biodiversity documentation and food security enhancement in the region.

This initiative is also intended to support academic research, curriculum development, and the formulation of policies related to the sustainable use of non-timber forest products (NTFPs) in Kerala.

#### AGARICUS BINGENSIS Heinem.

Pileus (Cap): 7–9 cm convex, later plano-convex to applanate with or without an umbo, surface chalky white in young ones with punctiform scales throughout. Lamellae (Gills): free, dark brown. Stipe (Stalk):  $7-9 \times 1-1.2$  cm central, cylindrical with a bulbous base, brittle, surface chalky white with punctiform squamules below the annulus (ring). **Context** (Flesh): White, fleshy Annulus (Ring): White, superior, pendant Odour & Taste: Strong of anise; Taste excellent Spore print: Brown **Spores**: Brown, ellipsoid to oblong  $6.4-10 \times 4.4-5.6(6) \, \mu m$ Habitat: Solitary on soil among grass Locality: Varkala, Thiruvananthapuram Season: May Common Name: Nil Status: Wild Cultivation practices: Not developed Uses: Food Parts used: Fruit body (Whole) Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Cultivation/Good



#### AGARICUS BITORQUIS (Quél.) Sacc.

Pileus (Cap): 7.9-14 cm, globose, semi globose, later convex to plano-convex, surface white, smooth. Lamellae (Gills): free, dark brown, crowded. Stipe (Stalk):  $40-70 \times 20-43$  mm, central, cylindrical, solid, surface white smooth. Context (Flesh): thick, fleshy, soft. Annulus (Ring): intermediate, double, white. Odour & Taste: Mild; Taste excellent Spore print: Brown **Spores**: Brown,  $5.5-8.5 \times 5.1-6.2 \mu m$ , ellipsoid, smooth Habitat: Solitary, scattered on soil and on manure heaps Locality: JNTBGRI campus Palode, Thiruvananthapuram. Season: October to December. Common Name: Pavement mushroom Status: Wild **Cultivation practices:** Yes Uses: Food Parts used: Fruit body (Whole) Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/palatability: Cultivation/ excellent



AGARICUS FLOCCULOSIPES R.L. Zhao, Desjardin, Guinb. & K.D. Hyde

**Pileus** (Cap): 6–16 cm, subglobose becoming convex, plano-convex to finally upturned; surface yellowish white becoming greyish orange with brownish orange to dark grain like squamules throughout. Lamellae (Gills): free, white becoming dark brown, crowded. Stipe (Stalk):  $9-20 \text{ cm} \times 8-30 \text{ mm}$ , central cylindric, hollow, brittle, with a sub-bulbous to clavate base, milky white to off-white becoming brown on handling. **Context** (Flesh): white, thick, soft Annulus (Ring): superior white, pendant Odour & Taste: Pleasant aniseed like; Taste excellent **Spore print:** Brown **Spores**: Brown,  $3.2-6 \times 2.4-4 \mu m$  ellipsoid, smooth Habitat: Solitary to scattered in groups on forest soil Locality: JNTBGRI Campus, Palode, Thiruvananthapuram Season: April, July to NovemberCommon Name: Nil. Status: Wild **Cultivation practices:** Yes Uses: Food Parts used: Fruit body(Whole) **Processing technique:** Existing value added products: Nil Possibility of value added products: Yes Methods of popularization/palatability: Cultivated/ Excellent



#### AGARICUS GRATOLENS C.K. Pradeep & R.L. Zhao

**Pileus** (Cap): 3–12 cm diam., subglobose or parabolic with a flat disc expanding to more or less applanate, sometimes broadly and lowly umbonate or with a depressed centre, surface chalky white with brownish disc, brownish appressed scales on the centre **Lamellae** (Gills): free, white in bud becoming orange white

Stipe (Stalk): 4.5–19 cm  $\times$  5–14 mm, central, cylindric, with a slightly thickened base; white, smooth above, floccose scales present at the base.

Annulus (Ring): superior, membranous, white, pendant, skirt like

Odour & Taste: Pleasant, flowery; Taste excellent

Spore Print: Brown

**Spores**: Brown, 5.6–6 × 3.2–4  $\mu$ m, thick-walled, ellipsoid to oblong **Context** (Flesh) thick, soft, white **Habitat**: Solitary, pairs or scattered in soil among leaf litter **Locality:** JNTBGRI Campus, Palode, Thiruvananthapuram

Season: June to October

Common Name: Nil

Status: Wild

Cultivation practices: Yes

Uses: Food

Parts used: Fruit body(Whole)

Processing technique: Nil

**Existing value added products:** Nil

Possibility of value added products: Yes

Methods of popularization/ palatability: Cultivation/Excellent



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#### AGARICUS SUBRUFESCENS Peck

Pileus (Cap): 5.3–10.9 cm diam., expanding convex to plane with a flat or slightly depressed centre, surface off-white covered by teak brown to dark brown fine appressed scales; margin of the cap with remnants from the partial veil in young basidiomata Lamellae (Gills): At first white, then pink, finally attain dark brown, free Stipe (Stalk):  $6-9.5 \times 0.7-1.6$  cm, central, cylindrical, stuffed later become narrowly hollow, brittle, tapering upwards from a broad base; surface white, yellowing on touching or on scratching Annulus (Ring): large, white, skirt like, pendant, persistent Context (Flesh): 6 mm thick at the pileus disc, white, yellowing on cutting Odour: Strong of anise Spore Print: Dark brown. **Spores**: Brown,  $5.2-6 \times 3.6-4 \mu m$ , ellipsoid, smooth Habitat: Solitary on bare soil and under living bamboo stands Locality: TBGRI Campus, Thiruvananthapuram; Villiyappally Kozhikkodu, Kuruva Island Wayanadu. Season: July, September to October Common Name: Almond mushroom Uses: Food Parts used: Fruit body(Whole) Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Cultivation/ Good



#### AMANITA HEMIBAPHA (Berk. & Broome) Sacc.

**Pileus** (Cap): 5–11 cm diam., expanding to plane, often depressed at the centre, surface uniformly tomato red in the bud, capsicum red to tomato red with deep orange margin, fading with age, without any scales, smooth and glabrous

Lamellae (Gills): Free, creamy white in buds, pastel yellow to light yellow when mature

Stipe (Stalk): 7–15 cm  $\times$  6–12 mm, central, maize yellow in the upper half, pastel yellow in the lower half, decorated with patches of maize yellow to sunflower yellow sub-felted scales

Annulus (Ring): Superior, membranous, persistent, skirt like, yellow

Volva: Saccate, white

Odour & Taste: Mild, taste excellent

**Spore print:** White to cream

**Spores**: White,  $8.9-9.5 \times 5.9-6.2 \mu m$ , ellipsoid to elongate inamyloid

**Habitat**: Solitary or gregarious on soil associated with *Hopea parviflora*, *Vateria indica* and *Myristica* sp.

Locality: JNTBGRI campus, Kallar, Thiruvananthapuram; Bonacaud, Thenmala. Kollam.

Season: February, April, June to September

**Common Name:** Half-dyed slender Caesar

Status: Wild

Cultivation practices: No

Uses: Food and medicine.

Parts used: Fruit body(Whole)

Processing technique: Nil

Existing value added products: Nil

**Possibility of value added products:** Yes

Methods of popularization/ palatability: Cultivation/excellent



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#### CANTHARELLUS CIBARIUS Fr.

**Pileus** (Cap): 3–10 cm diam., convex becoming nearly plane, disk shallowly depressed, surface deep yellow to butter yellow fading in age and dry weather, glabrous, margin in rolled and incurved.

Lamellae (Gills): Decurrent, narrow, cream to yellow, blunt, forked

Stipe (Stalk): 2.5–6.5 cm  $\times$  7–22 mm, central cylindric to compressed, solid equal or often tapered at base. Surface light yellow to yellowish white, smooth and glabrous Odour: Pleasant like apricots when fresh

Spore Print: White

**Spores**: White,  $7.5-12 \times 5-6.5 \mu m$ , ellipsoid, inamyloid with a thin smooth wall Habitat: Solitary or in groups on soil in association with Dipterocarpaceae trees Locality: Muthanga, Ponkuzhy, Wayanad; Kallar, JNTBGRI Campus, Thiruvananthapuram Season: June to October **Common Name:** Golden chanterelle Status: Wild Cultivation practices: No Uses: Food and medicine. Parts used: Fruit body (Whole) **Processing technique:** Dried/freezed Existing value added products: Nil Possibility of value added products: Yes Palatability: Excellent



## CANDOLLEOMYCES CANDOLLEANUS (Fr.) D. Wächt. & A. Melzer

**Pileus** (Cap): 3–8 cm diam., conical then convex-applanate, greyish brown, darkening to brownish at the centre, occasionally with a few velar scales, slightly slimy when moist.

Lamellae (Gills): free, cream to flesh-pink, 3–6 mm wide, crowded

**Stipe** (Stalk):  $2-12 \text{ cm} \times 0.5-2 \text{ mm}$ , cylindrical, solid, brittle; surface whitish to cream colour, fibrous

Context (Flesh): White, up to 1.5 cm thick at the disc white

**Odour**: Not distinct

Spore Print: Pale to dark brown

Spores: Brown, 5.5–7.5  $\times$  3.7–4.5  $\mu m,$  ovoid to ellipsoid, hyaline, with few contents

Habitat: In small groups around stumps and on lawns and pastures

**Locality**: Throughout Kerala

Season: June to August

Common Name: Pale Brittle Stem.

Status: Wild

Cultivation practices: No

Uses: Food

Parts used: Fruit body(Whole)

**Processing technique:** Nil

Existing value added products: Nil

Possibility of value added products: Yes

Palatability: Medium



COPRINOPSIS CINEREA (Schaeff.) Redhead, Vilgalys & Moncalvo

**Pileus** (Cap): 1.8–3.8 cm diam., campanulate to convex, with slightly raised apex, surface initially white, turning grey to greyish brown, light brown at apex, cap covered with white woolly appressed scales in buds easily removable, pileal margin radially splitting.

**Lamellae** (Gills): Free, crowded, narrow, deliquescent, white when young become grayish black at maturity

**Stipe** (Stalk): White,  $6.5-8.7 \times 5-8$  mm, central, tapering up from a bulbous base with a short white root, hollow, brittle, surface white fibrillose, often with a short white root, solid

**Context** (Flesh): white, blackening at maturity

Annulus (Ring): Absent

Odour: Mild

Spore Print: Black

**Spores**: Black,  $8.5-12 \times 5-7 \mu m$ , ellipsoidal with a broad central germ pore, thick-walled, brown to blackish brown.

Common Name: Gray Shag mushroom

Habit: Scattered or in dense clusters in arecanut husk

Locality: Throughout Kerala

Season: May to November

Common Name: Grey shag

Status: Wild

Cultivation practices: Yes

Uses: Food

Parts used: Fruit body (Whole)

Processing technique: Dried

Existing value added products: Nil

Possibility of value added products: Yes

Methods of popularization/ palatability: Good



#### COPRINUS COMATUS (O.F Mull.) Pers.

**Pileus** (Cap): 2 cm diam., parabolic, surface white turning black when cap opened, covered with recurved scales when young, smooth and glabrous when mature.

Lamellae (Gills): Adnexed, deliquescent, grey become black when mature

**Stipe** (Stalk): 9.5 cm  $\times$  6 mm, central, cylindric, hollow, tapering upwards from a broad base, brittle, white, smooth, glabrous

Context (Flesh): White, soft, thin

Annulus (Ring): Nil

Odour: Nil

Spore Print: Black

**Spores**  $12-16 \times 7-8 \mu m$ , smooth elliptical with an apical pore

Habit: Scattered, grouped, or in dense clusters on disturbed ground in grass or lawns

Locality: Muthanga, Wayanad; Munnar, Idukki

Season: May to November

Common Name: Shaggy ink cap, Lawyer's wig, Shaggy mane

Status: Wild.

Cultivation practices: Yes

Uses: Food.

Parts used: Fruit body (Whole)

Processing technique: Dried

**Existing value added products**: Nil

**Possibility of value added products:** Yes

#### Methods of popularization/ palatability: Cultivation/Good



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#### HYGROCYBE PUNICEA (Fr.) Kummer

Pileus (Cap): 2-7.5 cm diam., conic to conico-convex or campanulate when young, surface orange red, scarlet, carrot red, fire red, orange yellow, light orange, smooth, greasy to viscid. Lamellae (Gills): adnexed, becoming free, pale yellow, pastel yellow or yellowish white, thick and waxy Stipe (Stalk): 3.5-9.5 cm  $\times$  3-17 mm, central, cylindric, orange red to deep yellow, chrome yellow, light yellow, white at the extreme base, slimy when wet Context (Flesh): White, yellow to orange below cuticle Annulus (Ring): none **Odour**: Nil Spore Print: White **Spores**: White,  $8.8-11.7 \times 4.7-6.46 \,\mu\text{m}$ , ellipsoid, to elongate Habitat: Solitary to scattered or in groups on ground among litter Locality: Silent valley, Palakkad; Thenmala, Kollam; JNTBGRI campus, Palode Thiruvannathapuram Season: April to July, August, October **Common name**: Crimson waxcap/Scarlet waxcap Status: Wild Cultivation practices: Nil Uses: Food Parts used: Fruit body (Whole) Processing technique: Nil Existing value added products: Nil Possibility of value added products: Nil Methods of popularization/ palatability: Mild



#### HYMENOPELLIS RADICATA (Relhan) R.H. Petersen

**Pileus** (Cap): 2–10 cm diam., convex to applanate, umbonate, surface yellowish grey or paler to dark bistre brown, viscid and translucent striate when moist, sticky, ridged rugose at the centre.

Lamellae (Gills): Adnate, white or pale cream, broad, up to 10 mm thick

**Stipe** (Stalk):  $5-8 \text{ cm} \times 5-10 \text{ mm}$ , elongate, cylindric, tapers to both ends; base with a long root; surface similar in colour with the pileus, paler towards the cap, scaly

**Context** (Flesh): thin, white, unchanging

Annulus (Ring): Nil

**Odour**: Nil

Spore Print: White

Spores: 12–20  $\times$  9–13  $\mu m,$  ovoid to ellipsoid, hyaline smooth with a slightly thick wall

Habitat: Solitary in soil

**Locality:** Nelliyampathy, Palakkad; Munnar, Idukki; Thenmala, Kollam; JNTBGRI campus, Kallar, Thiruvananthapuram

Season: June to November

Common Name: Rooting shank

Status: Wild

Cultivation practices: No

Uses: Food

**Parts used:** Fruit body(Whole)

Processing technique: Dried

Existing value added products: Nil

**Possibility of value added products:** Yes

Methods of popularization/ palatability: Good



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#### LACCARIA AMETHYSTINA Cooke

Pileus (Cap): 1.7-5 cm diam., broadly convex to flat, often with a central depression, bright grayish purplish lilac, fading during loss of moisture Lamellae (Gills): Subdecurrent, distant or nearly so, thick, waxy, dark purple 3 mm broad Stipe (Stalk):  $3.5-4.0 \text{ cm} \times 2-3 \text{ mm.}$ , central, cylindric, similar in colour with the cap or slightly paler, stuffed, becoming hollow with age, fibrous Context (Flesh) thin, waxy, dark purple Annulus (Ring): Nil **Odour**: Nil Spore Print: White **Spores**: White,  $6.7-8.3 \times 6.3-8 \mu m$ , globose rarely subglobose, hyaline, inamyloid, echinulate Habitat: Scattered in troops on forest soil Locality: JNTBGRI campus, Kallar, Thiruvananthapuram; Nilambur. Malapputram; KFRI campus, Thrissur Season: July to December Common Name: Amethyst deceiver Status: Wild Cultivation practices: No Uses: Food Parts used: Fruit body (Whole) Processing technique: Dried Existing value added products: Nil Possibility of value added products: Nil Palatability: Mild



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#### LACCARIA LACATA (Scop.) Cooke

**Pileus** (Cap): 1–4.5 cm diam., convex becoming flat,often with a central depression; surface salmon pink, brick-red, or shades of orange or brown when moist and fades markedly when dry

Lamellae (Gills): Adnate, widely spaced, pinkish

**Stipe:**  $5-10 \text{ cm} \times 6-10 \text{ mm}$ , central, cylindric, fibrous

Context (Flesh): Reddish brown, thin

Annulus (Ring): Nil

Odour: Not distinct

Spore Print: White

**Spores**: White,  $8-10 \times 7.5-10 \,\mu\text{m}$ , globose, spiny

Habit: Solitary to scattered in groups in wooded areas on soil

Locality: Thenmala, Kollam; Eringol, Eranakulam; Muthanga, Ponkuzhy, Wayanad Bonacad, Kallar, TBGRI Campus, Thiruvananthapuaram

Season: January to December

Common Name: The deceiver; Waxy Laccaria

Status: Wild

Cultivation practices: No

Uses: Food

Parts used: Fruit body(Whole)

Processing technique: Dried

**Existing value added products:** Nil

Possibility of value added products: Nil

Palatability: Mild



#### *LENTINUS SAJOR-CAJU* (Fr.) Fr.

Pileus (Cap): 2.5–10.5 cm diam., funnel shaped; surface greyish white with brownish scales throughout; cap margin in rolled and wavy Lamellae (Gills): Deeply decurrent, white, crowded Stipe (Stalk):  $1-5 \text{ cm} \times 10-26 \text{ mm}$ , white lateral or excentric, solid, curved with an annulus in the middle or lower half **Context** (Flesh): White, tough, leathery Odour & Taste: Mild, good Spore Print: White **Spores**: White,  $5.3-8.7 \times 1.5-1.9 \mu m$ , ellipsoid Habitat: In clusters and scattered on rotting or fallen tree Locality: Nelliyampathy, Wayanadu; JNTBGRI campus Thiruvananthapuram Season: May, June to October Common Name: White-rot Fungus Status: Wild Cultivation practices: No Uses: Food and medicine. **Parts used:** Fruit body(Whole) Processing technique: Nil Existing value added products: Nil Possibility of value added products: Yes, good for pickle, soup powder etc Methods of popularization/ palatability: Cultivation/ Good



#### LENTINUS SQUARROSULUS Mont.

**Pileus** (Cap): 2–7 cm diam., convex to applanate with a depressed at center, infundibuliform, with concentrically arranged off white to brownish scales crowded at center and scattered towards margin; surface white, with pale brown scales.

Lamellae (Gills): White, decurrent, up to 2 mm wide, crowded. Stipe (Stalk):  $3-7 \text{ cm} \times 10-20 \text{ mm}$ , central to lateral, with white scales. Context (Flesh): white, thin, tough to leathery. Annulus (Ring): absent. **Odour**: Mild, mushroomy Spore Print: White **Spores**: White,  $5-8 \times 1.5-3 \mu m$ , cylindrical, thin–walled, hyaline Habitat: Mostly grow in large clusters on dead trees especially in Mango or Anacardiaceae members Locality: Throughout Kerala Season: May-August Common Name: Nil Status: Wild **Cultivation practices:** Yes Uses: Food Parts used: Fruit body (Whole) Processing technique: Dried Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Cultivation/Good



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#### LEPISTA SORDIDA (Schumach.) Singer

**Pileus** (Cap): 2–6 cm diam., initially convex sometimes with a slight umbo, gradually flattens while retaining a central bump, flattening out or developing a central depression at maturity, surface violet, sometimes with brownish, smooth without any scales; pileus margin wavy and in rolled Lamellae (Gills): Sinuate to adnexed, greyish lilac fading with age, crowed Stipe (Stalk):  $2-4 \text{ cm} \times 4-10 \text{ mm}$ , cylindrical to compressed, solid, fibrillose, lilac **Context** (Flesh): smooth, firm, white with violet hues Annulus (Ring): Nil Odour & Taste: Strong fungal; taste pleasant **Spore Print**: Creamy-white **Spores**:  $6-9 \times 4-5\mu m$ , ellipsoid, inamyloid, ornamented with tiny spines Habitat: Gregarious, scattered on soil Locality: JNTBGRI campus, Thiruvananthapuram; Chithara, Thenmala, Kollam; **KFRI** campus Thrissur Season: July to August Common Name: Sordid blewit Status: Wild Cultivation practices: No Uses: Food and medicine Parts used: Fruit body (Whole) **Processing technique:** Nil Existing value added products: Nil Possibility of value added products: Nil Methods of popularization/ palatability: Cultivation/ Good



#### MACROCYBE CRASSA (Sacc.) Pegler & Lodge

Pileus (Cap): 8–30 cm diam., large, fleshy, convex to applanate, surface chalky white, smooth and glabrous; margin lobate, in rolled Lamellae (Gills): Adnexo-adnate to sinuate, creamy white with a pinkish tinge up to 12 mm thick Stipe (Stalk): 7–14 cm  $\times$  20–80 mm, thick, central, rarely excentric, cylindric to obclavate, often with swollen base, solid; white, smooth or sometimes disrupting into small reflex squamules in dry weather Context (Flesh): Thick, fleshy, white Annulus (Ring): Nil **Odour**: Strongly cyanic Spore Print: Pale cream to cream **Spores**: Cream,  $5.5-6.6 \times 4.5-5 \mu m$ , ovoid to ellipsoid, hyaline Habitat: Solitary or scattered in groups on soil Locality: Sankili, Kollam; Kudappanakunnu, Poojappura, JNTBGRI campus, Thiruvananthapuram Season: January to November Common Name: Nil Status: Wild Cultivation practices: No Uses: Food Parts used: Fruit body(Whole) Processing technique: Nil Existing value added products: Nil Possibility of value added products: Yes, Pickle Methods of popularization/ palatability: Cultivation/ Good



### MACROCYBE TITANS (H.E. Bigelow & Kimbr.) Pegler, Lodge & Nakasone

**Pileus** (Cap): 5–13 cm diam., hemispheric at first, convex and then plano-convex often with a broad obtuse umbo, surface buff-ochre with a darker centre, brown leather brown, paler or even more whitish elsewhere towards the margin; pileus margin incurved and in rolled at first undulate or lobed later

Lamellae (Gills): Sinulate, whitish or with pale brown tints, up to 8 mm wide, crowded

**Stipe** (Stalk): 10–26 cm  $\times$  15–40 mm, central, cylindric to clavate, solid, curved, swollen at the base; surface whitish or with brown tints fibrillose with appressed to recurved squamules at the extreme apex

**Context** (Flesh): thick, white up to 23 cm thick

Odour & Taste: Mild; taste good

Spore print: Pale cream to cream

**Spores**:  $5.6-6 \times 3.5-64.5 \mu m$ , ovoid to short ellipsoid smooth, inamyloid

Habitat: Solitary or scattered in tufts on soil

**Locality**: Venjaramoodu, Kilimanoor, JNTBGRI campus, Ploade, Thiruvananthapuram; Chithara, Kollam; Kodakara, Thrissur

Season: May, September to November

Common Name: Nil

Status: Wild

Cultivation practices: No

Uses: Food

Parts used: Fruit body (Whole)

**Processing technique**: Nil

Existing value added products: Nil

Possibility of value added products: Yes

Methods of popularization/ palatability: Cultivation/Good



#### MACROLEPIOTA DOLICHAULA (Berk. & Broome) Pegler & R.W. Rayner

**Pileus** (Cap): 6–16 cm diam., fleshy, campanulate when young, become convex to plano-convex with age, with a low umbo at disc; surface pure white to whitish, covered with brownish to brownish granular scales, which become minute and sparse towards the cap margin

**Lamellae** (Gills): White when young, white to cream when mature, crowded **Stipe** (Stalk): 7–24 cm  $\times$  8–25 mm, twice as long as the diameter of the cap, white to whitish, stains slightly brown, cylindrical, with minute farinose granules, base slightly enlarged, hollow, brittle

Context (Flesh): White, sometimes becoming orange when cut

Annulus (Ring): Ascending, double, whitish, membranous, movable

**Odour**: Nil

Spore Print: White

**Spores**: White,  $12.5-16 \times 8.0-10.5$  (-12) µm, ovoid to ellipsoid, thick-walled, dextrinoid, metachromatic in cresyl blue with a germ pore

Habitat: Solitary to scattered on soil

Locality: Through out Kerala

Season: September to December

Common Name: White parasol mushroom

Status: Wild

Cultivation practices: Yes

Uses: Food

Parts used: Fruit body (Whole)

Processing technique: Dried

**Existing value added products: Nil** 

**Possibility of value added products:** Yes

Palatability: Good



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#### MACROLEPIOTA PROCERA (Scop.) Singer

Pileus (Cap): 8-23 cm diam., convex to broadly convex to almost plane when mature, white to cream, covered with brown, dark brown to grayish brown plate like squamules irregularly arranged towards the margin, below a whitish surface, dark brown in the centre Lamellae (Gills): White when young to cream when mature, free, crowded Stipe (Stalk):  $17-33 \text{ cm} \times 10-24 \text{ mm}$ , whitish, cylindrical, very fibrous covered with brown squamules sometimes in irregular bands **Context** (Flesh): White, firm, up to 10 mm wide, thick Annulus (Ring): Superior, movable, underside brownish, upper side whitish **Odour**: Nil Spore Print: White **Spores**: White,  $10-16 \times 9-13 \mu m$ , broadly elliptical with a small germ pore, thick-walled, dextrinoid Habitat: Scattered on soil Locality: JNTBGRI campus, Palode, Thiruvananthapuram; Chembotty, Wayanad Season: October to December Common Name: Parasol mushroom. Status: Wild **Cultivation practices:** Yes Uses: Food Parts used: Fruit body(Whole) Processing technique: Dried Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Good



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#### OUDEMANSIELLA CANARII (Jungh.) Höhn.

Pileus (Cap): 1–9 cm diam., convex then applanate, surface white with a darker centre, becoming paler, smooth, slimy Lamellae (Gills): Adnexed to adnate, white Stipe (Stalk):  $1-6 \text{ cm} \times 1.5-8 \text{ mm}$ , central, cylindric, solid, surface white shiny Context (Flesh) white, soft Annulus (Ring): Nil **Odour:** Mild, agreeable Spore Print: White **Spores**: White,  $15-24 \times 12-40 \,\mu\text{m}$ , globose to subglobose, inamyloid, smooth Habitat: Scattered in groups on dead fallen trees and rotting wood Locality: Throughout Kerala Season: January to December Common Name: Nil Status: Wild Cultivation practices: No Uses: Food Parts used: Fruit body(Whole) **Processing technique:** Nil Existing value added products: Nil Possibility of value added products: No Methods of popularization/ palatability: Cultivation/Mild



#### PANUS NEOSTRIGOSUS Drechsler-Santos & Wartchow

**Pileus** (Cap): 2–7 cm diam., convex with a depressed or vase-shaped centre, tongue-shaped to irregular, densely hairy, surface purple at first, but soon fading to reddish brown, pinkish brown, orangish brown or tan

Lamellae (Gills): Purplish when fresh and young, eventually white, decurrent, crowded

Stipe (Stalk):  $1-2 \text{ cm} \times 5-10 \text{ mm}$ , sub-centric to lateral, densely hairy, similar in colour with the pileus

**Context** (Flesh): white, tough and stringy.

Annulus (Ring): Nil

Odour & Taste: Mild

Spore Print: White

**Spores**: White,  $4-5.5 \times 1.5-2 \mu m$ , cylindric to ellipsoid

Habitat: Solitary or in clusters on dead wood

Locality: JNTBGRI campus, Palode, Thiruvananthapuram

Season: January to December

Common Name: Nil

Status: Wild

**Cultivation practices:** Yes

Uses: Food

**Parts used:** Fruit body(Whole)

Processing technique: Dried

Existing value added products: Nil

**Possibility of value added products**: Yes

Methods of popularization/ palatability: Cultivation/Mild



#### PHLEBOPUS PORTENTOSUS (Berk. & Broome) Boedijn

Pileus (Cap): 8–24 cm diam., convex becoming plano-convex, often with a shallow depression at the centre. Surface initially olive brown to sepia brown at the centre, paler towards the periphery, slimy when wet, smooth and glabrous Hymenophore tubulate (not lamellate), adnexed to adnate, lemon yellow, up to 14 mm long, darkening on cutting, pores greenish yellow with a brownish tinge, up to 0.8 mm diam., bluing when injured or rubbed Stipe (Stalk) 6–17 cm  $\times$  40–80 mm, central, robust, clavate with swollen base, solid. Surface colour similar to the pileus, discolouring henna when bruised or touched **Context** (Flesh): Up to 5 cm thick, spongy, butter yellow/sun yellow/sulphur yellow, bluing on bruising or cutting when fresh and young Annulus (Ring): Nil **Odour:** Pleasant **Spore Print:** Olivaceous brown **Spores**: Olivaceous,  $6-9.5 \times 4.5-7.5 \mu m$ , ovoid to short ellipsoid Habitat: Solitary to scattered on ground Locality: Throughout Kerala Season: January to December Common Name: Tropical black bolete. Status: Wild **Cultivation practices**: Yes Uses: Food **Parts used:** Fruit body (Whole) **Processing technique**: Nil Existing value added products: Nil Possibility of value added products: Nil Methods of popularization/ palatability: Good



#### PLEUROTUS DJAMOR (Rumph. ex Fr.) Boedijn

Pileus (Cap): 1.5-7 cm diam., orbicular, reniform to irregularly flabelliform, rarely with an excentric to central stipe. Surface pinkish red becoming pale pink with age, smooth, shiny Lamellae (Gills): Pink, crowded, decurrent Stipe (Stalk): Lateral, reduced or absent Context (Flesh): Pink, soft Annulus (Ring): Nil Odour: Mild; taste good Spore Print: White **Spores**: White,  $5.2-7.9 \times 3.5-4.9 \,\mu\text{m}$ , oblong cylindric, smooth Habitat: In clusters or scattered on rotting or fallen tree Locality: Throughout Kerala Season: May to October Common Name: Pink Oyster mushroom Status: Wild Cultivation practices: Yes Uses: Food Parts used: Fruit body (Whole) Processing technique: Dried /powdered Existing value added products: Mushroom powder **Possibility of value added products:** Yes Methods of popularization/ palatability: Cultivation/Excellent



#### PLEUROTUS FLABELLATUS Sacc.

**Pileus** (Cap): 1.5–12 cm diam., orbicular, reniform to irregularly flabelliform, rarely with an excentric to central stipe. Surface pure white becoming yellowish white with age, smooth, shiny Lamellae (Gills): White, crowded, decurrent Stipe (Stalk): reduced or absent **Context** (Flesh): white, soft Annulus (Ring): Nil **Odour**: Mild; taste excellent Spore Print: White **Spores**: White,  $7-8.5 \times 4-5 \mu m$ , oblong cylindric, smooth Habit: In clusters and scattered on rotting or fallen tree **Locality**: Throughout Kerala Season: January to December Common Name: Oyster mushroom Status: Wild. Cultivation practices: Yes Uses: Food. Parts used: Fruit body(Whole) Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Cultivation/Excellent



#### PLEUROTUS GIGANTEUS (Berk.) Karunarathna & Hyde

Pileus (Cap): 6–31 cm diam., convex to applanate becoming slightly depressed in the centre. Surface initially uniformly dark, fuscous brown, fuliginous or black, then fading with age to pale ochraceous or yellowish brown, with a darker centre, dry, disrupted into small, indefinite, squamules Lamellae (Gills): moderately crowded, decurrent, white to cream Stipe (Stalk):  $5-20 \text{ cm} \times 70-100 \text{ mm}$ , fusiform, with a radicating base, solid Context (Flesh): 5–10 mm thick white Annulus (Ring): Nil Odour &Taste: Mild; taste excellent Spore Print: White **Spores**: White,  $7-9 \times 6-7 \mu m$ , broadly ellipsoid to ellipsoid, inamyloid Habitat: In groups and scattered on soil or on base of rotting trees or tree stumps. Locality: JNTBGRI campus, Palode, Thiruvananthapuram Season: January to December Common Name: Giant oyster mushroom Status: Wild Cultivation practices: No Uses: Food Parts used: Fruit body (Whole) Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Cultivation/Ecellent



#### PLEUROTUS OSTREATUS (Jacq. Fr.) Kumm

Pileus (Cap): 3–12 cm diam., broadly convex, becoming flat or shallowly depressed; fan or oyster-shaped; surface greyish brown, darkening to umbrinous at the centre although sometimes remaining very pale, pale to dark brown, fading to buff, glabrescent, slightly viscid when moist Lamellae (Gills): White or with a gray tinge, 3-6 mm wide, descend on the stalk if present, crowded Stipe (Stalk): Rudimentary or nearly absent and lateral, if present lateral, short, solid, white Context: White, up to 5 mm thick, thin elsewhere, soft, fleshy Annulus (Ring): Nil Odour: Mild, mushroomy; taste excellent Spore Print: White **Spores**: White,  $7-11 \times 2-4 \mu m$ ; cylindric-ellipsoid, smooth, hyaline, inamyloid Habitat: In groups on dead wood Locality: Through out Kerala Season: June- December Common Name: Oyster Mushroom Status: Wild **Cultivation practices:** Yes Uses: Food Parts used: Fruit body (Whole) Processing technique: Dried Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Cultivation/Excellent



#### PLEUROTUS TUBER-REGIUM (Fr.) Singer

**Pileus** (Cap): 4.2–19 cm diam., infundibuliform (funnel shaped), leathery; surface yellowish white or pale yellow with brown pruinae, dense at centre, scarce towards margin; pileus margin straight, undulating, entire to incised **Lamellae** (Gills): Deccurent, white, 3-6 mm wide, crowded

Stipe (Stalk):  $2-6 \text{ cm} \times 6-11 \text{ mm}$ , eccentric, equal or slightly tapering downwards, curved, solid, leathery; surface white with brown erect squamules throughout

**Context** (Flesh): off white, up to 1.5 cm thick, tough, leathery

Annulus (Ring): Nil

**Odour**: Mild

Spore Print: White/Cream

**Spores**:  $7-9.5 \times 3-4.5 \mu m$ , elongate ellipsoid to cylindric, hyaline

Habitat: Caespitose on decaying angiosperm wood

Locality: JNTBGRI campus, Palode, Thiruvananthapuram

Season: June to September

Common Name: King tuber mushroom

Status: Wild

Cultivation practices: Yes

Uses: Food

Parts used: Fruit body (Whole)

Processing technique: Dried

**Existing value added products**: Nil

Possibility of value added products: Yes

Methods of popularization/ palatability: Mild



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#### PLUTEUS CERVINUS (Schaeff.) P. Kumm.

**Pileus** (Cap): 3–8 cm diam., conical then convex to plane, with a broad umbo; surface greyish brown, darkening to umbrinous at the centre although sometimes remaining very pale, radially fibrillose, slightly greasy when moist Lamellae (Gills): Free, cream to flesh-pink, 3-6 mm wide, crowded Stipe (Stalk):  $2-12 \text{ cm} \times 8-20 \text{ mm}$ , cylindrical or expanding slightly at ground level, solid; surface whitish to cream colour Context (Flesh): White, up to 1.5 cm thick, white Odour & Taste: Not distinct; taste mild Spore Print: Pink **Spores**: Pinkish,  $5.5-7.5 \times 3.7-4.5 \mu m$ , ovoid to ellipsoid Habitat: Solitary or in groups dead decaying wood Locality: Munnar, Idukki; Silent Valley National Park, Palakkad Season: June to August Common Name: Deer mushroom Status: Wild Cultivation practices: No Uses: Food Parts used: Fruit body(Whole) Processing technique: Dried Existing value added products: Nil Possibility of value added products: Yes Methods of popularization/ palatability: Mild



#### **RUSSULA ACICULOCYSTIS** Kauffman ex Bills & O.K. Mill.

**Pileus** (Cap): 3.5–8 cm diam., convex to broadly convex, then plane with a central depression, surface greyish red, brownish red, dull red, reddish lilac or sometimes pink, with a greyish rose, greyish ruby, dark, violet or greyish magenta, centre, sticky when wet

**Lamellae** (Gills): Adnate, yellowish white up to 1 cm wide, ventricose, subcrowded, lacking lamellulae, sometimes bifurcating near to the stipe

**Stipe** (Stalk):  $2-5 \text{ cm} \times 5-20 \text{ mm}$ , central, cylindric, equal, or slightly attenuated below; surface white, sometimes pastel red to pale red or with a reddish pink to greyish red tinge, more often entirely pink

Context (Flesh): White

Annulus (Ring): Nil

Odour: Mild

Spore Print: Cream

**Spores**: Cream,  $6.5-7.5 \times 6-7.5 \mu m$ , subglobose to broadly ovate, ornamentation with amyloid, conical to irregular ridges or wings connected by thick lines or ridges forming a complete reticulum

**Habitat**: Solitary to scattered on soil under *Myristica malabarica*, *Vateria indica* and *Calophyllum apetalum* 

Locality: Throughout Kerala Season: April- December Common Name: Nil

Status: Wild

Cultivation practices: Nil

Uses: Food

**Parts used:** Fruit body (Whole)

Processing technique: Nil

Existing value added products: Nil.

**Possibility of value added products**: Yes

Methods of popularization/ palatability: Mild



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#### RUSSULA CONGOANA Pat.

**Pileus** (Cap): 2–5 (–8) cm, first convex then expanded with a shallow central depression. Surface pastel red to greyish red, sulcate-striate up to three-fourth of pileus radius, shiny and lubricous when wet

Lamellae (Gills): Adnexed, white, cream or pale yellow when mature, close to crowded, without lamellulae, interveined, rarely bifurcate towards the margin

Stipe (Stalk):  $1.5-5 \times 5-10$  mm, central, cylindric, slightly bulbous or with an attenuated base, brittle; surface creamy white with a pinkish tinge at the base.

Context (Flesh): White, thick, soft

Annulus (Ring): Nil

Odour: Mild

Spore Print: White/Cream

**Spores**: White,  $6-8.5 \times 6-7 \mu m$  subglobose to ellipsoid, mostly broadly ellipsoid, densely ornamented with coarse, amyloid, vertucae, interconnected by an incomplete to almost complete reticulate

Habitat: Solitary to scattered on soil under Dipterocarpaceae trees

Locality: Muthanga, Wayanadu; Thenmala, Kollam.

Season: April; August to October Common Name: Nil

Status: Wild

Cultivation practices: Nil.

Uses: Food

**Parts used:** Fruit body (Whole)

Processing technique: Nil

Existing value added products: Nil.

Possibility of value added products: Nil

Methods of popularization/ palatability: Mild



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#### RUSSULA MARIAE Peck

**Pileus** (Cap): 4.5–5 cm diam., convex becoming broadly convex to flat with a shallow depression; surface brownish violet, red towards the margin, slimy in wet weather; margin radially striate to sulcate up to halfway

**Lamellae** (Gills): Adnate to sub-decurrent, white becoming yellowish white, crowded, often dichotomously branched, intervenose, without lamellulae

**Stipe** (Stalk):  $2.5-3 \times 5-10$  mm, central, cylindric; surface pink whitish towards the base, minutely pruinose to finely scurfy towards apex

**Context** (Flesh): White, thin, brittle

Annulus (Ring): Nil

Odour: Mild

Spore Print: Pale yellow/Cream

**Spores**: Cream, 6.6–8  $\times$  6–8  $\mu$ m, globose to subglobose, with amyloid irregular large vertucae, connected by fine connectives forming a partial to complete reticulum

Habitat: Solitary on forest soil among fallen leaves

Locality: JNTBGRI Campus, Palode, Thiruvananthapuram.

Season: May to December

Common Name: Purple-bloom Russula

Status: Wild

Cultivation practices: No

Uses: Food

Parts used: Fruit body(Whole)

Processing technique: Dried

Existing value added products: Nil

**Possibility of value added products:** Yes

Methods of popularization/ palatability: Mild



#### STROBILOMYCES STROBILACEUS (Scop.) Berk.

Pileus (Cap): 6-20 cm hemispherical when young expanding convex, surface is covered with dark grey to black erect scales Hymenophore: Poroid (not lamellate), whitish, bruising red to blackish Stipe (Stalk):  $8-11 \text{ cm} \times 10-20 \text{ mm}$ , cylindrical, fibrillose or floccose, similar in colour with the pileus, covered with woolly scales Context (Flesh): Initially white turning pinkish to red and finally to blackish on cutting Annulus (Ring): Nil Odour & Taste: Mild, not distinctive; taste good **Spore print**: Brown to blackish **Spores**: Brown,  $10-12 \times 9-11 \mu m$ , brown, subglobose with reticulate ornamentation Habitat: Solitary on soil Locality: JNTBGRI campus, Palode, Thiruvananthapuram Season: May to August Common Name: Old man of the woods Status: Wild. Cultivation practices: No Uses: Food Parts used: Fruit body(Whole) Processing technique: Nil Existing value added products: Nil Possibility of value added products: Nil Methods of popularization/ palatability: Excellent



#### TERMITOMYCES CLYPEATUS R. Heim

Pileus (Cap): 2.5–9 cm, at first pointed-conical, later expanding to convex but retaining a prominent dark spiniform umbo, surface grayish brown to ochraceous brown, paler to the margin, silky smooth, becoming fibrillose rimose on expansion and drying; pileus margin incurved irregularly lobed and fissile Lamellae (Gills): Free, whitish to pink, up to 8 mm broad, crowded Stipe (Stalk):  $2-12 \text{ cm} \times 5-10 \text{ mm.}$ , central, cylindric, tapering below to a long (3–12 cm) root (pseudorrhiza), solid Context (Flesh): White, up to 10 mm thick, soft Annulus (Ring): Nil Spore Print: Pink **Spores**: Pink,  $4.5-8 \times 3-5 \mu m$ , ovo-ellipsoid Habitat: Solitary to ground on termite mount Locality: Throughout Kerala Season: June Common Name: Nil Status: Wild Cultivation practices: Nil Uses: Food Parts used: Fruit body (Whole) Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Excellent



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#### TERMITOMYCES EURRHIZUS (Berk.) R. Heim

Pileus (Cap): 6–19 cm diam., initially conic, becoming convex, to finally applanate with a sharp umbo, often splitting variously; surface greyish brown with brownish centre Lamellae (Gills): White, turning light pink, free to sub-adnate Stipe (Stalk):  $5-20 \text{ cm} \times 15-30 \text{ mm}$ , stout, solid, white, fleshy-fibrous, ending in a short root (Pseudorhiza) Context (Flesh): Whitish, firm Annulus (Ring): Nil Odour & Taste: Pleasant; taste excellent Spore Print: Pink **Spores**: Pink,  $6.8-9.3 \times 5.1-6.8 \mu m$ , ovoid to ellipsoid Habitat: Solitary on soil in association with termite colony Locality: Throughout Kerala Season: May to November Common Name: Nil Status: Wild Cultivation practices: No Uses: Food **Parts used**: Fruit body(Whole) Processing technique: Nil Existing value added products: Nil Possibility of value added products: Yes Methods of popularization/ palatability: Excellent



#### TERMITOMYCES HEIMII Natarajan

Pileus (Cap): 5-16 cm diam., convex to plano-convex with a broad umbo at the centre, surface silky white with a greyish centre, smooth slimy when wet. Lamellae (Gills): White turning pink free Stipe (Stalk): 6–15 cm  $\times$  10–20 mm, central cylindric, firm solid surface white, smooth to sub-squamulose below the annular region, tapering down to a long white cylindrical root (Pseudorhiza) Context (Flesh): Whitish, soft Annulus (Ring): Present, superior, white, attached to the upper part of the stipe Odour & Taste: Mild, agreeable; taste excellent Spore Print: Pink Spores: Pink,  $4-6.5 \times 3.5-5 \mu m$ , ovoid to ellipsoid Habitat: Gregarious on soil in association with termite colony Locality: Throughout Kerala Season: June to October Common Name: Nil Status: Wild Cultivation practices: No Uses: Food Parts used: Fruit body(Whole. Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Excellent



#### TERMITOMYCES MICROCARPUS (Berk. & Broome) R. Heim

Pileus (Cap): 5–19 mm diam., pure silky white, initially conic, becoming convex, conico-convex, finally plane often with a papillate umbo Lamellae (Gills): White, turning light pink, free to adnexed, crowded Stipe (Stalk):  $6-8 \text{ cm} \times 1-2 \text{ mm}$ , slender, hollow, white, fleshy-fibrous without a pseudorhiza (root) Context (Flesh): White, thin, soft Annulus (Ring): Nil. Odour & Taste: Pleasant; taste excellent. Spore Print: Pink **Spores**: Pink, 5–5.5 (6)  $\times$  3–3.5 (4.5) µm, ovoid to ellipsoid Habitat: Gregarious on soil in association with ejected termite colony Locality: Throughout Kerala Season: May to November Common Name: Nil Status: Wild Cultivation practices: Nil Uses: Food Parts used: Fruit body (Whole) Processing technique: Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Excellent



#### TERMITOMYCES MICROCARPUS (Berk. & Broome) R. Heim

Pileus (Cap): 1-3 cm diam., conico-convex to plane with a sharp small umbo; surface greyish white with a brownish centre Lamellae (Gills): White, turning light pink sub-free to adnexed, thin Stipe (Stalk):  $4-10 \text{ cm} \times 3-5 \text{ mm}$ , slender, hollow, white, fleshy-fibrous. Pseudorhiza (Root): absent Context (Flesh): whitish, soft Annulus (Ring): Nil Odour & Taste: Pleasant; taste excellent **Spore Print**: Pale pink **Spores**: Light pinkish,  $6-8.5 \times 3.7-4.8 \,\mu\text{m}$ , ovoid to ellipsoid Habitat: Gregarious on soil in association with termite colony Locality: Throughout Kerala Season: May to November Common Name: Nil Status: Wild Cultivation practices: No Uses: Food. Parts used: Fruit body (Whole) **Processing technique:** Nil Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Excellent



#### TERMITOMYCES RADICATUS Natarajan

Pileus (Cap): 1.5–3.5 cm diam., convex to plano-convex with a spiniform umbo; surface pale orange to greyish brown, dark brown at the centre, smooth, finely striate Lamellae (Gills): White turning pink, free to adnexed, up to 4 mm broad Stipe (Stalk): 4.5–6 cm  $\times$  2–5 mm., cylindrical, solid tapering to a small root (pseudorhiza); surface off-white to pale orange Context (Flesh): White, thin Annulus (Ring): Nil **Odour:** Not distinct **Spore Print**: Pale pink **Spores**: Pinkish,  $5.5-8 \times 3.5-5 \mu m$ , ovoid to ellipsoid Habitat: Solitary to scattered on ground on termite mount **Locality**: Throughout Kerala Season: June to December Common Name: Nil Status: Wild Cultivation practices: Nil Uses: Food Parts used: Fruit body (Whole) Processing technique: Nil Existing value added products: Nil Possibility of value added products: Yes Methods of popularization/ palatability: Excellent



#### VOLVARIELLA BOMBYCINA (Schaeff.) Singer

Pileus (Cap): 7.5–20 cm diam., initially oval or egg shaped, later the cap expand to convex to planoconvex and finally flattened when mature; surface white to yellowish white, silky, fluffy Lamellae (Gills): White to pink, free, 10 mm broad, crowded Stipe (Stalk): 7–15 cm  $\times$  6–20 mm, central, cylindrical, solid, firm, almost glabrous, thick; surface white and smooth **Context** (Flesh): White, thick Annulus (Ring): Nil Volva: Stipe base encased in a sac like volva, cuplike, white with brown patches, lobed Odour & Taste: Pleasant; taste excellent **Spore Print**: Pink to pinkish brown **Spores**: Pink, 6.6–8.5  $\times$  4.5–5  $\mu$ m, ellipsoid, thick-walled Habitat: Grow singly or in small groups on trunks and decayed stumps Locality: Throughout Kerala Season: June to August Common Name: Silky Volvariella mushroom, tree mushroom Status: Wild Cultivation practices: Nil Uses: Food **Parts used:** Fruit body (Whole) Processing technique: Dried Existing value added products: Nil **Possibility of value added products:** Yes Methods of popularization/ palatability: Good



#### VOLVARIELLA VOLVACEA (Bull.) Singer

**Pileus** (Cap): 2.5–5 cm diam., initially egg shaped and on expanding to convex or broadly conic to flat with a broad ubmo at the centre; surface greyish, blackish brown near centre, slightly slimy when wet.

**Lamellae** (Gills): White when young become pink when mature, free from the stipe, crowded, up to 4 mm wide

Stipe (Stalk): 3-7cm  $\times$  5-10 mm, cylindrical expanded at the bottom, whitish or brownish

**Context** (Flesh): White, soft, thick

Annulus (ring): Nil

**Volva**: Present, sac like at the base of the stipe, brownish grey to nearly black above and whitish below, thick, lobed

Odour & Taste: Likes moist straw; Taste excellent

Spore Print: Pink

**Spores**: Pink,  $4.6-5.8 \times 7-8.5 \mu m$ , ellipsoid to elongate or somewhat ovoid **Habitat**: Solitary to gregarious on paddy straw, or on rubbish heap

Locality: Throughout Kerala

Season: June-October

Common Name: Paddy straw mushroom, straw mushroom.

Cultivation practices: Yes

Uses: Food

Parts used: Fruit body (Whole)

Processing technique: Dried

Existing value added products: Nil

Possibility of value added products: Yes

Methods of popularization/ palatability: Cultivation/Excellent

