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<http://www.vielepilze.de/>

## Key to coprinoid species (*Coprinellus*, *Coprinopsis*, *Parasola*)

Latest update: 20.01.19

20.01.19 (*Coprinellus campanulatus*, *disseminatissimilis*, *pakistanius*, *tenuis* added in part 2.1., another sequence in this part, *Coprinellus curtus* removed from part 2.2, another sequence in this part).

### Introduction:

The key includes most of the previously described coprinoid species from Europe and many from other continents, in addition, some of which have since been transferred from the genera *Psathyrella*. The dichotomous pairs are based predominantly on microscopic characteristics, to edit material also can be present for which no field notes. Macroscopic feature, however, are indispensable. Ecological features are problematic, but provide an overview, for example, for species on dung. To verify the determination must be used a detailed description. Some features are very striking and make long walks in the key almost superfluous, e. g. warty spores. It is possible to find such features in the drawings.

The colored bars (left) are to facilitate aid in finding the subkey:

Main part - 1.1. - 1.2. -- 2.1. - 2.2. - 2.3. - 2.4. - 2.5. - 3.1. - 3.2. - 3.3. - 3.4.

### Notes on the features:

It is usually necessary to have fruiting bodies available in different ages, that means older with mature spores and younger with not yet collapsed cystidia and still present veil. Measurements are often rounded. Where no data were available, a question mark is inserted. Only the absence of clamps is mentioned, not the presence. Note that the size of the fruiting bodies can vary greatly and is often dependent on the substrate. "Tiny" up to "very large" are only a rough guide. Growing at wood means it can be stumps, dead branches or buried wood. Terrestrial means soil, leaf litter, humus, and so on; buried wood can not be totally excluded. Growing indoor means greenhouses, flower pots and suchlike. Of course, such species can grow in a suitable climate even in the field.

### Remark:

The classification into sections / subsections is a private opinion and not official.

### Used abbreviations:

Ch.= cheilocystidia, Pi. = pileocystidia, Pl. = pleurocystidia, Scl. = sclerocystidia, Sp. = spores, Syn. = synonym(s), V. = veil

### Used symbols:

Sp. hyaline	Sp. very bright	Sp. bright	Sp. dark (subopaque)	Sp. black (opaque)	clamps absent	Pl. absent
soil, litter	sandy soil	wood, buried wood	herbicol, esp. grass	open habitat	indoor	wet
$N_2 +$	$CaCO_3 +$	C +				n - - -
dung, fertilized	calcareous	burned ground	deliquescent	wilting	wilting and deliquescent	very rare

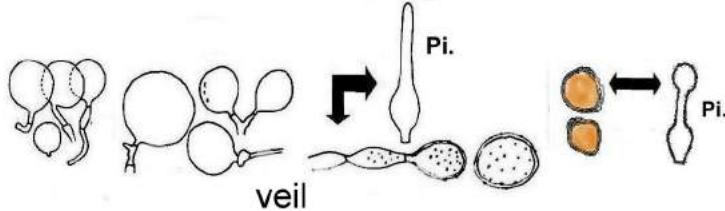
## Main part

- |       |   |   |
|-------|---|---|
| 1     | Cap always without veil and true pileocystidia, but some species with long, thick-walled, brownish hairs. | 2 |
| 1*    | Veil and/or true pileocystidia present.   | 3 |
| 2 (1) | Cap with long, thick-walled, brownish hairs.  |   |

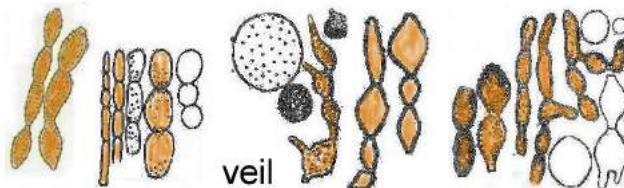
Part 1.1.

- 2\* Cap completely naked.
- 3 (1) Pileipellis a hymeniderm, veil and pileocystidia can be present together or one of these elements is missing. 4
- 3\* Pileipellis a cutis, veil always present, pileocystidia never present. 8
- 4 (3) Veil mainly consisting of globose or subglobose, not or only slightly encrusted cells, if strongly encrusted, pileocystidia present.

**Part 1.2.**

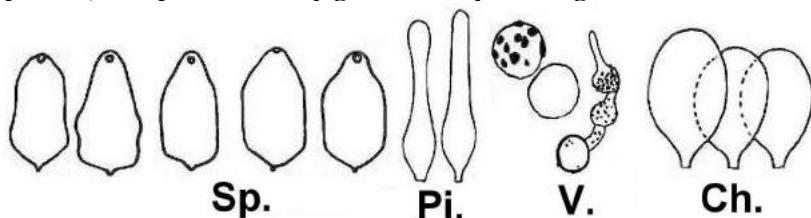


- 4\* Otherwise. 5
- 5 (4) Veil mainly consisting of conspicuous chains or conglomerates of subcylindrical, subglobose or globose, often encrusted or thick-walled cells.



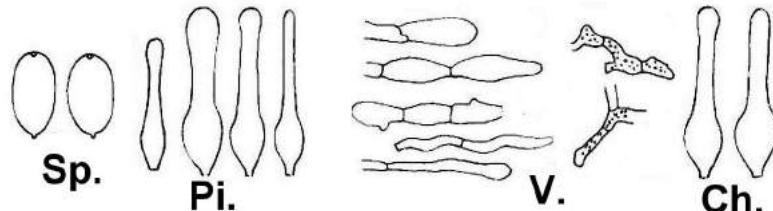
**Part 2.1.**

- 5\* Otherwise. 6
- 6 (5) Spores hexagonal, rounded hexagonal or with an irregular outline, pileocystidia always present, cheilocystidia only globose, veil present, cells predominantly globose. Only on dung.



**Part 2.2.**

- 6\* Otherwise. 7
- 7 (6) Spores usually ellipsoid to slightly ovoid, pileocystidia always present, cheilocystidia almost always not globbose, veil present, cells predominantly subcylindrical. Never on dung.

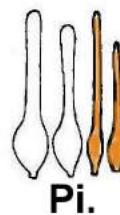
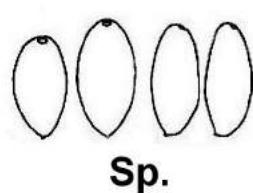


**Part 2.3.**

**Part 2.4.**

7\*

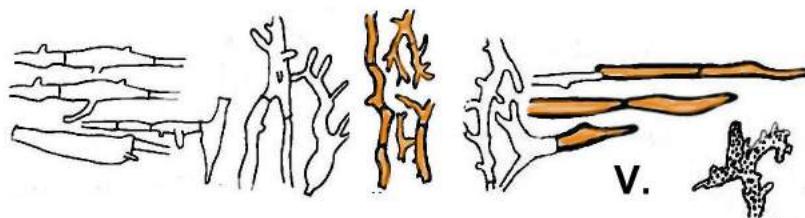
Pileocystidia always present, sometimes sclerocystidia, veil absent.



Part 2.5.

8 (3)

Veil consisting of chains of diverticulate, thin- or thickwalled, hyaline or pale yellowish to strongly brownish pigmented, sometimes encrusted cells.



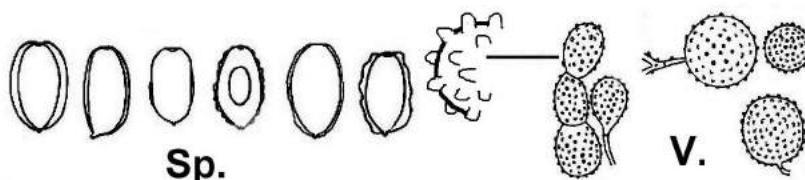
Part 3.1.

8\*

Otherwise.

9 (8)

Veil mainly consisting of (sub)globose, thin-walled, ever warty cells; spores ever with a perispore (sometimes indistinct).



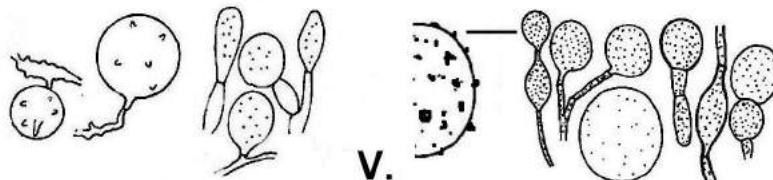
Part 3.2.  
10

9\*

Otherwise.

10 (9)

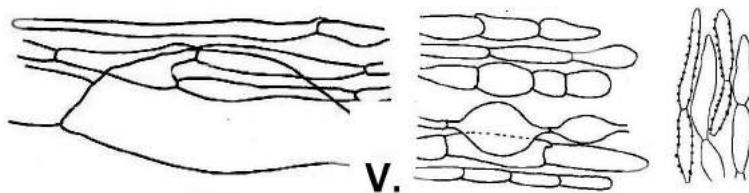
Veil mainly consisting of (sub)globose, thin-walled, smooth or encrusted cells, sometimes with projections, but not densely warty.



Part 3.3.

10\*

Veil consisting of chains of subcylindrical cells, thin- or thickwalled, smooth or encrusted.



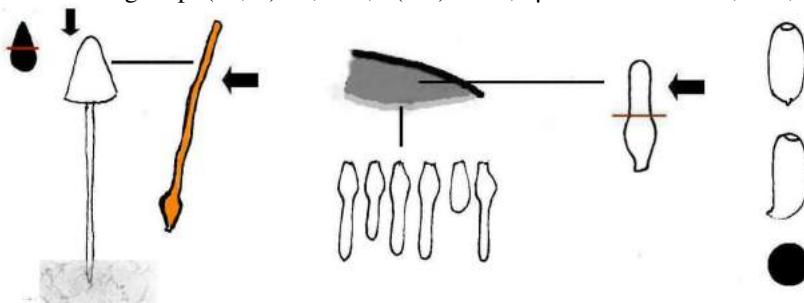
Part 3.4.

Part 1.1.

1\*

**Cap not radially furrowed, pleurocystidia absent.**

Medium-sized to large. Sp. (12,5-) 13,7-18,7 (-20) x 7-9,5 µm. Ch. 22-82 x 6,8-16,5 (-22) µm.



*Parasola conopileus* (FR.: FR.) ÖRSTADIUS & E. LARSS.

(Syn.: *Psathyrella conopileus* (FR.) ULBR.)

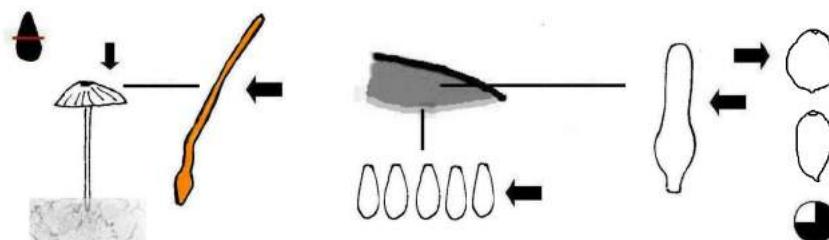
1\*

**Cap radially furrowed, pleurocystidia present.**

2 (1)

**Spores up to 16 µm broad.**

Small to medium-sized. Sp. 13-18 x 12,5-16 µm. Ch. 25-46 x 14-22 µm, clavate. Pl. 42-68 x 15-20 µm.



*Parasola malakandensis* S. HUSSAIN, N. S. AFSHAN, H. AHMAD

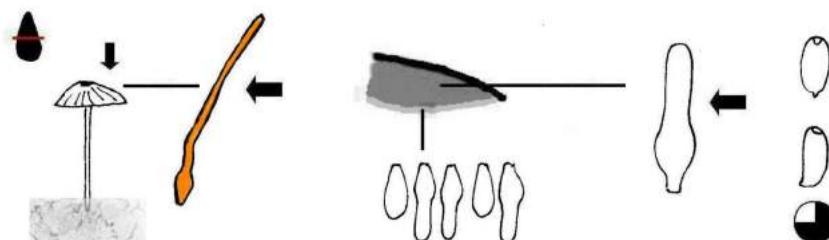
2\*

**Spores smaller**

3

**Spores in front view ellipsoid.**

Small to medium-sized. Sp. (8,7-) 9,5-12,5 (-13,7) x 6-7,5 (-8) µm. Ch. 24,5-82 x 11-22 µm, clavate and utriform. Pl. 55-150 x 16,5-33 µm.



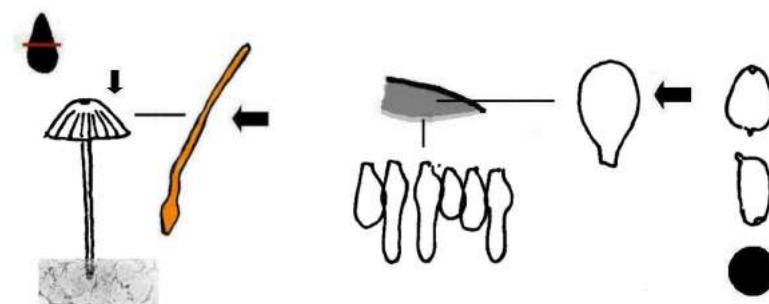
*Parasola auricoma* (PAT.) REDHEAD, VILGALYS & HOPPLE

(Syn.: *Coprinus auricomus* PAT.)

3\*

**Spores in front view not ellipsoid..**

Small to medium-sized. Sp. 8-12,5 (-13) x 7-8,5 6-7,5 (-9,5) µm. Ch. 20-42 x 8-24,5 µm, utriform. Pl. 14-25 x 9-14 µm, clavate.



*Parasola setulosa* (BERK. & BROOME) REDHEAD, VILGALYS & HOPPLE

(Syn.: *Coprinus setulosus* BERK. & BROOME)

## Part 1.2.

1

Pleuro- and true cheilocystidia absent, only on dung.

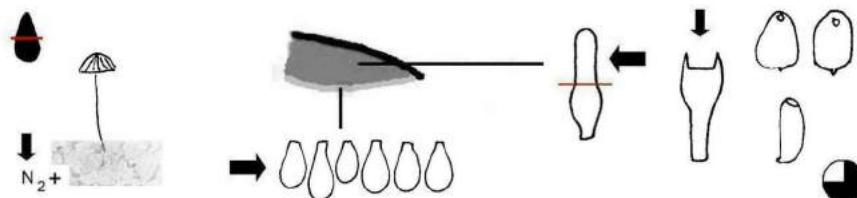
2

1\* Pleuro- and true cheilocystidia present, also other habitats.

4

2 (1) Basidia 2-spored.

Tiny to small. Sp. 8,3-12 x 8,1-12,2 µm. Ch. only clavate.



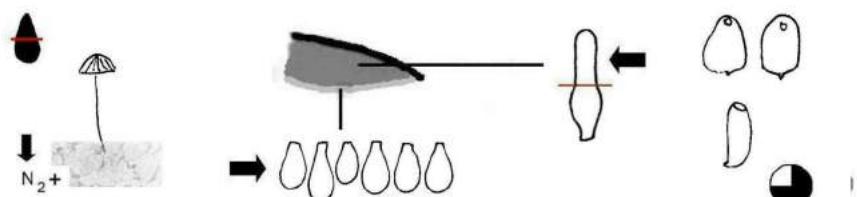
*Parasola cunicolorum* D. J. Schaf.

2\* Basidia 4-spored.

3

3 (2) Tiny to small species.

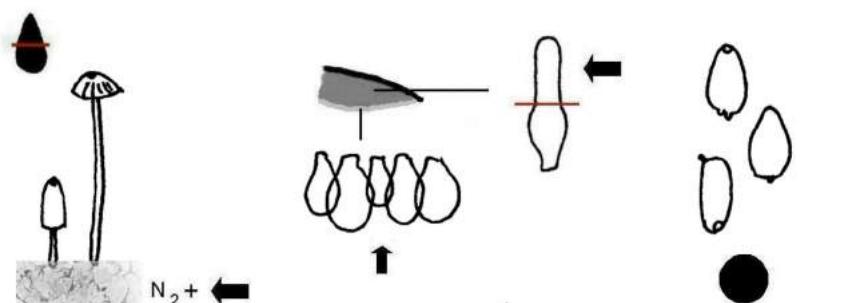
Sp. 7-11,5 x 6,5-10 µm. Ch. 16-40 x 15-22 µm, only clavate.



*Parasola misera* (P. KARST.) REDHEAD, VILGALYS & HOPPLE  
(Syn.: *Coprinus miser* P. KARST.)

3\* Medium sized species.

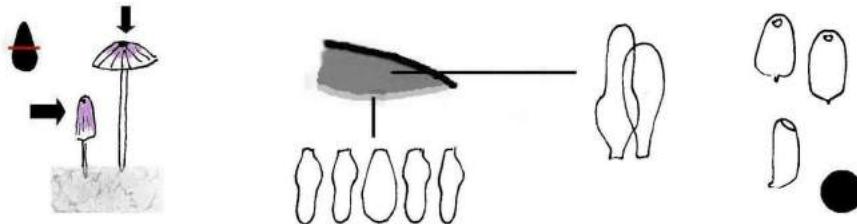
Sp. 10-11 x 6-8,5 µm. Ch. 35-47 x 11-13,5 µm, only clavate.



*Parasola ochracea* L. NAGY, SZARKÁNDI & DIMA

4 (1) Young cap with violet color tones.

Small to medium-sized. Sp. 9,6-13,3 x 8,5-11,2 µm. Ch. 25-70 x 12-28 µm. Pl. 30-95 x 15-38 µm.



*Parasola lilatincta* (BENDER & ULJÉ) REDHEAD, VILGALYS & HOPPLE  
(Syn.: *Coprinus lilatinctus* BENDER & ULJE)

4\* Young cap without violet color tones.

5

5 (4) Spores up to 20 µm long.

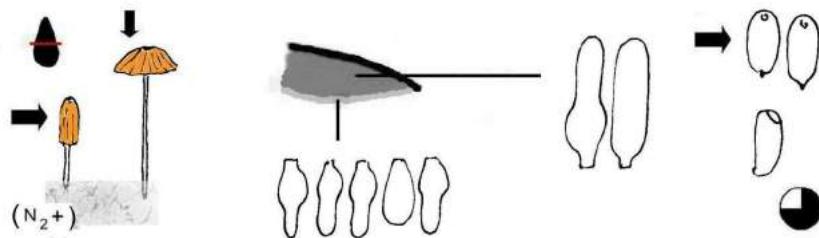
6

Spores shorter.

7

6 (5) Spores frontally mostly ellipsoid, laterally slightly flattened.

Small to medium-sized. Cap young with orange tones. Sp. 12,5-20 x 9-14,5 (-15,2) x 7,5-10 µm. Ch. 30-60 x 5-25 µm. Pl. 30-95 x 5-25 µm. Also on dung.

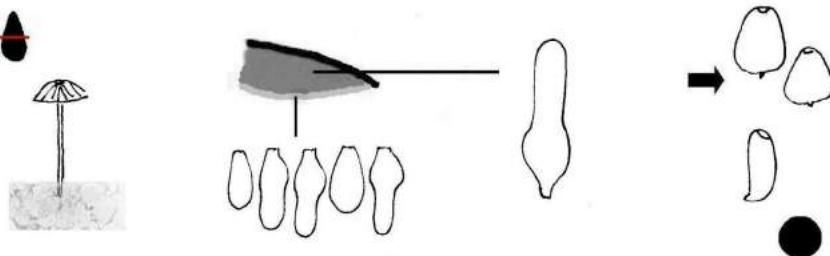


*Parasola megasperma* (P. D. ORTON) REDHEAD, VILGALYS & HOPPLE  
(Syn.: *Coprinus megaspermus* P. D. ORTON)

6\*

**Spores frontally mostly rounded angular, laterally strongly flattened.**

Small to medium-sized. Sp. 12,5–20 x 9–14,5 (-15,2) µm. Ch. 30–60 x 5–25 µm. Pl. 30–95 x 5–25 µm.

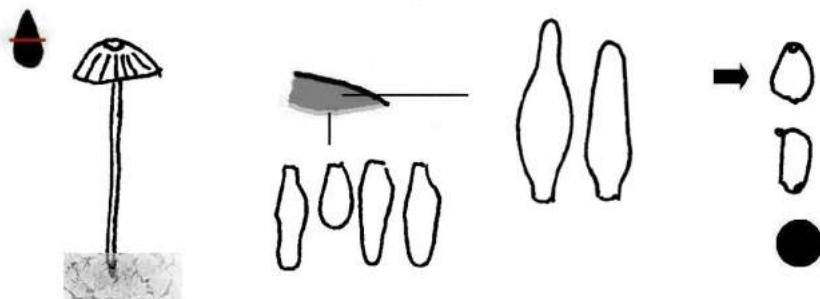


*Parasola hercules* (ULJE & BAS) REDHEAD, VILGALYS & HOPPLE  
(Syn.: *Coprinus hercules* ULJE & BAS)

7

(5) **Spores < 10 µm long.**

Small. Sp. 6,5–8,5 x 5,5–7,5 x 4–5,5 µm. Ch. 23–40 x 10–17 µm. Pl. 48–62 x 17–24 µm.  
Under *Crataegus*.



*Parasola crataegi* SCHMIDT-STOHN

7\*

**Spores longer.**

8

(7) **Spores up to ca. 12 µm long.**

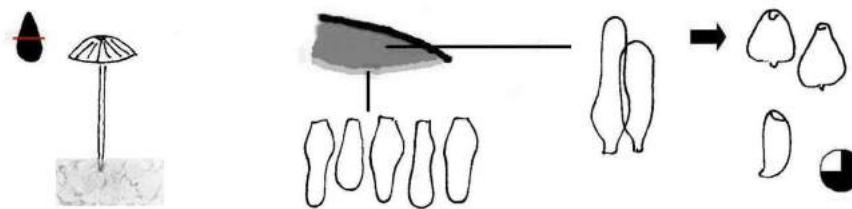
9

**Spores longer.**

10

(8) **Spores up to ca. 8 µm broad, mostly triangular.**

Small to medium-sized. Sp. 6,5–11 x 5,5–8,5 x 5–6 µm. Ch. 30–80 x 12–28 µm. Pl. 40–100 x 22–40 µm.

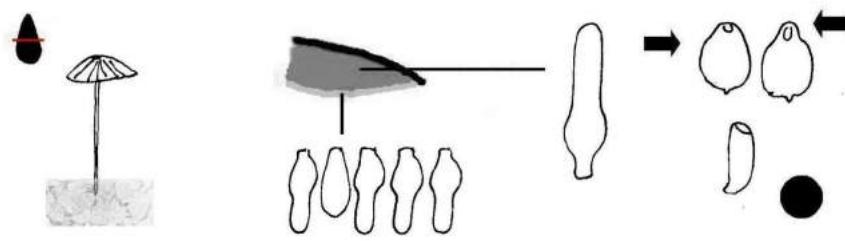


*Parasola kuehneri* (ULJÉ & BAS) REDHEAD, VILGALYS & HOPPLE  
(Syn.: *COPRINUS KUEHNERI* ULJÉ & BAS)

9\*

**Spores up to ca. 10 µm broad, tri- to pentangular, apically often prolonged.**

Small to medium-sized. Sp. (8-) 8,7–12 x 7,5–10 µm. Ch. (22-) 30–70 (-80) x 8,2–27,3 µm.  
Pl. 40–115 (-120) x 16,5–40 µm.

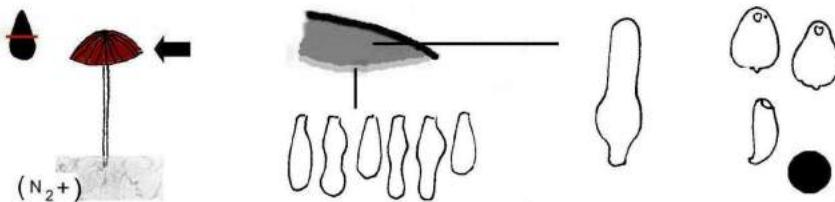


***Parasola lactea* (A. H. SM.) REDHEAD, VILGALYS & HOPPLE**

(Syn.: *Pseudocoprinus lacteus* A. H. SM., *Coprinus leiocephalus* P. D. ORTON,  
*Parasola leiocephala* (P. D. ORTON) REDHEAD, VILGALYS & HOPPLE)

10 (8) Cap predominantly with brown color tones, habitat more shady, also on dung.

Small to medium-sized. Sp. (8,7-) 12,5-15 x (7-) 8,7-12,5 µm. Ch. 30-70 x 13,5-30 µm. Pl. 82-96 x 22-40 µm.



***Parasola schroeteri* (P. KARST.) REDHEAD, VILGALYS & HOPPLE**

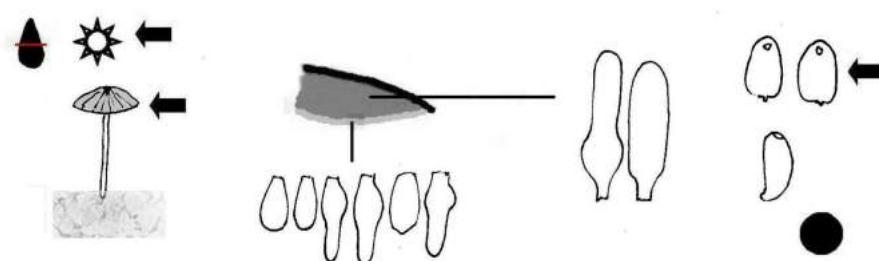
(Syn.: *Coprinus schroeteri* P. KARST., *Coprinus nudiceps* P. D. ORTON, *Parasola nudiceps* (P.D. ORTON) REDHEAD, VILGALYS & HOPPLE,  
*Coprinus longipes* BULLER, *Coprinus proximellus* P. KARST.)

10\* 11 (10) Cap predominantly with grey color tones, habitat usually sun exposed.

11

Spores often hexagonal.

Small to medium-sized. Sp. 10-14,5 (-15,5) x 6,2-10 µm. Ch. 24,5-90 x 7-27 µm. Pl. 60-110 x 20-38 µm.

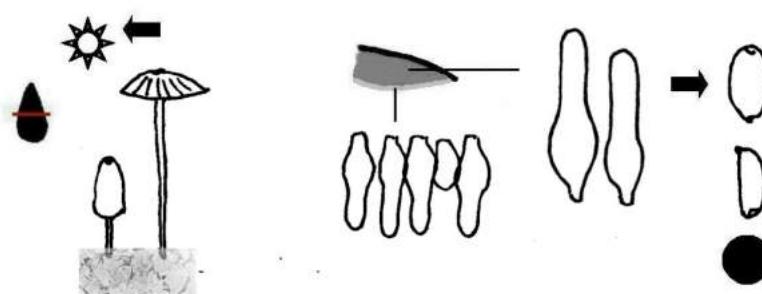


***Parasola plicatilis* (CURTIS: FR.) REDHEAD, VILGALYS & HOPPLE**

(Syn.: *Coprinus plicatilis* (CURTIS) FR., *Coprinus pulcher* (PERS.) GRAY)

11\* Spores often broadly ellipsoid.

Small to medium-sized. Sp. 10,5-13,5 x 8-11,5 µm. Ch. 35-80 x 12-20 µm. Pl. 75-90 x 24-35 µm

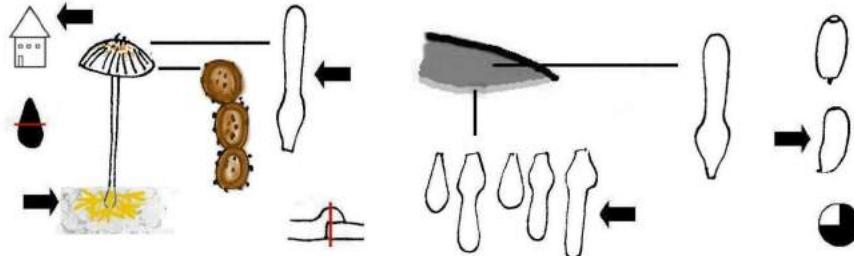


***Parasola plicatilis-similis* L. NAGY, SZARKANDI & DIMA**

**Part 2.1.**

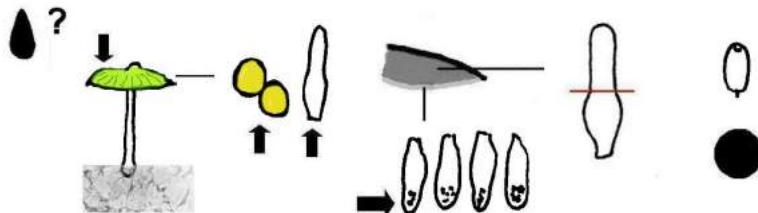
- |    |                        |   |
|----|------------------------|---|
| 1  | Pileocystidia present. | 2 |
| 1* | Pileocystidia absent.  | 7 |

- |    |  |        |
|----|--|--------|
| 2  | (1) Cheilocystidia at least partly utri- or lageniform.<br>Cheilocystidia only globose.  | 3<br>5 |
| 2* | (2) Pleurocystidia present.<br>Medium-sized. Ozonium present. Sp. 6,2-7,8 x 4-5 $\mu\text{m}$ . Ch. 40-90 x 13-23 $\mu\text{m}$ . Pl. similar, very rare. Papua New Guinea, India, one record in Germany (indoor). | 4      |

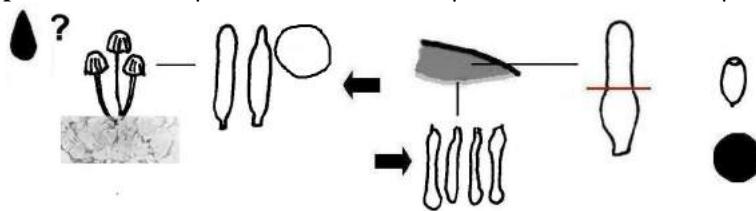


*Coprinellus aureogranulatus* (ULJÉ & APTROOT) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus aureogranulatus* ULJE & APTROOT)

- |    |   |   |
|----|---|---|
| 3* | Pleurocystidia absent.  | 4 |
| 4  | (3) Cap with greenish tones. Cheilcystidia with crystals on the upper part.<br>Large. Sp. 7-12 x 6-8,5 $\mu\text{m}$ , Ch. 42-75 x 14-25 $\mu\text{m}$ . Pi. 30-90 x 9-24 $\mu\text{m}$ . Pakistan. |   |

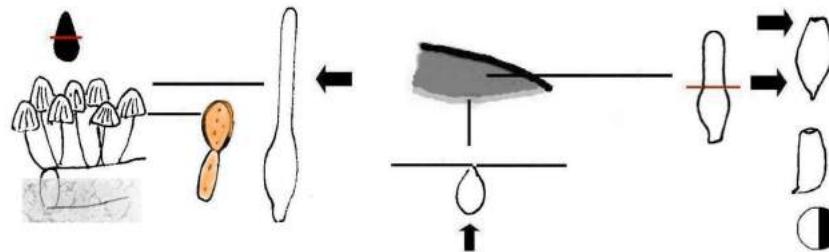


- |    |  |  |
|----|--|--|
| 4* | Cap without greenish tones. Cheilcystidia without crystals on the upper part.<br>Small. Sp. 7,5-9,5 x 4,5-6 $\mu\text{m}$ . Pl. 70-165 x 11-15 $\mu\text{m}$ . Pi. 118-165 x 23-28 $\mu\text{m}$ . Pakistan. |  |
|----|--|--|



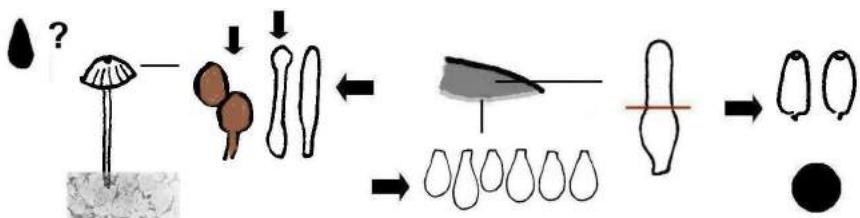
*Coprinellus disseminatus* S. HUSSAIN

- |   |  |   |
|---|--|---|
| 5 | (2) Pileocystidia never capitate.<br>Small, mostly in large groups. Sp. 6,5-9,5 x 4-5,5 (-6) $\mu\text{m}$ . Pi. 140-220 x 22-25 $\mu\text{m}$ . | 5 |
|---|--|---|



*Coprinellus disseminatus* (PERS.) J. E. LANGE  
(Syn.: *Coprinus disseminatus* (PERS.) GRAY)

- |    |  |   |
|----|--|---|
| 5* | Pileocystidia always or often capitate.  | 6 |
| 6  | (5) Spores often ovoid. In leaf litter.<br>Small to medium sized. Sp. 9-15,5 x 7,5-10,5 $\mu\text{m}$ . Ch. 22-30 x 19-28 $\mu\text{m}$ . Pi 78-94 x 10-12 $\mu\text{m}$ . |   |

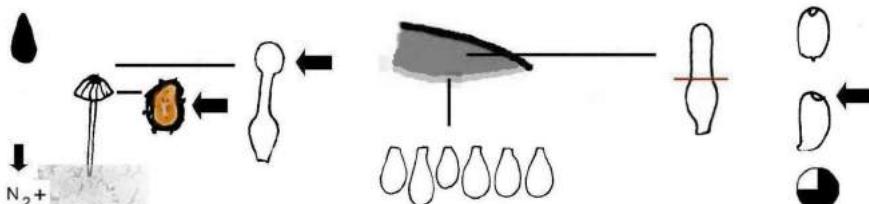


*Coprinellus tenuis* S. HUSSAIN

6\*

**Spores ellipsoid.** On dung.

Tiny to small. Sp. (9-) 10-12,5 (-13,5) x (5-) 6,5-8,5 µm. Ch. 15-40 x 16-20 µm. Pl. 60-110 (-140) x 9,7-20 µm.



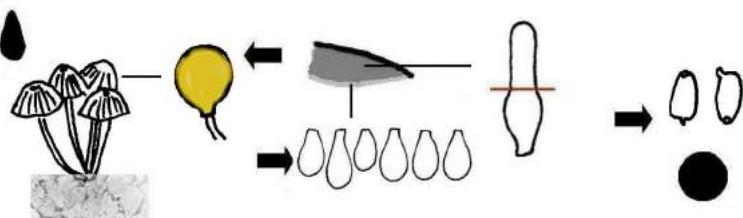
*Coprinellus curtus* (KALCHBR.) VILGALYS, HOPPLE & JACQ. JOHNSON

(Syn.: *Coprinus curtus* KALCHBR.)

7

(1) **Pleurocystidia absent.**

Large. Sp. 7-11,5 x 5-7 x 4-6 µm. Ch. 36-47 x 35-45 µm. Pakistan.



*Coprinellus campanulatua* S. HUSSAIN & H. AHMAD

7\*

**Pleurocystidia present.**

8

8

(7) **Caulocystidia present.**

9

8\*

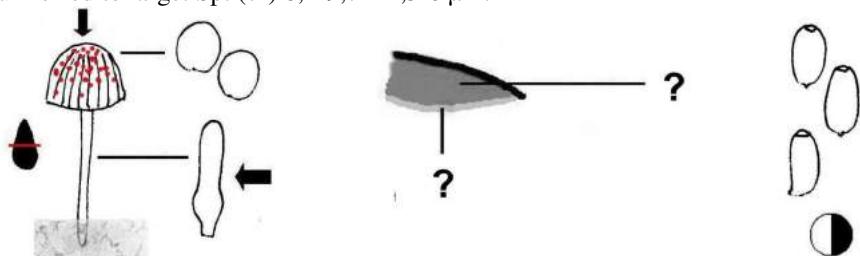
**Caulocystidia absent.**

11

9

(8) **Veil reddish.**

Medium-sized to large. Sp. (7-) 8,2-9,7 x 4,5-6 µm.



*Coprinus rufopruinatus* ROMAGN.

10

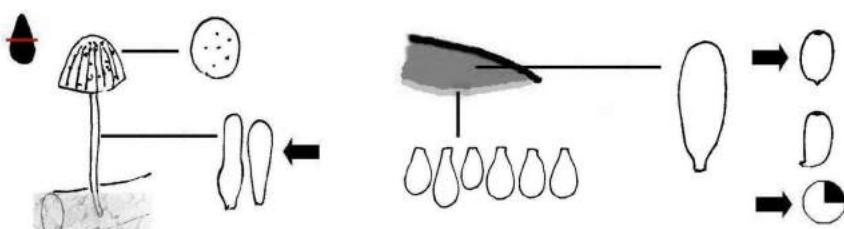
9\*

**Veil whitish.**

10

(9) **Spores pale, ellipsoid.**

Medium-sized to large. Cap strikingly pale brownish. Sp. 6,5-10,5 x 5,5-7 µm. Ch. up to 110 µm long. Pl. up to 120 x 40 µm.



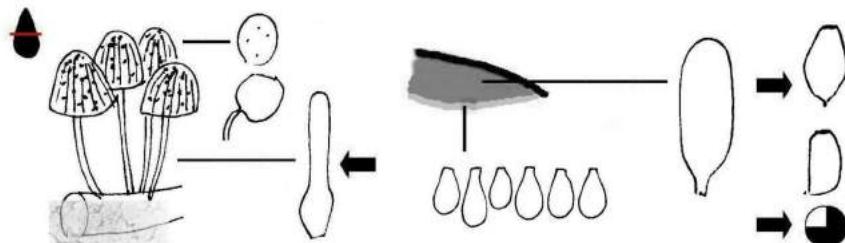
*Coprinellus pallidissimus* (ROMAGN.) P. ROUX, GUY GARCIA & S. ROUX

(Syn.: *Coprinus pallidissimus* ROMAGN.)

10\*

**Spores red brown, mitriform.**

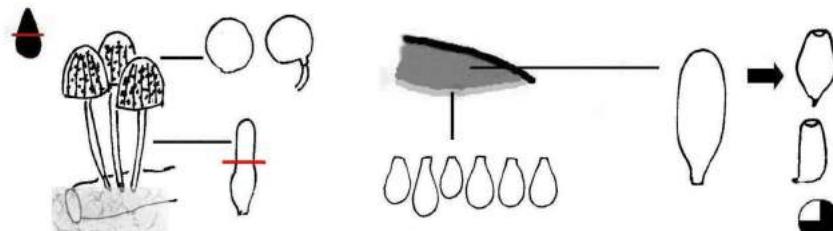
Medium-sized to large. Sp. (6,5-) 8,7-11 (-12,5) x (4-) 5-7 µm. Ch. 22-150 x 16-65 µm. Pl. 40-155 x 33-90 µm.



***Coprinellus micaceus* (BULL.: FR.) VILGALYS, HOPPLE & JACQ. JOHNSON**  
(Syn.: *Coprinus micaceus* (BULL.: FR.) Fr.)

11      (8) **Spores mitriform.**

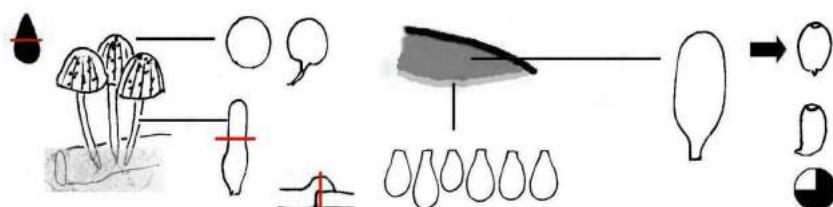
Medium-sized to large. Sp. (5-) 7-10,5 (-11,2) x 5-7 µm. Ch. 20-125 x 27-55 µm. Pl. 58-185 x 40-80 µm.



***Coprinellus saccharinus* (ROMAGN.) P. ROUX, GUY GARCIA & DUMAS**  
(Syn.: *Coprinus saccharinus* ROMAGN.)

11\*     **Spores ellipsoid.**

Medium-sized to large. Sp. 6-9,5 x (3,7-) 4,5-6 µm. Ch. 27-95 (-125) x 25-60 µm. Pl. 45-200 x 30-75 µm.



***Coprinellus truncorum* (SCOP.) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus truncorum* (SCOP.) Fr.)

## Part 2.2.

1       **On dung.**

2

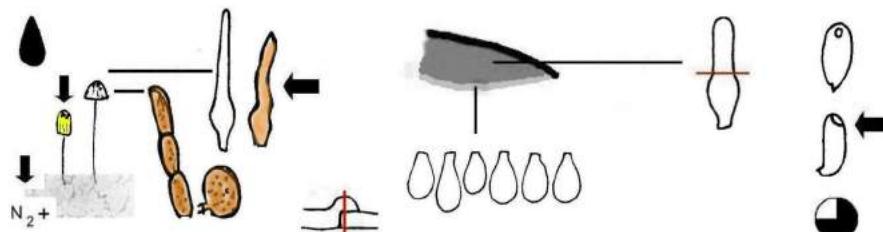
1\*      **Not on dung.**

3

2       (1) **Spores up to 10,5 µm long.**

2

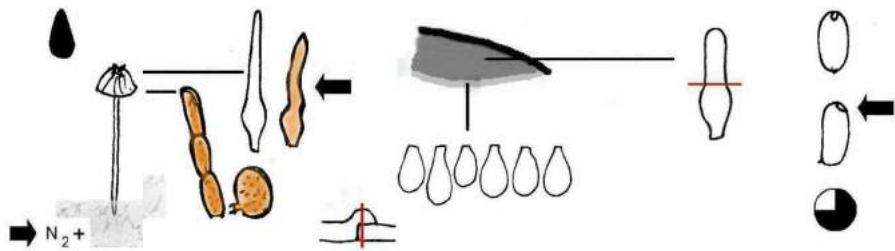
Tiny to small. Cap young strikingly yellowish. Sp. (6,5-) 7,5-10,5 x 3,5-5 (-5,5) µm. Ch. 10-35 µm broad. Pl. 27-110 x 6,8-15 µm.



***Coprinellus pusillus* (SVRČEK) HÁZI, L. NAGY, T. PAPP & VÁGVÖLGYI**  
(Syn.: *Coprinus pusillus* SVRČEK)

2\*      **Spores more than 10,5 µm long.**

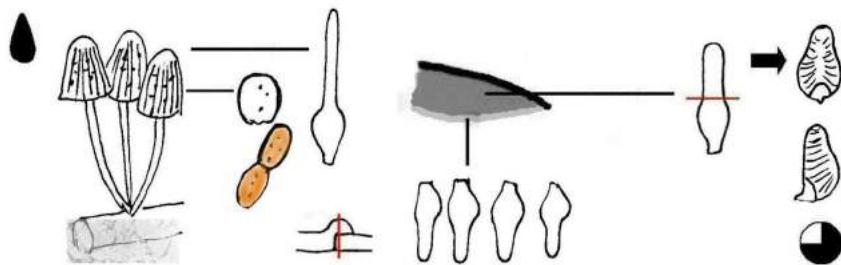
Tiny to small. Sp. 10,8-15 (-16,5) x (4,4-) 6-8 (-8,5) µm. Ch. up to 50 µm long. Pl. 27-120 x 11-24,5 µm.



*Coprinellus hepthemerus* (M. LANGE & A.H. SM.) VILGALYS, HOPPLE & JACQ. JOHNSON  
(Syn.: *Coprinus curtus* f. *macrosporus* ROMAGN.)

3 (1) Spores warty.

Medium-sized. Sp. 11-16,5 x 8-11 µm. Ch. 35-100 x 13-27 µm. Pi. (45-) 80-180 x 10-25 (-30) µm.

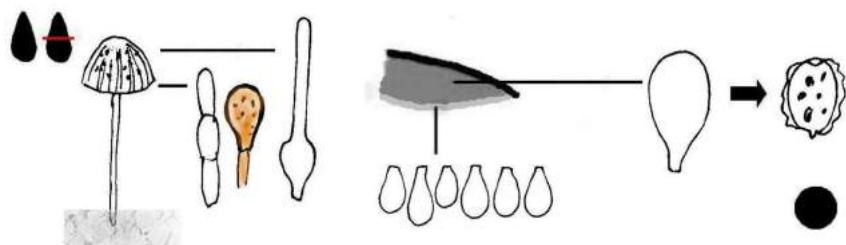


*Coprinellus deliquescens* (BULL.) P. KARST.  
(Syn.: *Coprinus deliquescens* (BULL.) FR., *Coprinus silvaticus* PECK, *Coprinellus tardus* (P. KARST.)  
P. KARST.)

3\* (2) Spores smooth.

4 (3) Spores with a perispore.

Small to medium-sized. Sp. 11-18,5 x 6,4-10,2 µm. Ch. 20-100 x 35-60 µm. Pl. 30-65 µm. Pi. 35-210  
x 5-30 µm.



*Coprinellus verrucispermus* (JOSS. & ENDERLE) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus verrucispermus* JOSS.)

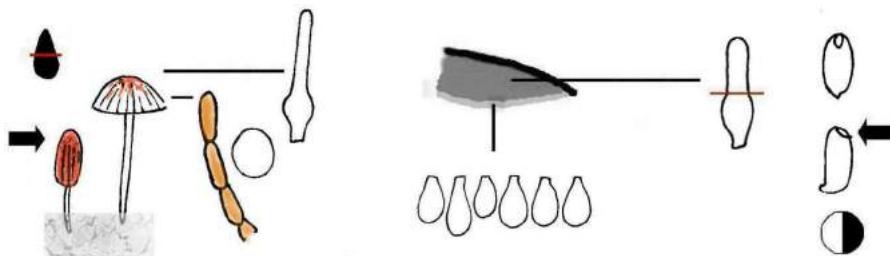
4\* (4) Spores without a perispore.

5 (5) Pileocystidia present.

5\* (6) Pileocystidia absent.

6 (5) Spores up to 11,5 µm long.

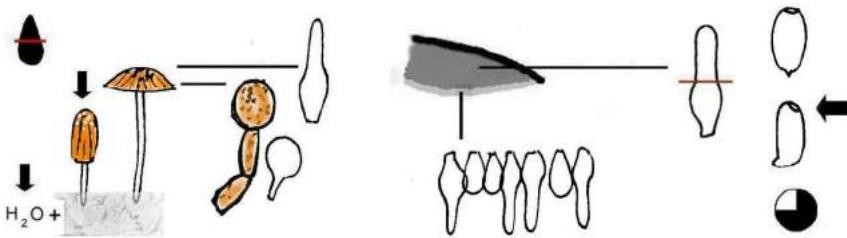
Small. Cap young strikingly reddish. Sp. 6,5-11,5 x 4,7-7,5 µm. Ch. 20-50 x 15-30 µm. Pi. 40-150 x  
14-24 µm



*Coprinellus pyrrhanthes* (ROMAGN.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus pyrrhanthes* ROMAGN.)

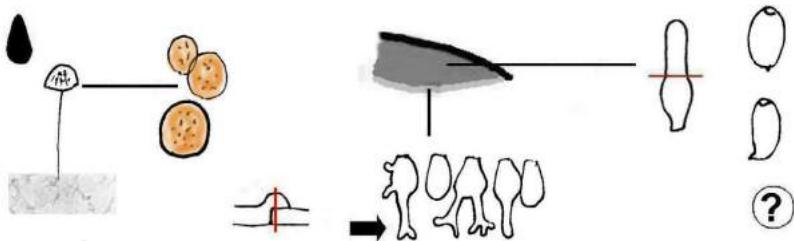
6\* (7) Spores up to 14,5 µm long.

Small. Cap young strikingly orange. Sp. 11-14,5 x 6-8 µm. Ch. up to 120 µm long. Pi. up to 150 µm  
long.



*Coprinellus dilectus* (FR.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus dilectus* FR.)

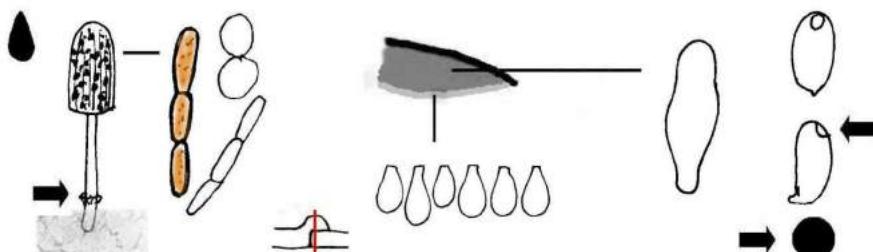
- 7 (5) Cheilo- and caulocystidia apikally gnarled branched.  
Small. Sp. 7,5-11,5 x 6-7,5 µm. Ch. 10-30 µm long.



*Coprinellus ramosocystidiatus* (BENDER) L. NAGY, HÁZI, VÁGVÖLGYI & PAPP  
(Syn.: *Coprinus ramosocystidiatus* BENDER)

7\* Otherwise

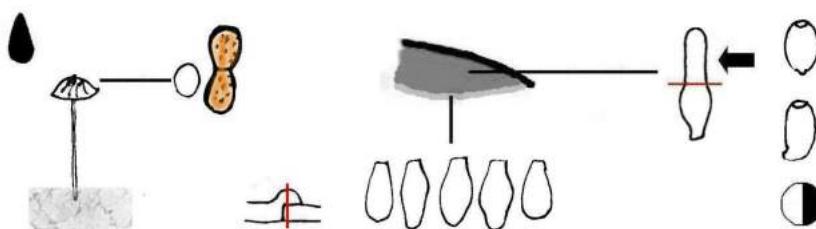
- 8 (7) Spores 11-17,5 µm long, opaque, germ pore strongly exzentrical.  
Medium-sized to large. Sp. (9,5-) 11-17,5 x (5-) 6,5-10 µm. Ch. 16,5-120 µm lang. Pl. 70-130 x 45 µm.



*Coprinellus flocculosus* (DC.) Vilgalys, Hopple & Jacq. Johnson  
(Syn.: *Coprinus flocculosus* (DC.) Fr. 1838, *Coprinus rostrupianus* E.C. HANSEN ss. LANGE)

8\* Spores otherwise.

- 9 (8) Pleurocystidia absent.  
Small. Sp. 6,2-9,4 (-10) x 4,4-6,2 µm. Ch. 22-40 x 11-35,5 µm.



*Coprinellus deminutus* VALADE  
(Syn.: *Coprinus deminutus* ENDERLE)

9\* Pleurocystidia present.

- 10 (9) Cheilocystidia utri-/lageniform, mixed with globose cells.

10\* Only globose to clavate marginal cells present.

11 (10) Spores dark red brown, semiopaque

Medium-sized to large. Stipe base mostly with a yellowish mycelium. Sp. 8,5-12,5 x 5-7 µm. Ch. 20-55 x 11-30 µm. Pl. 50-140 x 30-55 µm.

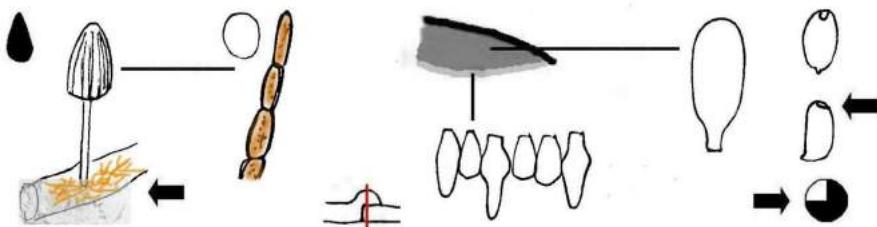
8

9

10

11

12

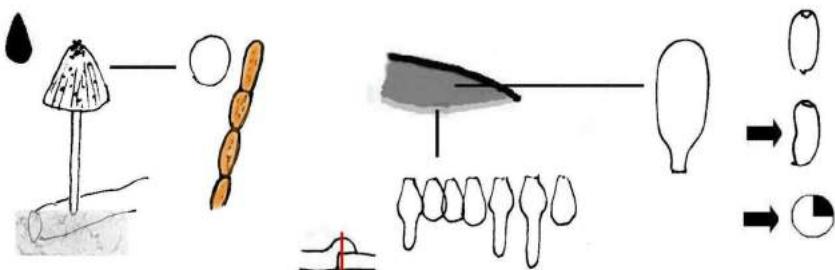


***Coprinellus radians* (DESM.) VILGALYS, HOPPLE & JACQ. JOHNSON**  
(Syn.: *Coprinus radians* (DESM.) FR., *Coprinus similis* BERK. & BROOME,  
*Coprinus horotum* METROD)

11\*

**Spores bright brown, not semiopaque**

Medium-sized to large. Stipe base rarely with a yellowish mycelium. Sp. 7,5-10 x (3,7-) 4,4-5,5 (-6)  $\mu\text{m}$ . Ch. 22-50 (-68) x 8,2-22  $\mu\text{m}$ . Pl. 46-165 x 30-55  $\mu\text{m}$ .

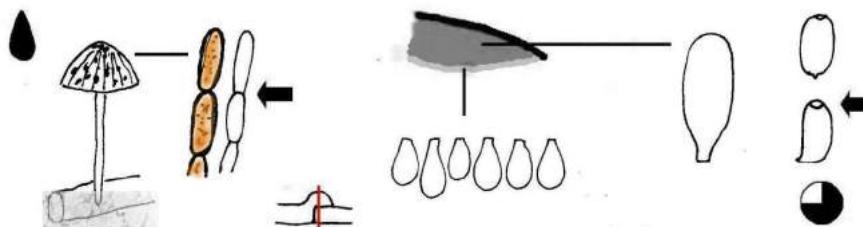


***Coprinellus xanthothrix* (ROMAGN.) VILGALYS, HOPPLE & JACQ. JOHNSON**  
(Syn.: *Coprinus xanthothrix* ROMAGN.)

12 (10)

**Veil without globose elements.**

Large. Sp. 7-9,5 x 4,5-6  $\mu\text{m}$ . Ch. 30-115 x 30-60  $\mu\text{m}$ . Pl. 45-175 x 30-65  $\mu\text{m}$ .



***Coprinellus bipellis* (ROMAGN.) P. ROUX, GUY GARCIA & BORGARINO**  
(Syn.: *Coprinus bipellis* ROMAGN.)

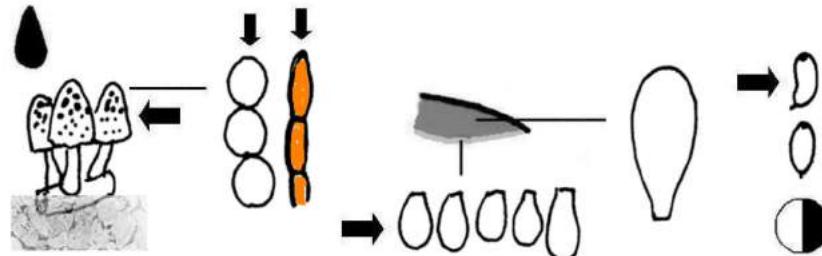
12\*

**Veil mixed with globose elements.**

13 (12)

**Germ pore central.**

Large. C. with white veil patches. Sp. 7-8,5 x 3,5-5  $\mu\text{m}$ . Ch. 18-45 x 7-18  $\mu\text{m}$ . Pl. 80-110 x 50-65  $\mu\text{m}$ .



***Coprinellus albidofloccosus* (LOCQ.) GMINDER & MANZ**  
(Syn.: *Coprinus albidofloccosus* LOCQ.)

13\*

**Germ pore excentrical.**

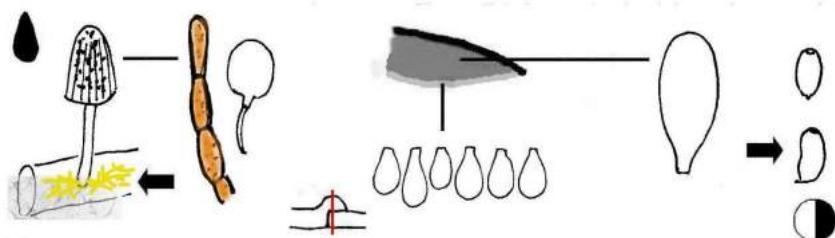
14 (13)

**Spores up to 9 x 4,5 (5)  $\mu\text{m}$ .**

Large. Stipe base mostly with a yellowish mycelium. Sp (5,5-) 6,2-8,8 x (3-) 3,7-4,4 (-5). Ch. 15-90 x 22-33  $\mu\text{m}$ . Pl. 40-225 x 25-70  $\mu\text{m}$ .

13

14

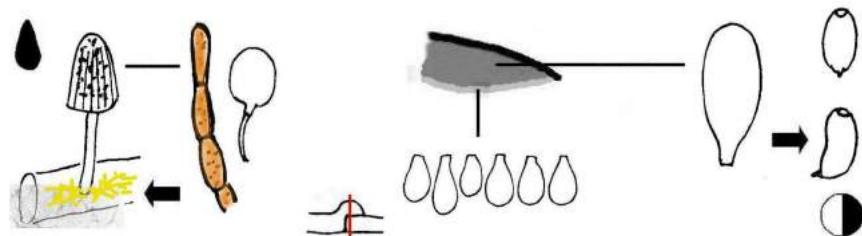


***Coprinellus ellisii* (P.D. ORTON) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus ellisii* P. D. ORTON)

14\*

**Spores up to 11 x 5,5 (6) µm.**

Large. Stipe base mostly with a yellowish mycelium. Sp 6,7-10 (-11,2) x 3,7-5,6 (-6) µm. Ch. 10-90 x 15-40 µm. Pl. 72-220 x 22,5-60 µm.



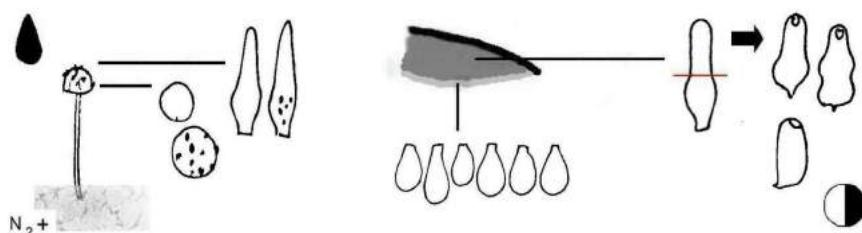
***Coprinellus domesticus* (BOLTON: FR.) VILGALYS, HOPPLE & JACQ. JOHNSON**  
(Syn.: *Coprinus domesticus* (BOLTON: FR.) GRAY)

### Part 2.3.

1

**Spores up to 7,5 µm long.**

Tiny. Sp. 5,2-7,3 x 4,2-4,7 µm. Ch. 10-14 µm broad. Pi. 35-65 x 6-13 µm.



***Coprinellus doverii* (L. NAGY) HÁZI, L. NAGY, T. PAPP & VÁGVÖLGYI**  
(Syn.: *Coprinus doverii* L. NAGY)

1\*

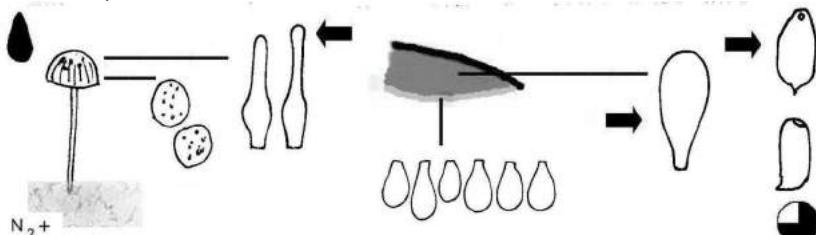
**Spores longer.**

2 (1)

**Pileocystidia often subcapitate, sclerocystidia absent, pleurocystidia present.**

Medium sized. Sp. 9,5-14,5 x 6,5-8,5 µm. Ch. 20-70 x 20-40 µm. Pl. 60-90 x 20-35 µm. Pi. 50-110 x 9-22 µm.

2

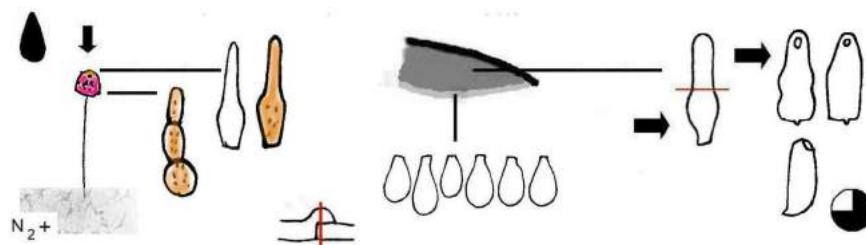


***Coprinellus marculentus* (BRITZELM.) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus marculentus* BRITZELM., *Coprinus hexagonosporus* JOSS.)

2\*

**Pileocystidia never subcapitate, sclerocystidia present, pleurocystidia absent.**

Tiny. Cap with purplish tones. Sp. 9-11,5 x 6-7 µm. Ch. 25-39 x 21-32 µm. Pi. 62-90 x 12-15 µm.

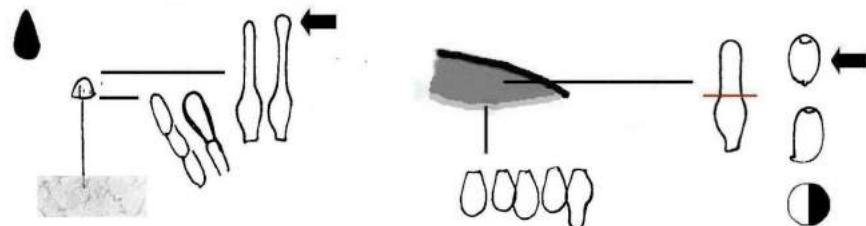


*Coprinellus mitrinodulisporus* DOVERI & SARROCCO

#### Part 2.4.

1 Spores up to 8,5 µm long.

Tiny. Sp. 7-8,5 x 5,1-6,2 µm. Ch. 20-50 x 20-30 µm. Pi. 50-100 x 14-22 µm.

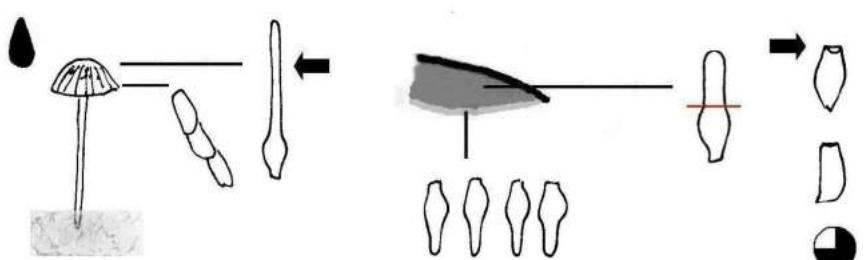


*Coprinellus minutisporus* (ULJÉ) DOVERI & SARROCCO  
(Syn.: *Coprinus minutisporus* ULJÉ)

1\* Spores longer.

2 (1) Pileocystidia with a long thin neck, not capitate.

Medium sized. Sp. 7,5-12 x 4,3-6 µm, truncat. Ch. 30-75 x 10-18 µm. Pi. (50-) 100-250 x 13-24 µm.

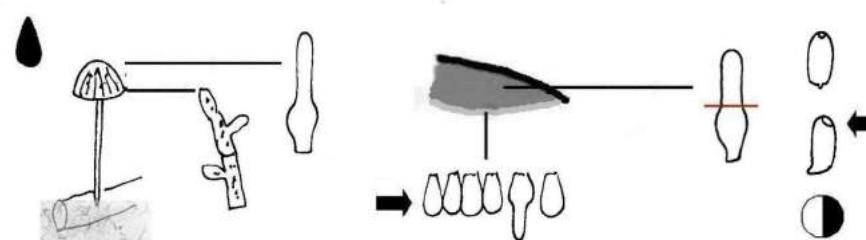


*Coprinellus hiascens* (Fr.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus hiascens* (Fr.) QUEL.)

2\* Pileocystidia otherwise.

3 (2) Cheilocystidia almost exclusively globose.

Medium sized. Sp. 9,5-13 x 6,5-8 µm. Ch. 20-70 µm long. Pi. 65-140 x 10-30 µm.



*Coprinellus velatopruinatus* (BENDER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus velatopruinatus* BENDER)

3\* Cheilocystidia almost never globose.

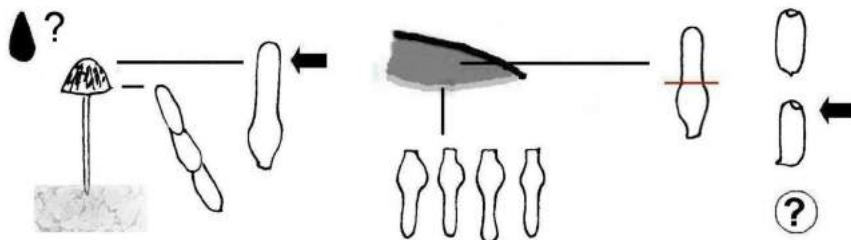
4 (3) Pileocystidia not capitate, sometimes apically only somewhat expanded.

Small. Sp. 8,8-11,6 x 5-7 µm. Ch. 30-50 x 8-10 µm. Pi. 70-120 x 13-18 µm.

2

3

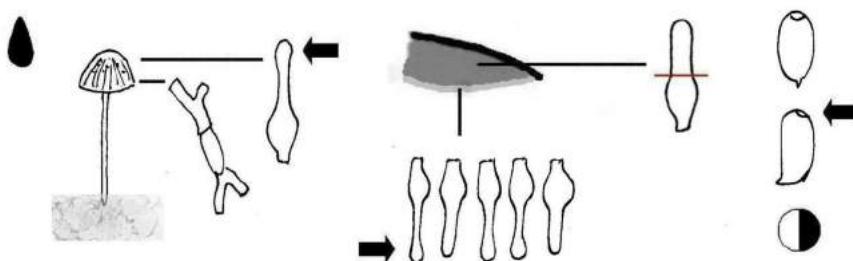
4



*Coprinellus allovelus* (ULJÉ) DOVERI & SARROCCO  
(Syn.: *Coprinus allovelus* ULJE)

- 4\* Pileocystidia at least partially capitate.  
5 (4) Spores up to ca. 14 µm long.

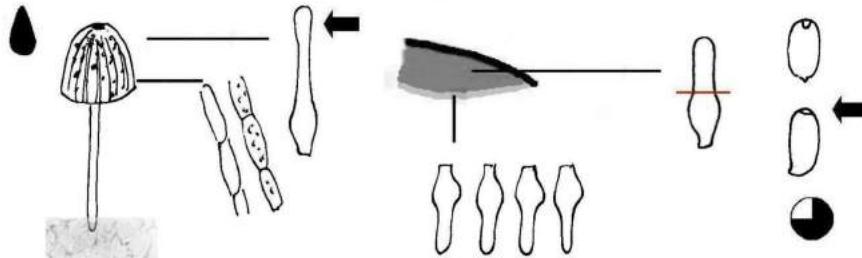
Small. Sp. 9-14,2 x 5,8-7 µm. Ch. 35-40 x 10-12 µm. Pi. 67-88 x 12-22 µm.



*Coprinellus cinereopallidus* L. NAGY, HÁZI, PAPP & VÁGVÖLGYI

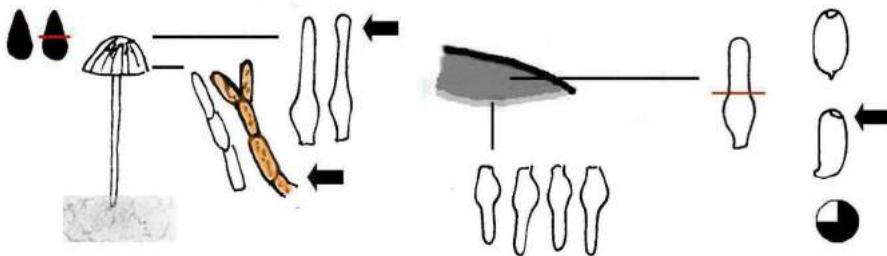
- 5\* Spores shorter.  
6 (5) Spores up to 10,5 µm long, germ pore nearly central.

Medium-sized. Sp. 7,5-10,5 x 5-6,5 µm. Ch. 40-60 x 10-20 µm. Pi. 50-75 µm long.



*Coprinellus cinnamomeotinctus* (P. D. ORTON) D. J. SCHAF.  
(Syn.: *Coprinus cinnamomeotinctus* P. D. ORTON)

- 6\* Spores up to 12,5 µm long, germ pore excentrical.  
Small. Sp. (7-) 10-12,5 x (4,5-) 5-6,2 µm. Ch. 27-75 x 5,5-12,3 µm. Pi. (33-) 46,5-110 x 9,5-20,5 µm. Veil cells often with thickened brownish walls.



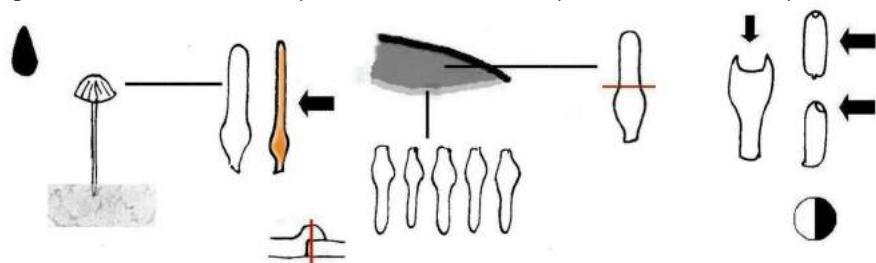
*Coprinellus heterothrix* (KÜHNER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus heterothrix* KÜHNER)

## Part 2.5.

1	Basidia predominantly 2-spored.	2
1*	Basidia predominantly 4-spored.	8
2	(1) Cheilocystidia lageniform.	3
2*	Cheilocystidia globose.	5

3      (2) **Sclerocystidia present.**

Tiny. Sp. 9-12,7 (-14,8) x 4,7-5,7 µm. Ch. 23-50 x 7,5-14 µm. Pi. 50-90 x 6-12 µm.

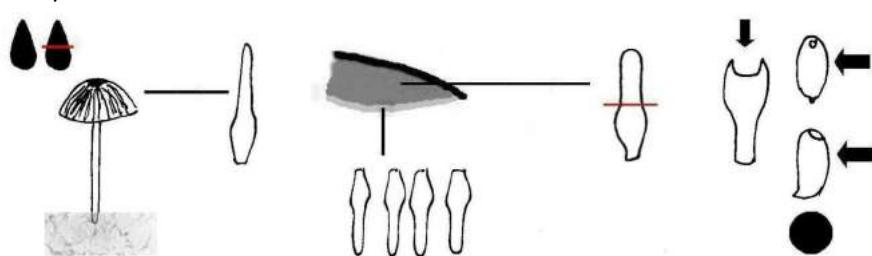


*Coprinellus pseudoamphithallus* (ULJÉ) DOVERI & SARROCCO  
(Syn.: *Coprinus pseudoamphithallus* ULJE)

3\*     **Sclerocystidia absent.**

4      (3) **Spores ellipsoid.**

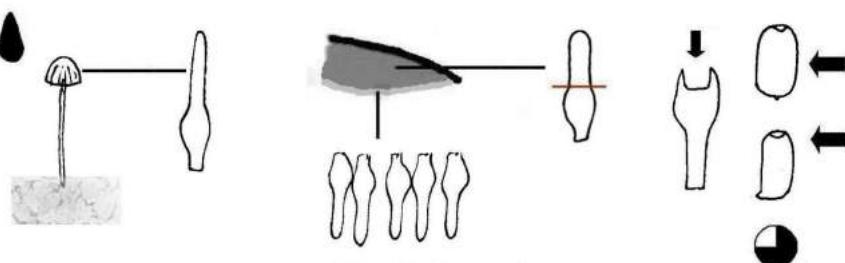
Medium-sized. Sp. 10-16,2 (-17) x 5,6-8,5 (-9) µm. Ch. 20-55 x 8,2-15 µm. Pi. (35-) 68-125 x 10-16,5 µm.



*Coprinellus amphithallus* (M. LANGE & A.H. SM.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus amphithallus* M. LANGE & A.H. SM., *Coprinus disseminatoides* KÜHNER)

4\*     **Spores subcylindrical.**

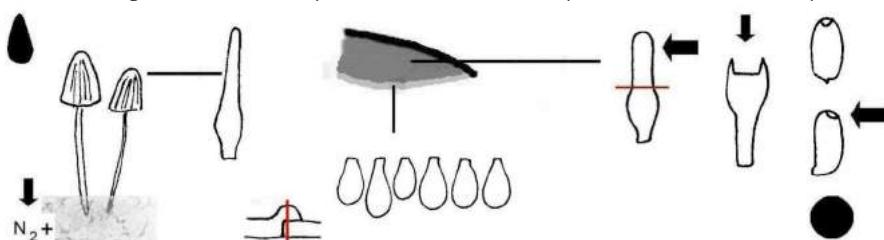
Tiny to very small. Sp. 9,7-17 x 6,8-10,9 µm. Ch. 30-50 x 12-17 µm. Pi. 50-85 x 11-18 µm.



*Coprinellus singularis* (ULJE) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus singularis* ULJE)

5      (2) **Pleurocystidia absent.**

Medium-sized. Sp. 9,7-15 x 6-8,5 µm. Ch. 20-60 x 15-32 µm. Pi. 25-140 x 9-22 µm.



*Coprinellus bisporus* (J. E. LANGE) VILGALYS, HOPPLE & JACQ. JOHNSON  
(Syn.: *Coprinus bisporus* J. E. LANGE)

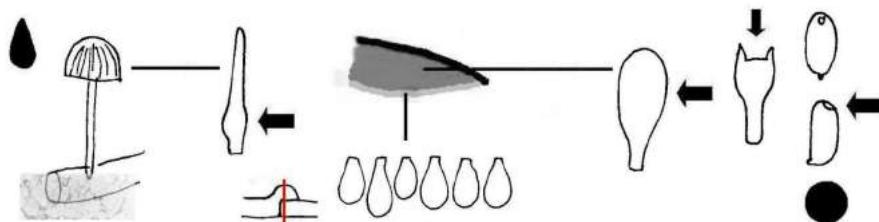
5\*     **Pleurocystidia present.**

6      (5) **Spores up to 14,5 µm long, pileocystidia not encrusted.**

Medium-sized. Sp. 10-14,5 x 6,3-9 µm. Ch. 25-60 x 20-35 µm. Pl. 40-65 x 28-27 µm. Pi. 50-140 x 12-25 µm.

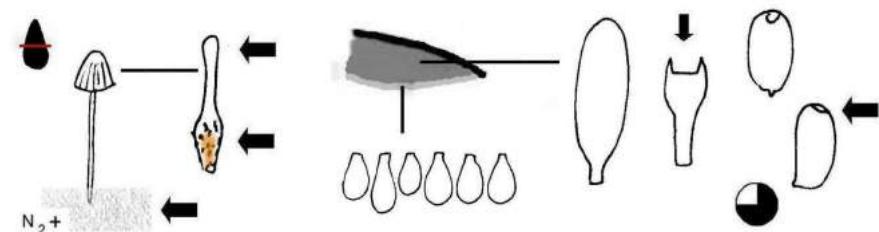
4

6



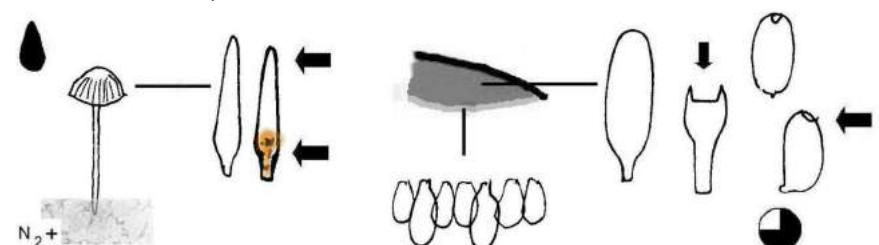
*Coprinellus bisporiger* (BULLER EX P. D. ORTON) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus bisporiger* BULLER, *Coprinus bisporus* ss. BULLER)

- 6\* Spores longer, pileocystidia encrusted. 7
- 7 (6) Pileocystidia mostly subcapitate.  
Small. Sp. 15–21,8 x 10–13 µm. Ch. 17–40 x 12,5–27 µm. Pl. 65–80 x 30–40 µm. Pi. 22–63 x 5,5–19 µm.



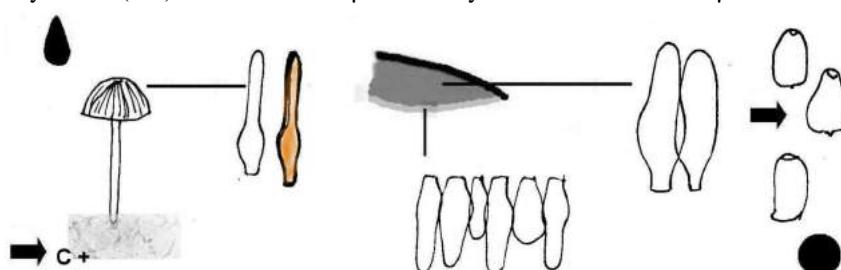
*Coprinellus sabulicola* L. NAGY, HÁZI, PAPP & VÁGVÖLGYI

- 7\* Pileocystidia not subcapitate.  
Small to medium-sized. Sp. 13–21 x 8–12,5 µm. Ch. 30–75 x 25–50 µm. Pl. 50–115 x 15–60 µm. Pi. 30–100 x 4,5–22 µm.



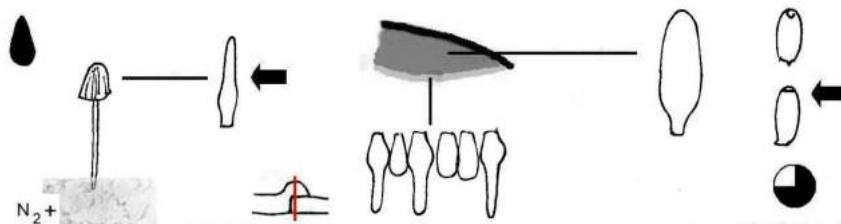
*Coprinellus sassii* (M. LANGE & A. H. SM.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus sassii* M. LANGE & A. H. SM., *Coprinus ephemerus* f. *bisporus* SASS)

- 8 (1) Spores submitriform, on fire places.  
Medium-sized. Sporen: 7,5–11,5 x 6–8,8 µm. Cheilozystiden: 25–80 x 7–35 µm. Pleurozystiden: (50–) 60–180 x 15–60 µm. Pileozystiden: 25–110 x 9–16 µm.



*Coprinellus angulatus* (PECK) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus angulatus* PECK, *Coprinus boudieri* QUÉL.)

- 8\* Otherwise. 9
- 9 (8) On dung or dung-straw mixture. 10
- 9\* Habitat otherwise. 17
- 10 (9) Pleurocystidia present. 11
- 10\* Pleurocystidia absent. 13
- 11 (10) Spores up to 12 µm long, pileocystidia mostly only up to 65 µm long.  
Small. Sp. (5,6-) 7,5–11,5 (-12) x (3,7-) 4,5–5,5 (-6,7). Ch. 20–60 x 8–15 µm. Pl. 55–125 x 14–33 µm. Pi. (20-) 33–65 (-98) x 5,5–13,5 (-19) µm.



***Coprinellus brevisetulosus* (ARNOLDS) REDHEAD, VILGALYS & MONCALVO**

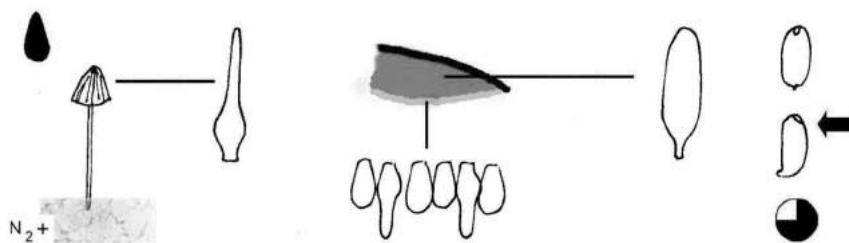
(Syn.: *Coprinus brevisetulosus* ARNOLDS, *Coprinus bulleri* CACIALLI, CAROTI & DOVERI)

11\* Spores and pileocystidia longer.

12

12 (11) Clamps present.

Small. Sp. 11,5-15 (-15,5) x 6-8 µm. Ch. 20-60 x 8-13,5 µm. Pl. 60-120 x 20-45 µm. Pi. 30-76 (-110) x 10-20 µm.

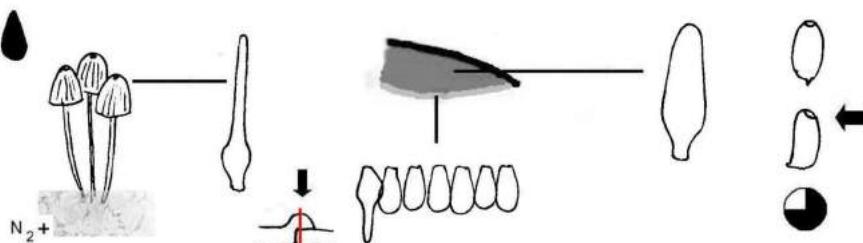


***Coprinellus ephemerus* (BULL.) REDHEAD, VILGALYS & MONCALVO**

(Syn.: *Coprinus ephemerus* (BULL.) FR.)

12\* Clamps practically absent.

Small. Sp. 7,5-14 (-16,6) x 5-8,8 µm. Ch. 33-60 x 7-8,5 µm. Pl. 40-140 x 30-52 µm. Pi. (35,5-) 55-130 (-150) x 7-22 µm.

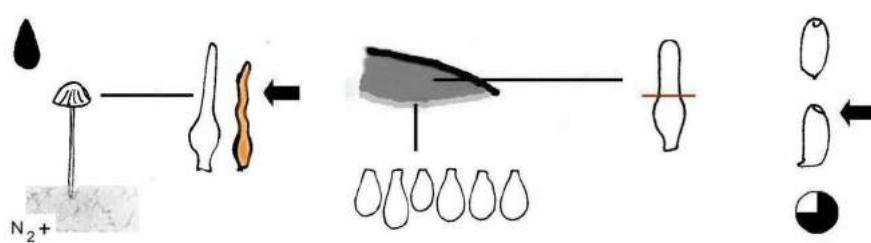


***Coprinellus congregatus* P. KARST.**

(Syn.: *Coprinus congregatus* (BULL.) FR.)

13 (10) Sclerocystidia present.

Tiny to small. Sp. 8-12,5 (-13) x (3,7-) 5-6,5 (-7) µm. Pi. (25-) 45-135 x 8-22 µm.



***Coprinellus heterosetulosus* (LOCQ. EX WATLING) VILGALYS, HOPPLE & JACQ. JOHNSON**

(Syn.: *Coprinus heterosetulosus* LOCQ.)

13\* Sclerocystidia absent.

14

14 (13) Spores up to 11 µm long, pileocystidia with a thin neck.

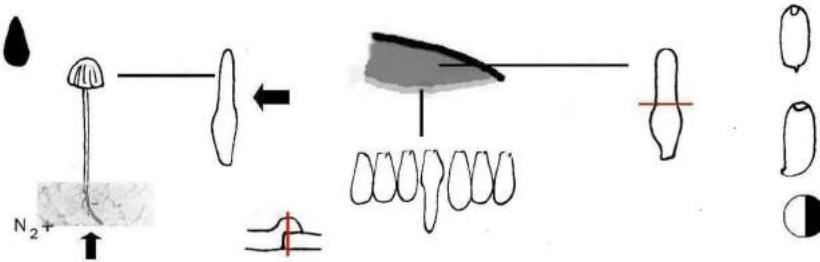
15

14\* Spores longer, pileocystidia with a thick neck.

16

15 (14) Stipe with a pseudorhiza, pileocystidia up to 70 µm long.

Tiny to small. Sp. 8-11 x 4,6-5,5 µm. Ch. 9-20 x 8-14 µm, mostly globose. Pi. 32-70 x 9-14 µm.

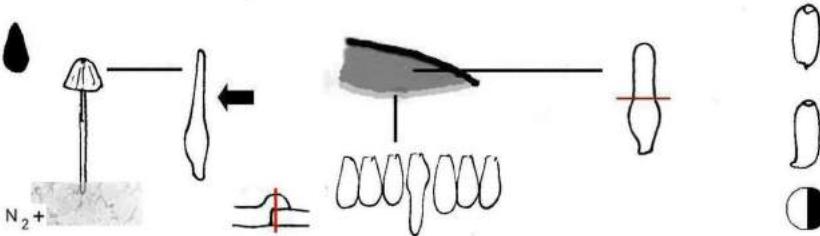


*Coprinellus radicellus* HÁZI, L. NAGY, PAPP & VÁGVÖLGYI

15\*

**Stipe without a pseudorhiza, pileocystidia up to 90 µm long.**

Tiny to small. Sp. (6,2-) 7,5-10 (-11,5) x (3-) 4,5-5 (-5,5) µm. Ch. 17,7-46,5 x 12,3-33 µm, mostly globose. Pi. 27-95 (-130) x 7-19 µm.



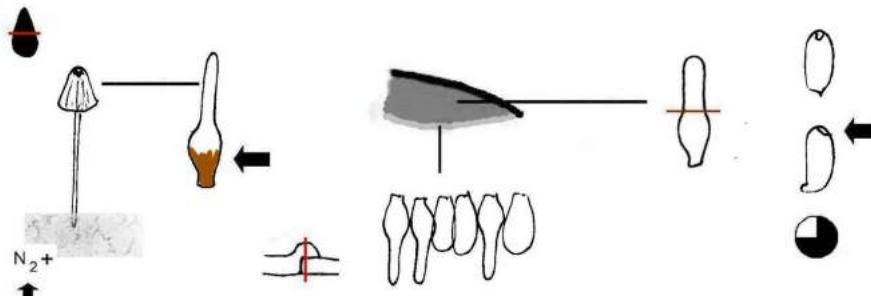
*Coprinellus pellucidus* (P. KARST.) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus pellucidus* P. KARST.)

16

(14) **Pileocystidia often with a brown base.**

Small. Sp. 9,4-15 x 6,3-7,5 µm. Ch. 20-65 x 10-20 µm. Pi. 40-145 x 13,5-23 µm.

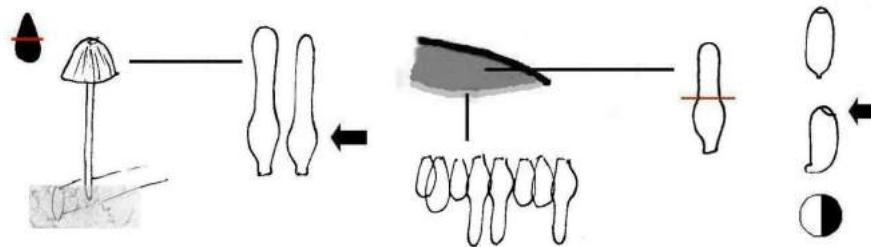


*Coprinellus fuscocystidiatus* L. NAGY, HÁZI, PAPP & VÁGVÖLGYI

16\*

**Pileocystidia without a brown base.**

Small. Sp. 9,5-14,5 x 5-7 µm. Ch. up to 55 µm long. Pi. up to 120 µm long.



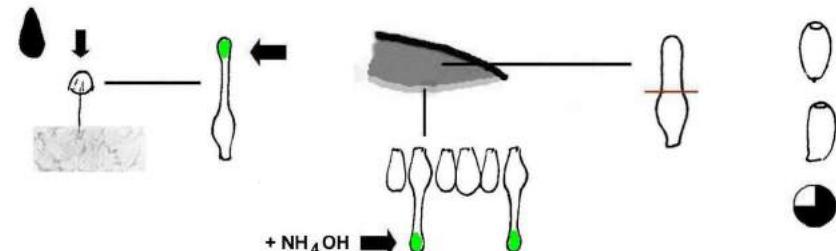
*Coprinellus subdisseminatus* (M. LANGE) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus subdisseminatus* M. LANGE)

17

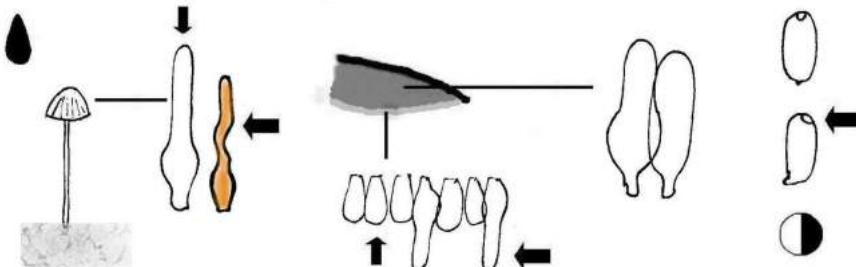
(9) **Cheilo- and Pileocystidia with in NH<sub>4</sub>OH greenish deposits.**

Tiny. Sp. 13-16,5 x 8-9 µm. Ch. 32-52 x 9-25 µm. Pi. 27-62 x 9-14 µm.



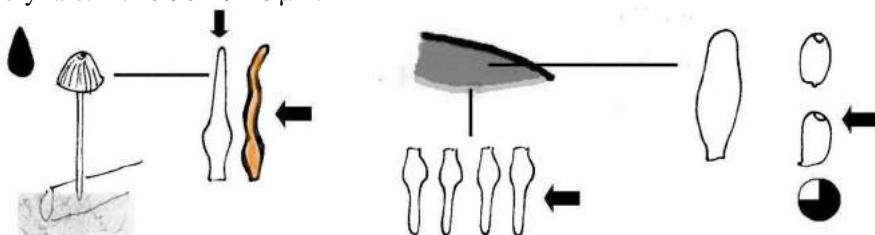
*Coprinellus christianopolitanus* ÖRSTADIUS & E. LARSS.

17*	Otherwise.	18
18	(17) Pleurocystidia present.	19
18*	Pleurocystidia absent.	23
19	(18) Sclerocystidia present.	20
19*	Sclerocystidia absent.	21
20	(19) Cheilocystidia lageniform and globose. Small to medium-sized. Sp. (9,5-) 10-14 (-16) x (5-) 8 (-10) µm. Ch. 30-100 x 11-20 µm. Pl. 40-65 (-75) x 20-55 µm. Pi. 44-125 x 7,5-24 µm.	



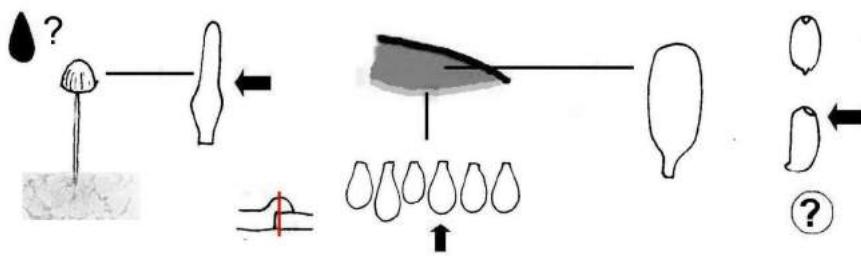
*Coprinellus subimpatiens* (M. LANGE & A.H. SM.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus subimpatiens* M. LANGE & A.H. SM.)

20*	<b>Cheilocystidia only lageniform.</b> Small to medium-sized. Sp. 8,3-10,3 x 6,1-8,4 µm. Ch. 20-40 x 8-14 µm. Pl. 36-48 x 9-13 µm, very rare. Pi. 40-90 x 9-16 µm.
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*Coprinellus eurysporus* (M. LANGE & A. H. SM.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus eurysporus* M. LANGE & A. H. SM.)

21	(19) <b>Pileocystidia up to 90 µm long.</b> Small. Sp. 9,3-13,6 x 6,2-8,3 µm. Ch. 30-70 x 17-42 µm. Pl. 50-110 x 27-45 µm. Pi. 60-90 x 11-20 µm.
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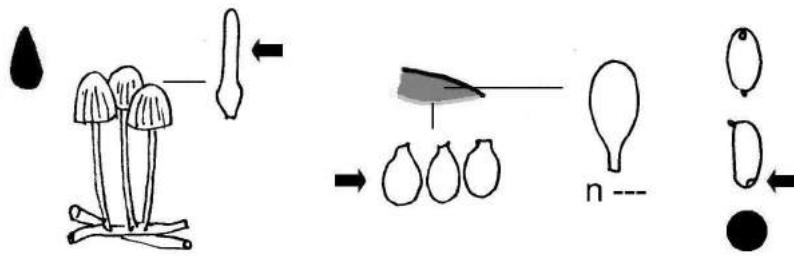


*Coprinellus canistri* (ULJÉ & VERBEKEN) DOVERI & SARROCCO  
(Syn.: *Coprinus canistri* ULJÉ & VERBEKEN)

21*	<b>Pileocystidia up to 130 (150) µm long.</b>	22
22	<b>Small, clamps absent.</b>	

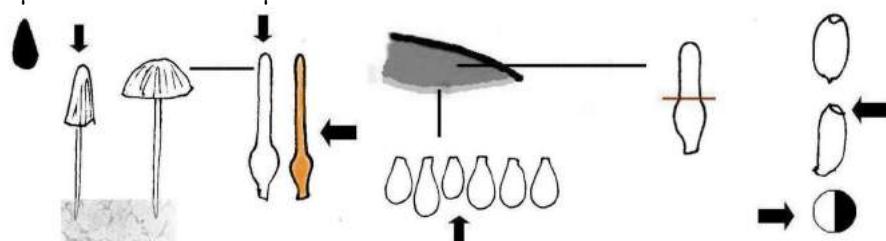
*Coprinellus congregatus* P. KARST.  
(see 12\*)

22*	<b>Medium sized, clamps present.</b> Sp. 10-13,5 x 6-7,6 µm. Ch. 0,64 x 20-39 µm. Pl. very rare or absent. Pi. 85-117 x 11,5-15 µm. Japan.
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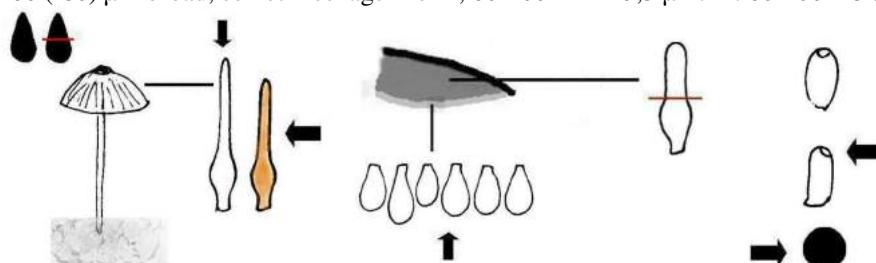
*Coprinellus aokii* (HONGO) VILGALYS, HOPPLE & JACQ. JOHNSON  
(Syn.: *Coprinus aokii* HONGO)

- |     |  |    |
|-----|--|----|
| 23  | <b>(18) Sclerocystidia present.</b>  | 24 |
| 23* | <b>Sclerocystidia absent.</b>  | 25 |
| 24  | <b>(23) Pileocystidia apically obtuse rounded.</b><br>Medium-sized. Cap young strikingly conical. Sp. (9,5-) 10-15,5 x 6,5-8,5 µm. Ch. 20-60 x 15-50 µm. Pi. 40-120 x 8-25 µm. |    |



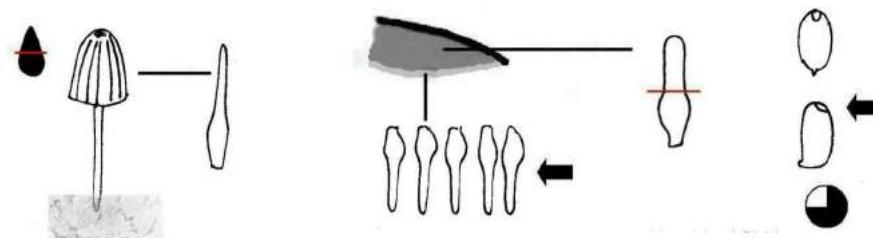
*Coprinellus sclerocystidiosus* (M. LANGE & A. H. SM.) VILGALYS, HOPPLE & JACQ. JOHNSON  
(Syn.: *Coprinus sclerocystidiosus* M. LANGE & A. H. SM.)

- |     |   |
|-----|---|
| 24* | <b>Pileocystidia apically relatively pointed.</b><br>Medium-sized to large. Sp. (9-) 10,5-13,5 x 5,5-7 (-7,5) µm. Ch. mostly spheropedunculat, 13,5-60 (-80) µm broad, sometimes lageniform, 60-100 x 11-13,5 µm. Pi. 60-200 x 8-36 µm. |
|-----|---|



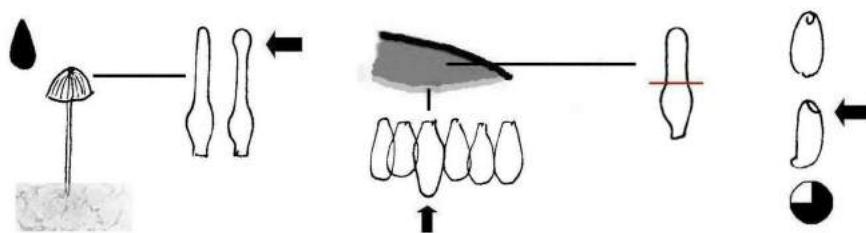
*Coprinellus callinus* (M. LANGE & A.H. SM.) VILGALYS, HOPPLE & JACQ. JOHNSON  
(Syn.: *Coprinus callinus* M. LANGE & A.H. SM.)

- |    |   |
|----|---|
| 25 | <b>(23) Cheilocystidia lageniform.</b><br>Large. Sp. (8-) 10-11,5 (-12) x (5-) 6-7,5 µm. Ch. 24,5-70 x 8,2-11 (-14) µm. Pi. 50-120 x 8-15 µm. |
|----|---|



*Coprinellus impatiens* (FR.) J. E. LANGE  
(Syn.: *Coprinus impatiens* (FR.) QUÉL.)

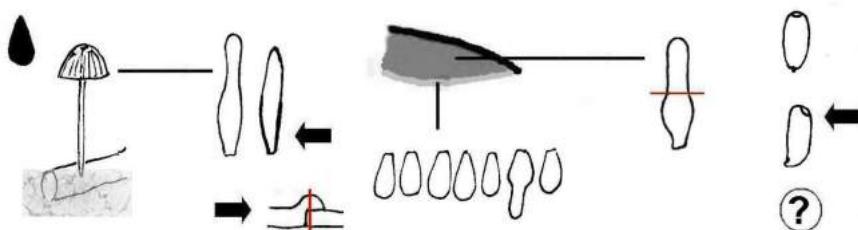
- |     |  |    |
|-----|--|----|
| 25* | <b>Cheilocystidia only globose or mixed with lageni-/utriform cystidia.</b>  | 26 |
| 26  | <b>(25) Spores 9,5-13,5 µm long.</b>   | 27 |
| 26* | <b>Spores longer.</b>  | 28 |
| 27  | <b>(26) Spores 9,5-12 µm long.</b><br>Small. Sp. 9,5-12 x 6,3-7,5 µm. Ch. 40-70 x 25-35 µm. Pi. 60-110 x 16-27 µm. |    |



*Coprinellus fallax* (M. LANGE & A. H. SM.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus fallax* M. LANGE & A. H. SM.)

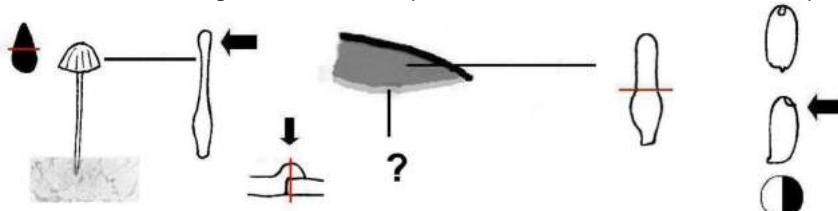
- 27\* Spores 10,5-13,5 µm long.  
*Coprinellus aokii* (HONGO) VILGALYS, HOPPLE & JACQ. JOHNSON  
(see 22\*)

- 28 (26) Clamps absent. 29  
 28\* Clamps present. 30  
 29 (28) Pileocystidia partially with thickened walls.  
 Small. Sp. 11,3-14 x 6,2-8 µm. Ch. 45-65 x 17-20 µm. Pi. 65-115 x 12-25 µm.



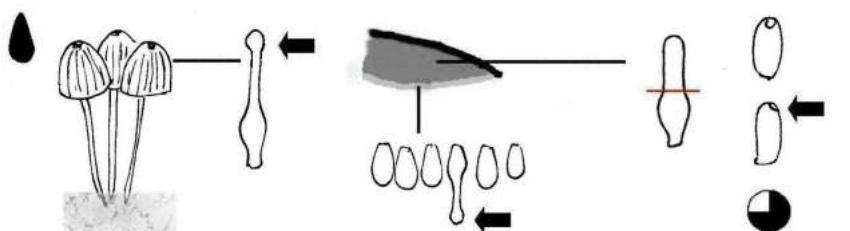
*Coprinellus uljiei* L. NAGY, HÁZI, PAPP & VÁGVÖLGYI

- 29\* Pileocystidia thin-walled.  
 Small to medium-sized. Sp. 9-14,2 x 5,8-7 µm. Ch. not noted. Pi. 62-93 x 9-18 µm.



*Coprinellus pallidus* L. NAGY, HÁZI, PAPP & VÁGVÖLGYI

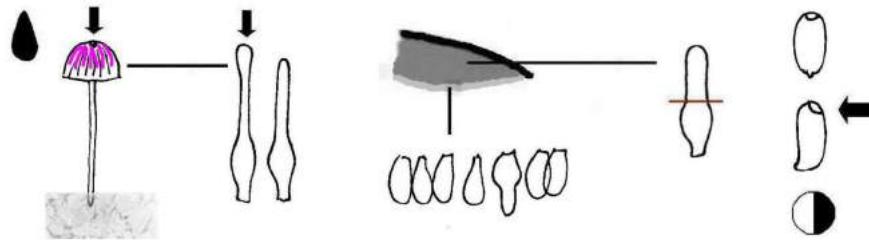
- 30 (28) Pileocystidia mostly capitate.  
 Medium-sized. Sp. (9-) 10,5-14,0 x (5,5-) 6,0-7,5 µm. Ch. mostly spheropedunculat, up to 40 µm broad, true Ch. very rare or absent. Pi. 30-150 x 8-18 µm.



*Coprinellus plagioporus* (ROMAGN.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus plagioporus* ROMAGN.)

- 30\* Pileocystidia apically not more than swollen.  
 31 (30) Cap up to 35 mm broad, with a purplish hue, pileocystidia often apically enlarged.  
 Medium-sized. Sp. 9-15,5 x 5,5-8 µm. Ch. 40-85 x 25-45 µm. Pi. 45-150 x 7-15 µm.

31

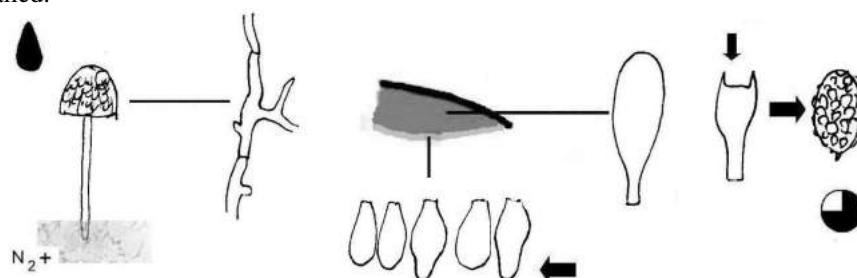


*Coprinellus subpurpureus* (A. H. SM.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus subpurpureus* A. H. SM.)

- 31\* Cap up to 15 mm broad, without purplish hue, pileocystidia apically hardly enlarged.  
*Coprinellus subdisseminatus* (M. LANGE) REDHEAD, VILGALYS & MONCALVO  
(see 16\*)

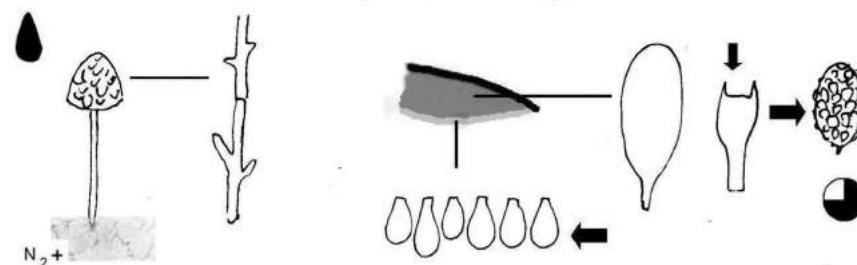
### Part 3.1.

1	On dung or on strongly fertilized places.	2
1*	Habitat otherwise.	13
2	(1) Spores warty.	3
2*	Spores smooth.	7
3	(2) Basidia 2-spored.	4
3*	Basidia 4-spored.	5
4	(3) Cheilocystidia globose and utriform. Small to medium-sized. Sp. 9-13,8 x 8-9,1 µm. Ch. 29-70 x 20-36 µm. Pl. 50-95 x 22-42 µm. V. thinwalled.	



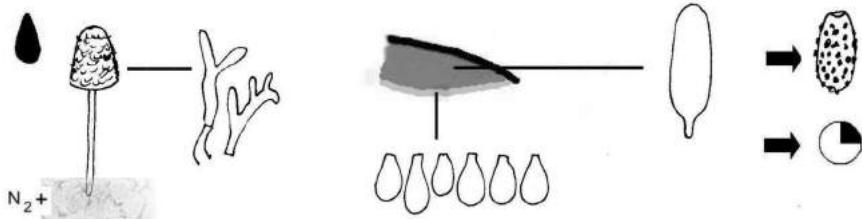
*Coprinopsis rugosobispora* (J. GEESINK & IMLER EX WALLEYN) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus rugosobisporus* J. GEESINK & IMLER)

- 4\* Cheilocystidia only globose.  
Medium-sized. Sp. 8,4-12,7 x 6,5-9,8 µm. Ch. 26-58 x 20-37 µm. Pl. 35-60 x 15-38 µm. V. thinwalled. In a fertilized flower pot, China.



*Coprinopsis novorugosobispora* FUKIHARU & YAMAKOSHI

- 5 (3) Spores spiny-warty, bright brown.  
Medium-sized. Sp. 5,7-6,9 x 3,9-4,8 µm. Ch. 20-50 x 16-28 µm. Pl. 43-97 x 16-36 µm. V. thinwalled. Japan.



*Coprinopsis asiaticiphlyctidospora* FUKIHARU & Horigome

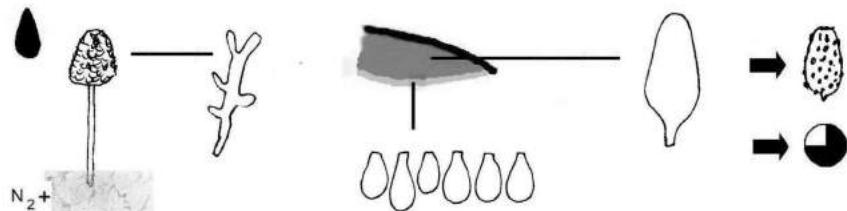
5\*

Spores rounded-warty, darker.

6

(5) Spores  $6,5\text{--}7,5 \times 5,1\text{--}6,2 \mu\text{m}$ , dark red brown.

Medium-sized. Ch.  $35\text{--}50 \times 25\text{--}30 \mu\text{m}$ . Pl.  $65\text{--}80 \times 40\text{--}50 \mu\text{m}$ . V. thinwalled. Japan.

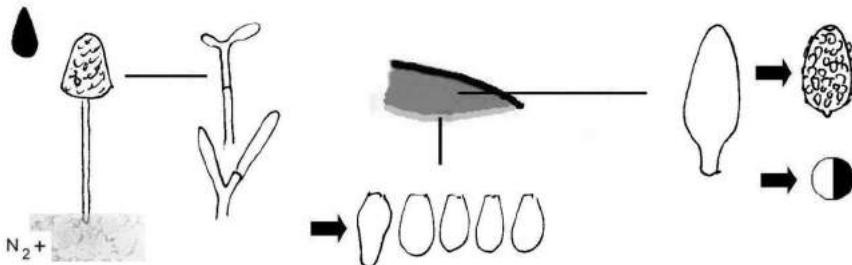


*Coprinopsis austrophlyctidospora* FUKIHARU

6\*

Spores  $7,8\text{--}8,5 \times 5,4\text{--}6 \mu\text{m}$ , reddish brown.

Medium-sized. Ch.  $25\text{--}35 \times 15\text{--}25 \mu\text{m}$ . Pl.  $40\text{--}65 \times 15\text{--}30 \mu\text{m}$ . V. thinwalled. Canada.



*Coprinopsis neophlyctidospora* RAUT, FUKIHARU & A. SUZUKI

7

(2) Spores up to ca.  $17 \mu\text{m}$  long.

8

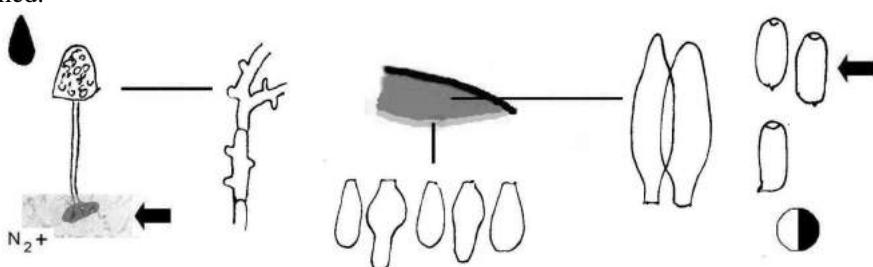
Spores shorter.

9

8

(7) With a sclerotium, cheilocystidia globose and utriform.

Medium-sized. Sp.  $11\text{--}17,5 \times 9,5\text{--}12,8 \mu\text{m}$ . Ch.  $60\text{--}100 \times 30\text{--}40 \mu\text{m}$ . Pl.  $45\text{--}160 \times 15\text{--}45 \mu\text{m}$ . V. thinwalled.



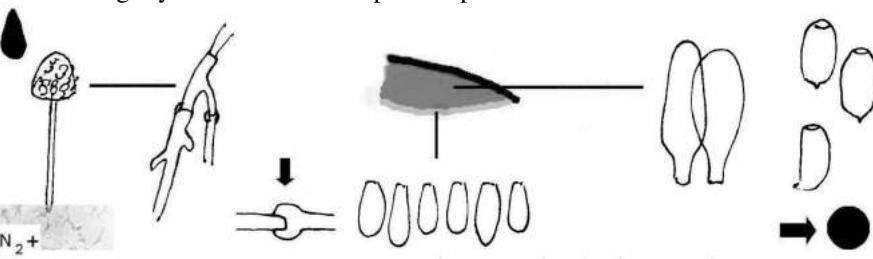
*Coprinopsis sclerotiorum* (HORVERS & DE COCK) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus sclerotiorum* HORVERS & DE COCK)

8\*

Without a sclerotium, cheilocystidia only globose.

Small to medium-sized. Sp.  $12,5\text{--}17 \times 10\text{--}14 \mu\text{m}$ . Ch.  $50\text{--}150 \times 25\text{--}45 \mu\text{m}$ . Pl.  $140\text{--}175 \times 25\text{--}40 \mu\text{m}$ . V. thin- to slightly thickwalled. Clamps multiple.

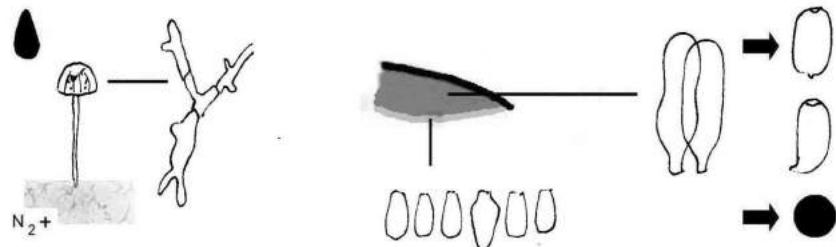


*Coprinopsis myceliocephala* (M. LANGE) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus myceliocephalus* M. LANGE)

9 (7) Spores up to ca. 9 µm long.

Small. Sp. 5-8,7 x 3,5-6,5 µm. Ch. 37,5-100 x 15-52 µm. Pl. 57,5-135 x 20,5-48 µm. V. thinwalled. Clamps unclear.



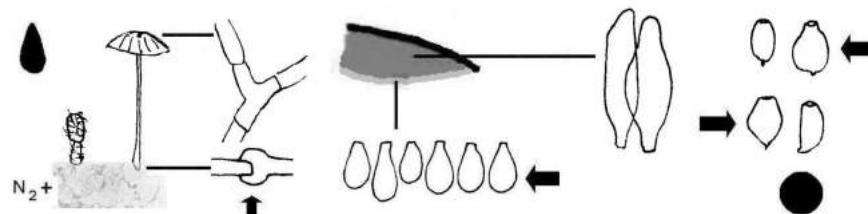
*Coprinopsis filamentifera* (KÜHNER) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus filamentifer* KÜHNER)

9\* Spores longer.

10 (9) Cheilocystidia only globose.

Small. Sp. 9-13 x 6-10 µm. Ch. 30-65 x 25-50 µm. Pl. 80-110 x 20-40 µm. V. thinwalled. Clamps in the mycelium multiple. Dromedary dung, Algeria.



*Coprinopsis verticillata* (SCHULZ-WEDD.) REDHEAD, VILGALYS & MONCALVO

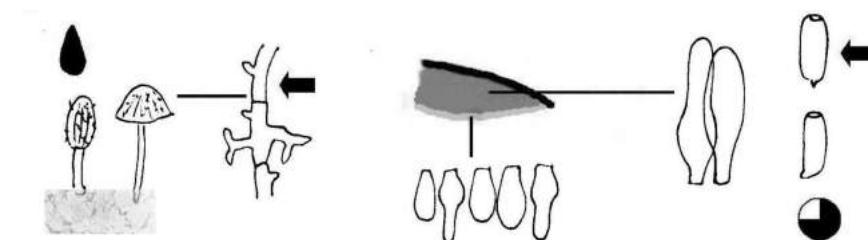
(Syn.: *Coprinus verticillatus* SCHULZ-WEDD.)

10

10\* Cheilocystidia globose and utriform.

11 (10) Veil cells always thin-walled.

Tiny. Sp. 9-14,7 x 5-8,7 µm. Ch. 30-100 x 15-40 µm. Pl. 90-125 x 20-40 µm. V. thinwalled.



*Coprinopsis xenobia* (P. D. ORTON) REDHEAD, VILGALYS & MONCALVO

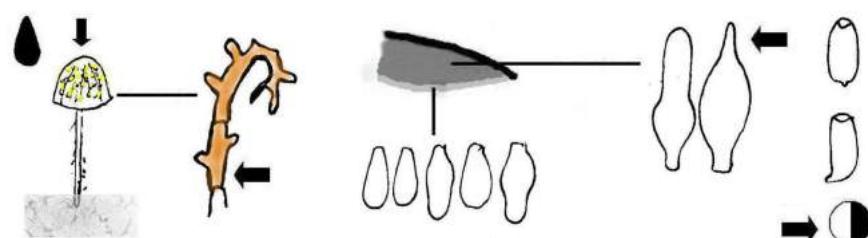
(Syn.: *Coprinus xenobius* P. D. ORTON)

11

11\* Veil cells partly thick-walled.

12 (11) Veil yellowish, pleurocystidia up to 175 µm long.

Small to medium-sized. Sp. 8,5-12,5 x 4,5-7,5 µm. Ch. 35-100 x 25-50 µm. Pl. 75-175 x 25-50 µm. V. thin- to slightly thickwalled.



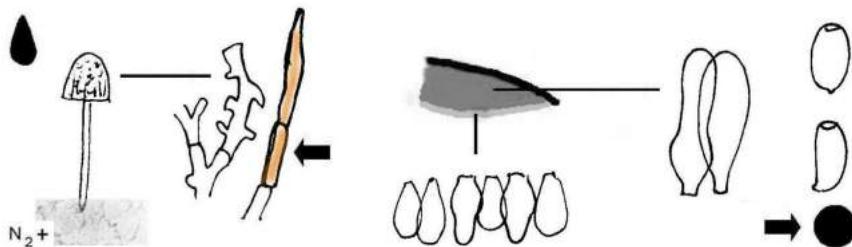
*Coprinopsis luteocephala* (WATLING) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus luteocephalus* WATLING)

12

12\* Veil whitish, pleurocystidia up to 90 µm long.

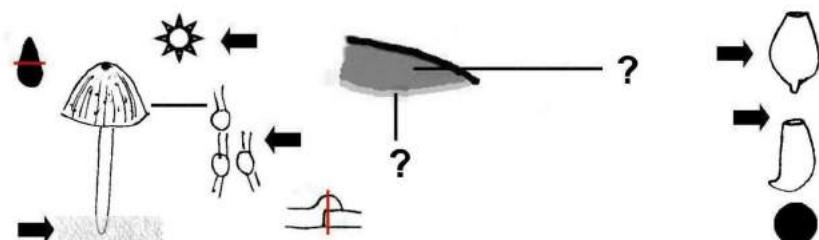
Small. Sp. 9,3-13,6 x 6,8-9,3 µm. Ch. 35-60 x 20-35,5 µm. Pl. 35-90 x 25-37,5 µm. V. thin- and thickwalled.



*Coprinopsis vermiculifera* (JOSS. ex DENNIS) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus vermiculifer* JOSS.)

13 (1) **On sea dunes.**

Medium sized. Sp. 8,5-10,5 x (6-) 6,5-9 µm, truncat. Ch. and Pl. not noted. V. thinwalled, swollen on the septae.



*Coprinus dunarum* STOLL

13\* **Habitat otherwise.**

14

14 (13) **Spores warty.**

15

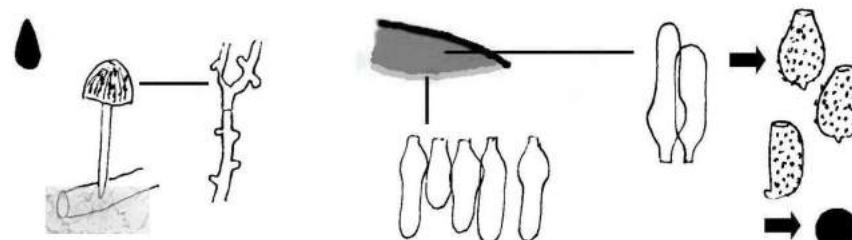
14\* **Spores smooth.**

16

15 (14) **Spores up to ca. 13 µm long, limoniform.**

14

Medium sized. Sp. 8,5-13 x 5-8,2 µm. Ch. 25-100 x 8-55 µm. Pl. 60-150 x 20-80 µm. V. thinwalled.

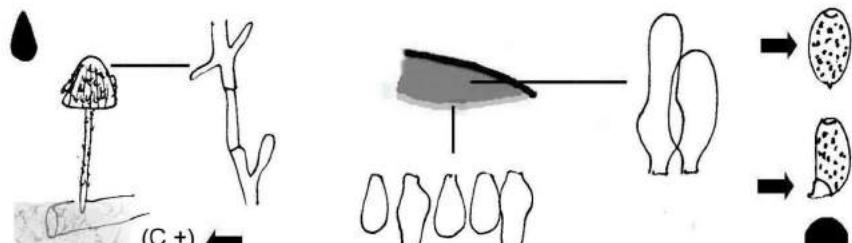


*Coprinopsis echinospora* (BULLER EX BULLER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus echinosporus* BULLER, *Coprinus giganteoporus* HUIJSMAN)

15\* **Spores up to ca. 11 µm long, broadly ellipsoid.**

14

Small to medium-sized. Sp. (6-) 8-11,2 x 5,4-8,2 µm. Ch. 30-110 x 15-45 µm. Pl. 31-120 x 18,5-55 µm. V. thinwalled.



*Coprinopsis phlyctidospora* (ROMAGN.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus phlyctidosporus* ROMAGN., *Coprinus lagopides* P. KARST.,  
*Coprinopsis lagopides* (P. KARST.) REDHEAD, VILGALYS & MONCALVO)

16 (14) **Spores often frontally rounded-angular or triangular.**

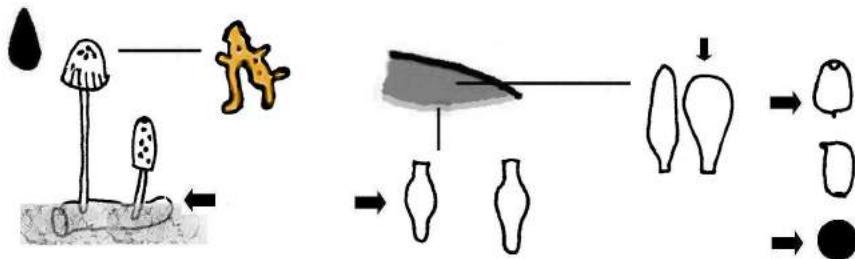
17

16\* **Spores predominantly otherwise but sometimes submittiform.**

19

17 (16) **Veil strongly diverciculate.**

Medium sized. Sp. 8-9,5 x 7-9 x 5,5-7 µm. Ch. up to bis 18-30 µm wide. Pl. 35-75 (-100) x 25-55 µm. Wood debris. Spain.

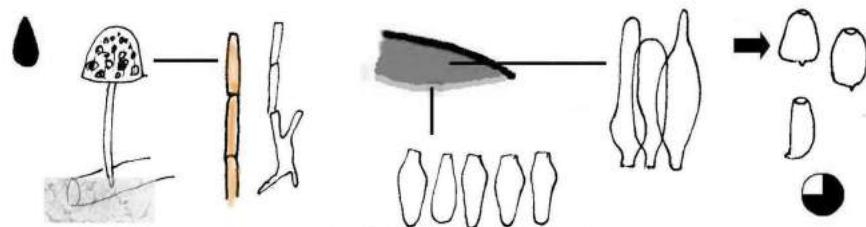


*Coprinopsis phaeopunctata* (ESTEVE-RAV. & A. ORTEGA) VALADE  
(Syn.: *Coprinus phaeopunctatus* ESTEVE-RAV. & A. ORTEGA)

17\* Veil otherwise. 18

18 (16) Spores 6,5-11,5 x 6-11 µm.

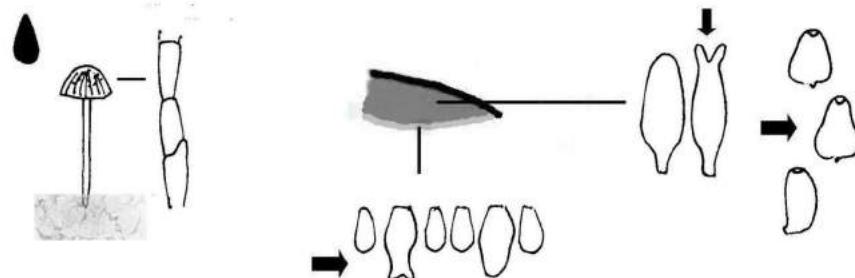
Medium sized. Ch. 30-120 x 10-45 µm. Pl. 45-140 x 15-40 µm. V. thin- to slightly thickwalled.



*Coprinopsis episcopalis* (P. D. ORTON) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus episcopalis* P. D. ORTON)

18\* Spores 7-9 x 6-7,6 µm.

Small. Ch. like the Pl. Pl. 79-94 x 31-37 µm. Veil structure uncertain.



*Coprinopsis maysoidispora* (REDHEAD & TRAQUAIR) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus maysoidisporus* REDHEAD & TRAQUAIR)

19 (16) Spores frontally subglobose. 20

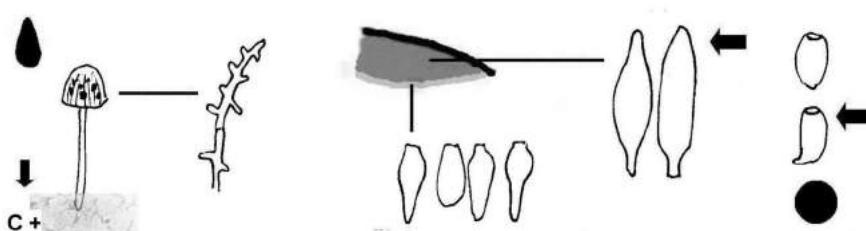
19\* Spores frontally ellipsoid, ovoid, submitriform.

20 (19) Spores laterally strongly flattened.

20\* Spores laterally not or only slightly flattened.

21 (20) Especially on fire places, spores very dark.

Medium sized. Sp. 6-9,5 x 5-8,5 µm. Ch. 40-85 x 18-50 µm. Pl. 50-120 x 20-40 µm. V. thinwalled.



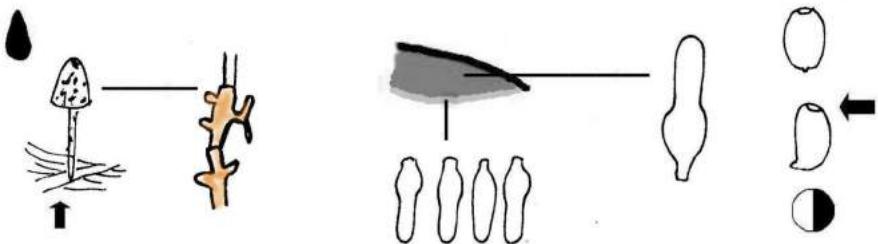
*Coprinopsis gonophylla* (QUEL.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus gonophyllus* QUÉL.)

21\* Habitat otherwise, spores brighter. 22

22 (21) On dead plant debris, germ pore excentrical.

Medium sized. Sp. (5,5-) 6,5-9,5 x (4,5-) 6,5-8 µm. Ch. 30-120 x 10-30 µm. Pl. 50-150 x 10-30

$\mu\text{m}$ . V. thin- and thickwalled.



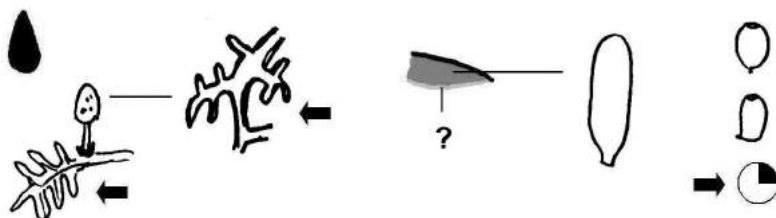
*Coprinopsis phaeospora* (P. KARST.) P. KARST.

(Syn.: *Coprinus phaeosporus* P. KARST., *Coprinus saichiae* D. A. REID)

22\*

On fern remnants, germ pore central.

Small. Sp. 5,5-6,3 x 4,5-5,3 x 3-4,2  $\mu\text{m}$ . Ch. unknown. Pl. 10-15  $\mu\text{m}$  broad. V. diverticulate, thickwalled.



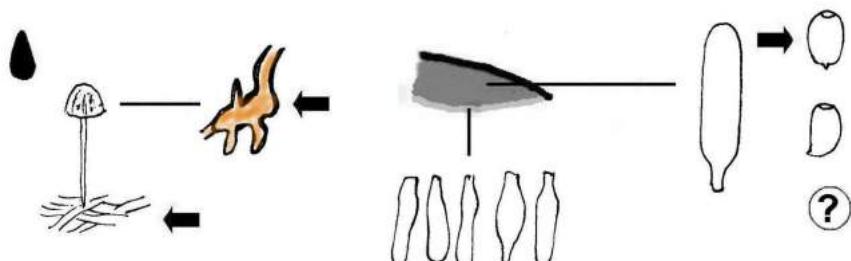
*Coprinopsis burkii* (A. H. SM.) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus burkii* A. H. SM.)

23

(20) Spores up to 7  $\mu\text{m}$  long.

Tiny to small. Sp. 4,7-6,7 x 4,8-6,6  $\mu\text{m}$ . Ch. 45-100 x 14-23  $\mu\text{m}$ . Pl. 60-1165 x 14-26  $\mu\text{m}$ . V. thickwalled.



*Coprinopsis herinkii* (PILÁT & SVRČEK) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus herinkii* PILÁT & SVRČEK)

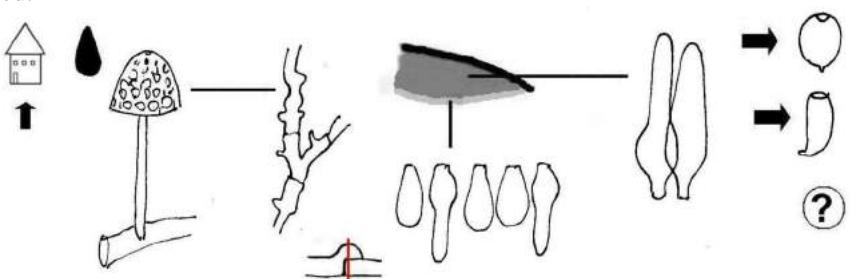
23\*

Spores longer.

24

(23) Spores up to 15  $\mu\text{m}$  long.

Medium sized. Sp. 8,5-15 x 7-14  $\mu\text{m}$ . Ch. 50-120 x 20-45  $\mu\text{m}$ . Pl. 60-200 x 20-50  $\mu\text{m}$ . V. thinwalled.



*Coprinopsis kimurae* (HONGO & AOKI) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus kimurae* HONGO & AOKI)

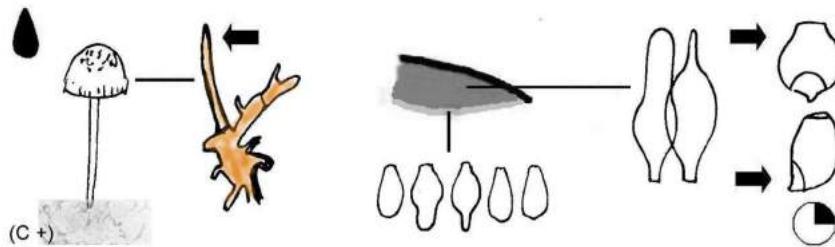
24\*

Spores shorter.

25

(24) Spores relatively pale, around the apiculus even brighter.

Medium sized. Sp. 7,2-10 x (5,6-) 7-9,5  $\mu\text{m}$ . Ch. up to 90  $\mu\text{m}$  long. Pl. 80-200 x 25-60  $\mu\text{m}$ . V. thin- and thickwalled, terminal cells long.

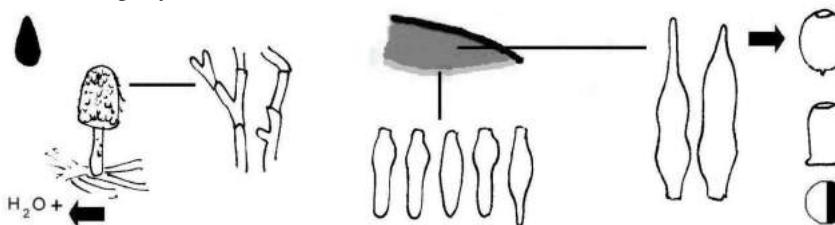


*Coprinopsis spilospora* (ROMAGN.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus spilosporus* ROMAGN.)

25\* Spores otherwise. 26

26 (25) On plant debris, wet places.

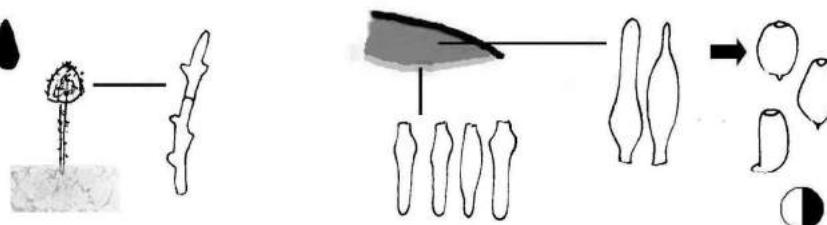
Small. Sp. 7-11,5 x 5-8 (-10,5) µm. Ch. 35-80 (-120) x 11-20 (-30) µm. Pl. 55-200 x 12-22 (-30) µm. V. thin- to slightly thickwalled.



*Coprinopsis kubickae* (PILÁT & SVRČEK) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus kubickae* PILÁT & SVRČEK, *Coprinus amphibius* ANASTASIOU)

26\* Terrestrial.

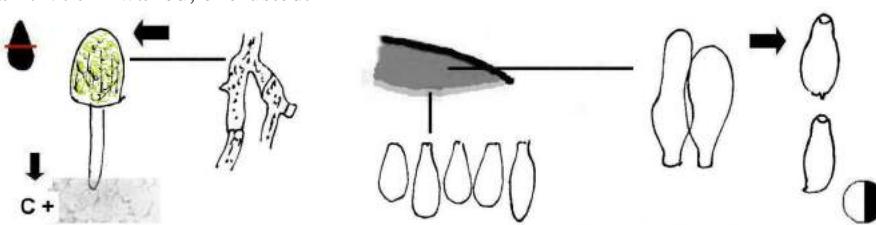
Tiny to small. Sp. 7-10,2 x 6,7-9 µm. Ch. 45-100 x 15-30 µm. Pl. 60-105 x 12-24 µm. V. thinwalled.



*Coprinopsis epichloea* (ULJÉ & NOORDEL.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus epichloes* ULJÉ & NOORDEL.)

27 (19) Basidia 2-spored, at fire places.

Small. Veil yellowish-greenish. Sp. 11,9-16,5 x 7,7-11,5 µm. Ch. 40-85 x 20-45 µm. Pl. 55-90 x 22-40 µm. V. thinwalled, encrusted.



*Coprinopsis piepenbroekorum* (ULJÉ & BAS) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus piepenbroekorum* ULJÉ & BAS)

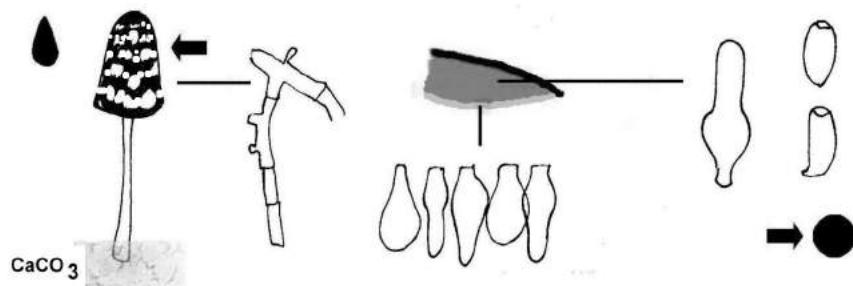
27\* Basidia 4-spored, habitat otherwise.

28 (27) Spores up to 13-20 µm long.

Large. Sp. 13-20 x 9,5-13 µm. Ch. 80-150 x 24-50 µm. Pl. 100-200 x 28-60 µm. V. thinwalled.  
On calcereous soil.

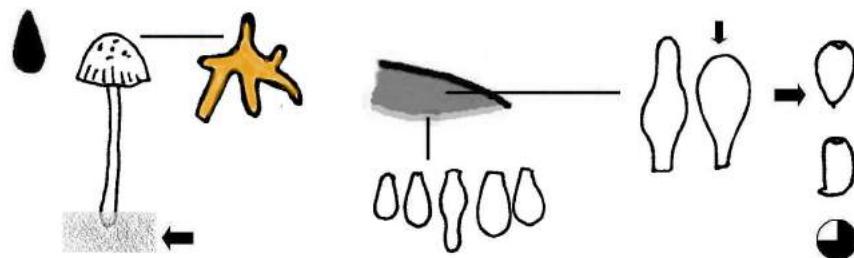
26

28



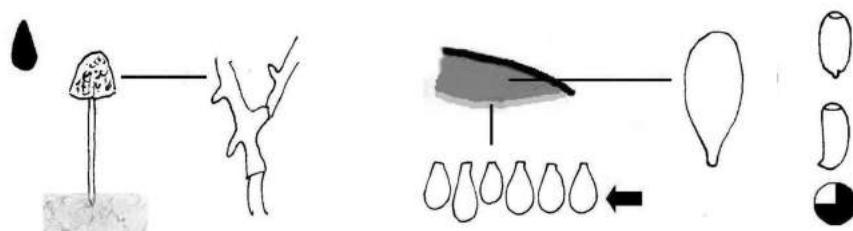
*Coprinopsis picacea* (BULL.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus picaceus* (BULL.) GRAY)

- |     |   |    |
|-----|---|----|
| 28* | Spores shorter.   | 29 |
| 29  | (28) Spores significantly above 10 µm long.   | 30 |
| 29* | Spores hardly longer than 10 µm.  | 32 |
| 30  | (29) Veil thickwalled and brownish pigmented.<br>Medium sized. Sp. 9,5-11,7 x 7-9 µm, Ch. up to 35 x 20 µm. Pl. 35-110 x 25-35 µm. Sandy soil. Spain. |    |



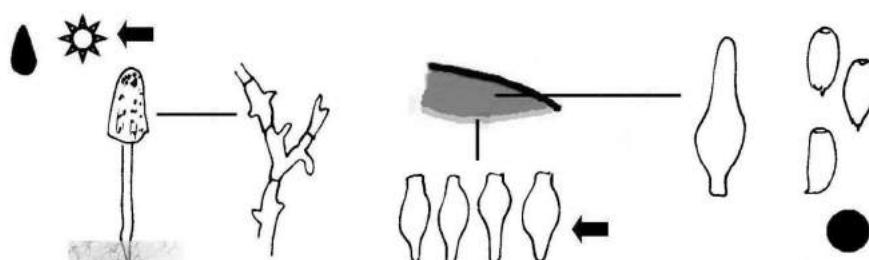
*Coprinopsis alcobae* (A. ORTEGA) VALADE  
(Syn.: *Coprinus alcobae* A. ORTEGA)

- |     |   |    |
|-----|---|----|
| 30* | Veil thinwalled and colourless.   | 31 |
| 31  | (30) Cheilocystidia globose.<br>Small. Sp. 13,7-15 x 7,2-7,8 µm. Ch. 48-77,5 x 22,5-40 µm. Pl. 63-75,5 x 30-40 µm. V. thinwalled. |    |



*Coprinopsis sylvicola* (BOGART EX BOGART) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus sylvicola* BOGART)

- |     |  |  |
|-----|--|--|
| 31* | Cheilocystidia lageniform.<br>Large. Sp. 9-12,5 x 6-9 µm. Ch. 40-155 x 18-45 µm. Pl. 75-165 x 20-70 µm. V. thinwalled. |  |
|-----|--|--|



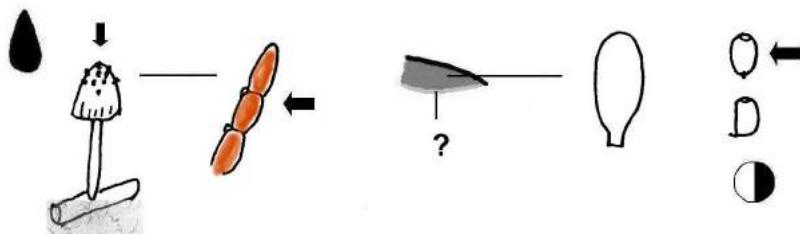
*Coprinopsis stangliana* (ENDERLE, BENDER & GRÖGER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus stanglianus* ENDERLE, BENDER & GRÖGER)

- |     |                              |    |
|-----|------------------------------|----|
| 32  | (29) Spores up to 6 µm long. | 33 |
| 32* | Spores longer.               | 34 |

33

## (32) Spores ellipsoid.

Small to medium sized. Sp. 5,2-5,5 x 3,3-4,8 µm. Ch. unknown. Pl. 47-85 x 12-33 µm. V. slightly thickened and bownish. Sri Lanka, Uganda.

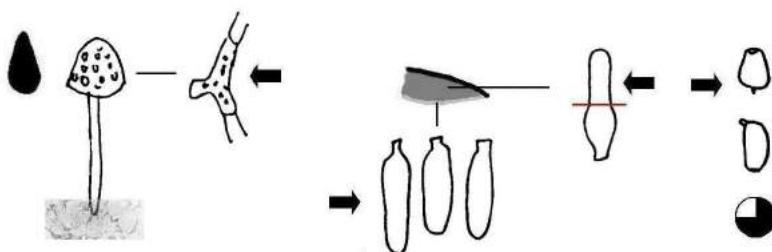


*Coprinopsis fibrillosa* (BERK. & BROOME) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus fibrillosus* BERK. & BROOME)

33\*

## Spores subtriangular.

Medium sized to large. Sp. 5-6 x 3,5-4,5 µm. Ch. 100-160 x 20-30 µm. Pl. absent (or overlooked?). V. hyaline, sometimes encrusted. Martinique, Trinitad.

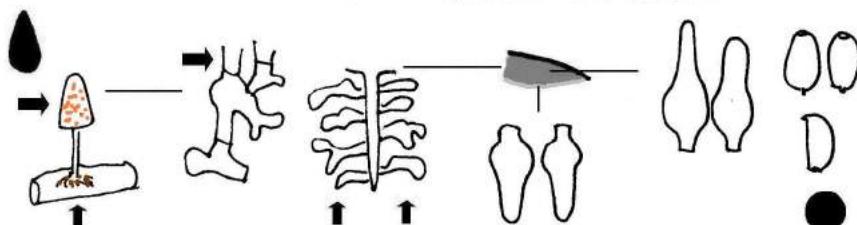


*Coprinopsis caribaea* (PEGLER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus caribaeus* PEGLER)

34

## (32) Lamellae with irregular outgrowths.

Small. St. base with white, brown spotted mycelium and rhizomorphs. Sp. 7,6-9,4 x 5,7-6,7 µm. Ch. similar the pl., shorter. Pl. 48,5-107,5 x 15,5-33 µm. Sri Lanka.



*Coprinopsis clastophylla* (MANIOTIS) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus clastophyllus* MANIOTIS, *Racophyllum lilacinus* BERK. & BROOME)

34\*

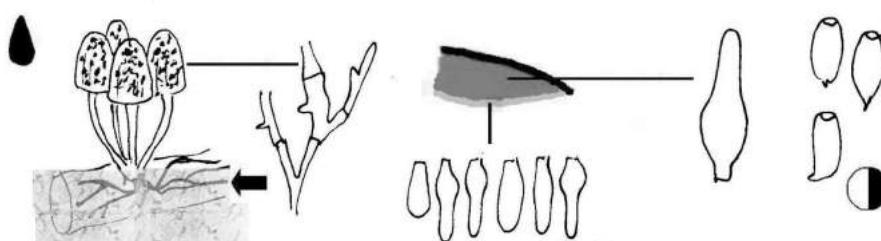
## Otherwise.

35

35

## (34) Stipe with long rhizomorphs.

Large. Sp. 6-9,5 x 4-6 µm. Ch. 40-170 x 15-40 µm. Pl. 65-180 x 18-50 µm. V. thinwalled.



*Coprinopsis strossmayeri* (SCHULZER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus strossmayeri* SCHULZER, *Coprinus rhizophorus* A. KAWAM.,  
*Coprinus populicola* MORNAND)

35\*

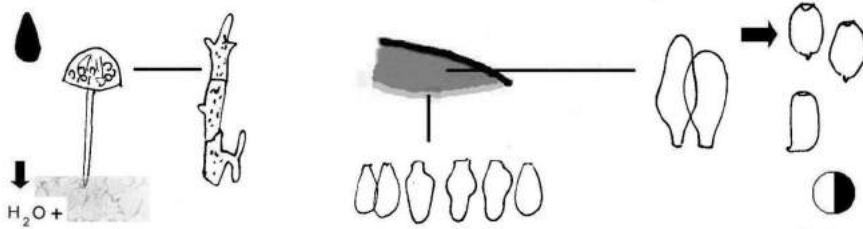
## Stipe without long rhizomorphs.

36

36

## (35) On muddy ground.

Small. Sp. 6,9-10,6 x 5,3-7,8 µm. Ch. 30-55 x 17-32 µm. Pl. 33-58 x 19-44 µm. V. thinwalled, encrusted.



***Coprinopsis fluvialis* (LANCONELLI & ULJÉ) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus fluvialis* LANCON. & ULJÉ)

36\*

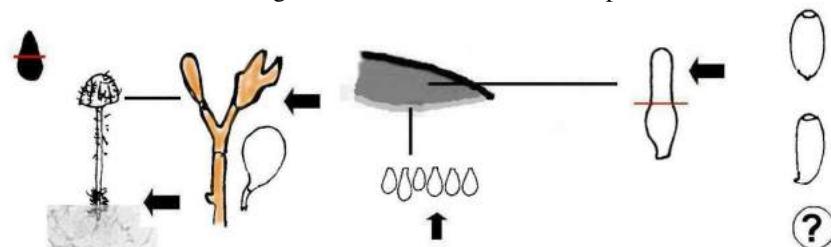
Habitat otherwise.

37

(36) Pleuro- and true cheilocystidia absent.

Tiny to small. Sp. 9-10,5 x 5-6 µm. Ch. only small sphaeropedunculate cells, up to 15 µm broad. V. thickwalled, often encrusted; globose, thickwalled cells also present.

37



***Coprinus filiformis* BERK. & BROOME**

37\*

Pleuro- and cheilocystidia present.

38

38

(37) Veil cells thinwalled.

39

38\*

Veil cells thickwalled.

43

39

(38) Cheilocystidia only globose or ellipsoid.

40

39\*

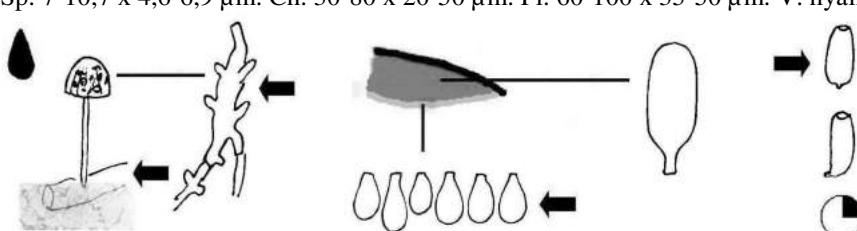
Cheilocystidia also utriform or lageniform.

41

40

(39) Spores up to 7 µm long.

Small. Sp. 7-10,7 x 4,6-6,9 µm. Ch. 30-80 x 20-50 µm. Pl. 60-100 x 35-50 µm. V. hyaline.

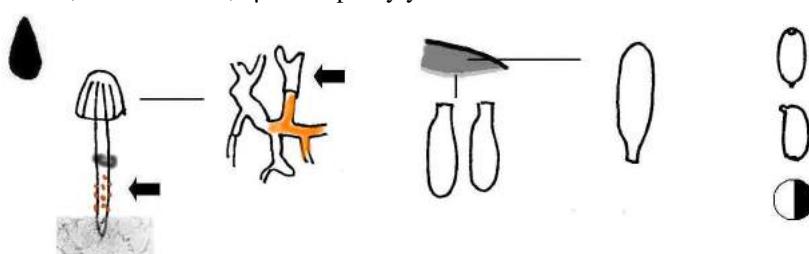


***Coprinopsis goudensis* (ULJÉ) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus goudensis* ULJÉ)

40\*

Spores up to 9 µm long.

Medium sized. Stipe sometimes with an annular zone. Sp. 5,6-8,8 x 4,2-5 µm. Ch. 80-125 x 15-30 µm. Pl. 82,5-144 x 20-36,5 µm. V. partly yellowish brown.

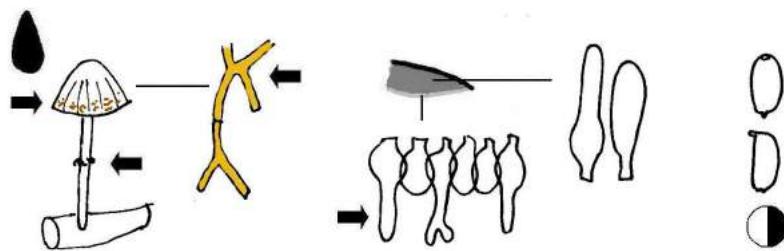


***Coprinopsis striata* (BOGART) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus striata* BOGART, *Coprinopsis pinguispora* (BOGART) REDHEAD, VILGALYS & MONCALVO, *Coprinus pinguisporus* BOGART)

41

(39) Veil branched but not diverticulate.

Medium sized. Sp. 7,5-9 x 4,5-5,4 µm. Ch. 77-110 x 14-38 µm. Pl. 122-165 x 34-46 µm. V. yellowish brown.



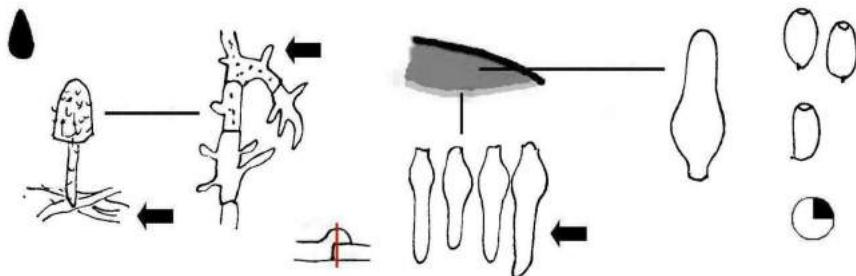
*Coprinopsis depressiceps* (BOGART) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus depressiceps* BOGART)

41\* Veil branched and diverticulate.

42

42\* (41) Spores shorter than 10 µm.

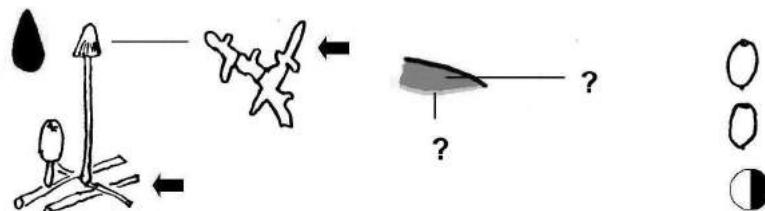
Small. Sp. 5,3-9 x 4,3-6,7 µm. Ch. 30-65 x 10-15 µm. Pl. 40-70 x 10-15 µm. V. hyaline, sometimes encrusted, very diverticulat.



*Coprinopsis urticicola* (BERK. & BROOME) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus urticicola* (BERK. & BROOME) BULLER, *Coprinus brassicae* PECK,  
*Coprinus melo* J. FAVRE, *Coprinus suburticicola* PILÁT & SVRČEK,  
*Coprinopsis paleotropica* (REDHEAD & PEGLER) REDHEAD, VILGALYS & MONCALVO,  
*Coprinus paleotropicus* REDHEAD & TRAQUAIR)

42\* Spores longer than 10 µm.

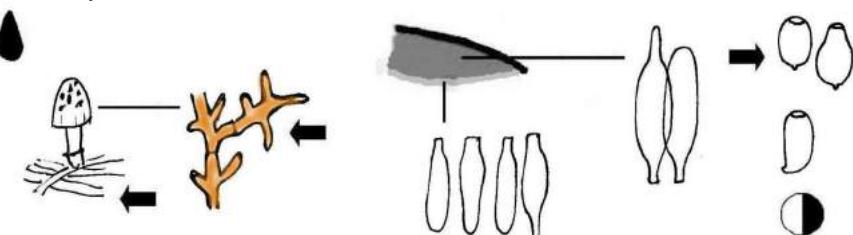
Small. Similar *Coprinopsis friesii*. Spores 11,8 (-13) x 8-9 x 7,2-8 µm. Dead grass, Venezuela.



*Coprinopsis austrofriesii* (REDHEAD & PEGLER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus austrofriesii* REDHEAD & PEGLER)

43 (38) Spores up to 8 µm long.

Small. Sp. (5-) 7-8 x 4,5-5,5 (-6) µm. Ch. 40-120 x 20-40 µm. Pl. 80-80 x 25-60 µm. V. thickwalled, very diverticulat.



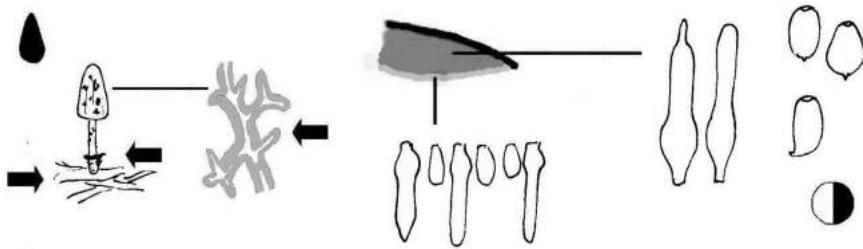
*Coprinopsis xantholepis* (P. D. ORTON) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus xantholepis* P. D. ORTON)

43\* Spores longer.

44

44 (43) Veil cells very pale brownish or colourless.

Small. Stipe often with a volva-like zone. Sp. 5-9,5 (-11) x (5,5-) 6,2-8 (-8,5) µm. Ch. 55-110 x 8-16,5 µm. Pl. 80-130 x 14-22 µm. V. thickwalled but pale, very diverticulat.



*Coprinopsis friesii* (QUÉL.) P. KARST.

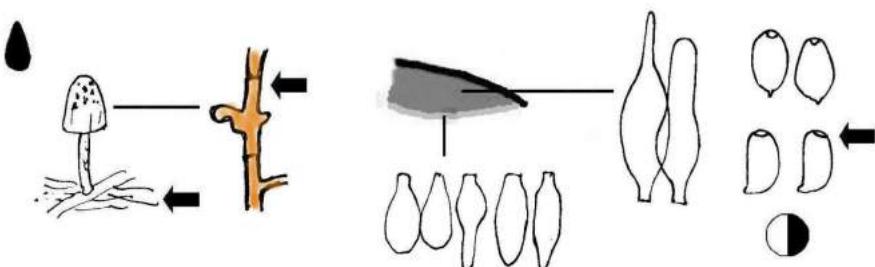
(Syn.: *Coprinus friesii* QUEL., *Coprinus rhombisporus* P. D. ORTON)

44\* Veil cells distinctly yellowish to brown.

45

(44) **Herbicul (graminicul).**

Small. Sp. 5,3-10,5 x 4-8,3 µm. Ch. 20-100 x 15-32 µm. Pl. 50-120 x 16-30 µm. V. thickwalled, very diverticulat.



*Coprinopsis tigrinella* (BOUD.) REDHEAD, VILGALYS & MONCALVO

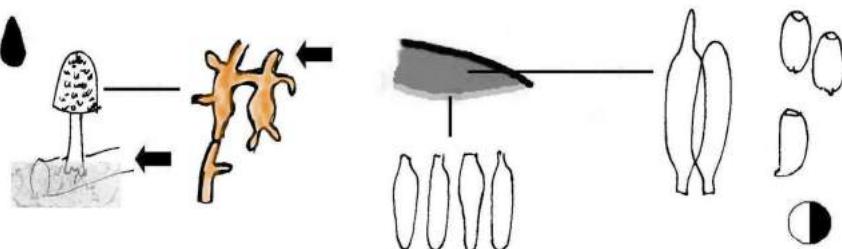
(Syn.: *Coprinus tigrinellus* BOUD., *Coprinus subtigrinellus* DENNIS)

45\* **Lignicol.**

46

(45) **Veil cells strongly diverticulat.**

Small. Sp. 6-10,2 x 4,5-8 µm. Ch. 30-80 x 7-22 µm. Pl. 60-120 x 10-27 µm. V. thickwalled, very diverticulat.

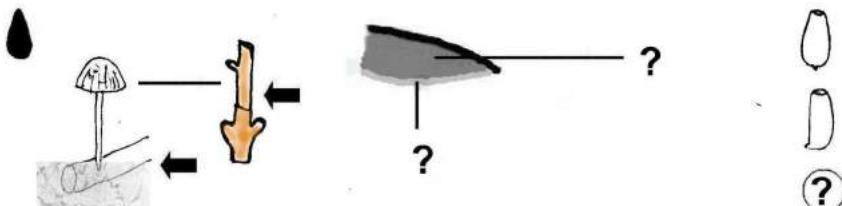


*Coprinopsis pseudofriesii* (PILÁT & SVRČEK) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus pseudofriesii* PILÁT & SVRČEK)

46\* **Veil cells slightly diverticulat.**

Medium-sized. Sp. 9-11 x 5-6 µm. Ch. and Pl. not noted. V. thin- to thickwalled. Jamaica.

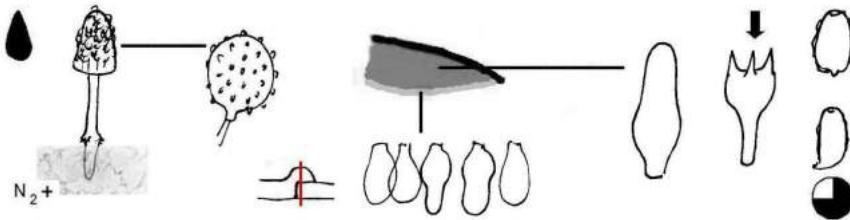


*Coprinopsis cinchonensis* (MURRILL) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus cinchonensis* MURRILL)

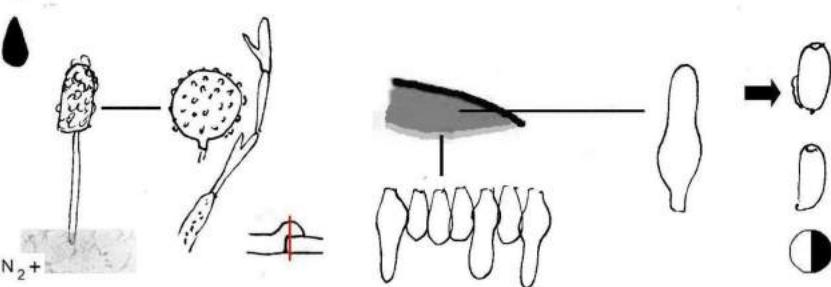
## Part 3.2.

- |   |                   |
|---|-------------------|
| <p>1      <b>Mostly on dung or dung-straw mixture.</b></p> <p>1*     <b>Habitat otherwise, only exceptionally on dung.</b></p> <p>2      (1) <b>Basidia predominantly 3-spored.</b></p> | <p>2</p> <p>7</p> |
|---|-------------------|
- Small to medium-sized. With unpleasant odor. Sp. 6,5-10,5 (-11,5) x (4,5-) 6-7 µm. Ch. 30-70 x 15-45 µm. Pl. 50-100 x 22-50 µm.



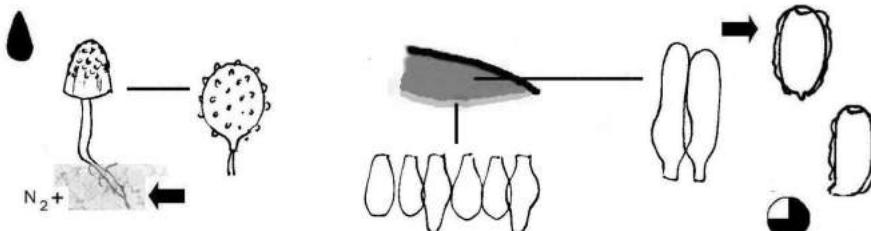
***Coprinopsis trispora* (KEMP & WATLING) REDHEAD, VILGALYS & MONCALVO**  
 (Syn.: *Coprinus trisporus* KEMP & WATLING, *Coprinus triplex* P. D. ORTON,  
*Coprinopsis triplex* (P. D. ORTON) P. ROUX & GUY GARCIA)

- 2\* **Basidia predominantly 4-spored.**
- 3 (2) **Spores up to 8 µm long.**  
 Small. Sp. 6-8,7 x (3-) 4,5-5 µm, perispore very indistinct. Ch. 24,5-62 x 10-24,5 µm. Pl. (22-) 35,5-50 (-65) x (12,3-) 15-22 µm.



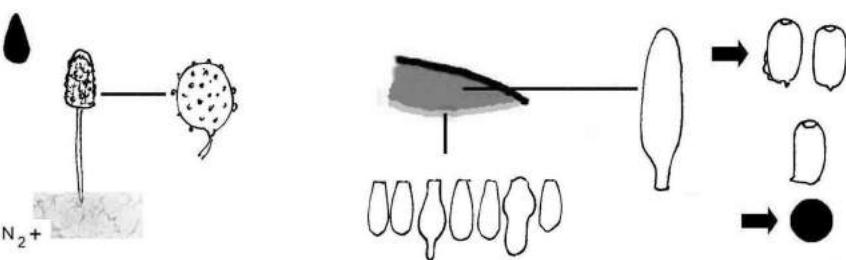
***Coprinopsis stercorea* (FR.) REDHEAD, VILGALYS & MONCALVO**  
 (Syn.: *Coprinus stercoreus* FR. *Coprinus stercorarius* FR.)

- 3\* **Spores longer.**
- 4 (3) **Spores up to ca. 17 µm long.**  
 Medium-sized. With unpleasant odor. Stipe with pseudorhiza. Sp. 11,5-17,5 x 5,5-10,5 µm. Ch. 40-100 x 25-35 µm. Pl. 40-130 x 25-35 µm.



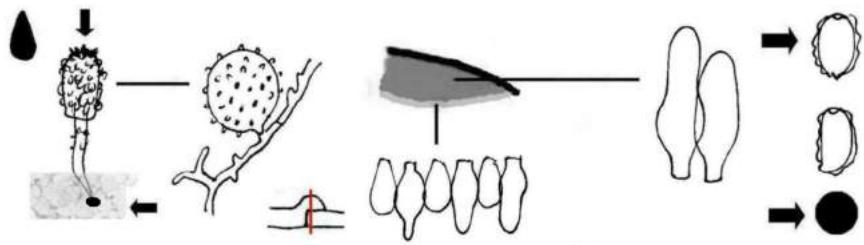
***Coprinopsis radicans* (ROMAGN.) REDHEAD, VILGALYS & MONCALVO**  
 (Syn.: *Coprinus radicans* ROMAGN.)

- 4\* **Spores up to ca. 10 µm long.**
- 5 (4) **Odor narcotic, perispore indistinct.**  
 Small. Sp. (7,5-) 8,7-10,5 (-11) x (4,5-) 5,5-7 µm. Ch. 25-70 x 15-30 µm. Pl. 60-110 x 17,7-30 µm.



***Coprinopsis foetidella* (P. D. ORTON) A. RUIZ & G. MUÑOS**  
 (Syn.: *Coprinus foetidellus* P. D. ORTON)

- 5\* **Odor otherwise, perispore distinct, with a sclerotium.**
- 6 (5) **Sclerotium indistinct, clamps absent.**  
 Small. Sclerotium small, inconspicuous, deep in the substrate. Veil strongly developed, often dark brown on the top of the pileus. Sp. 8-10 (-11,5) x 5-6,5 µm. Ch. 16-50 (-70) x 8-45 µm. Pl. 33-130 x 16,5-40 µm.

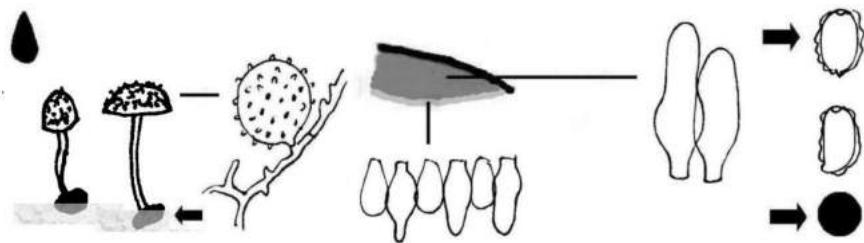


*Coprinopsis tuberosa* (QUÉL.) DOVERI, GRANITO & LUNGHINI  
(Syn.: *Coprinus tuberosus* QUÉL.)

6\*

**Sclerotium distinct, clamps present.**

Small to medium sized. Sclerotium conspicuous, usually above the substrate. Veil strongly developed, often ochraceous on the top of the pileus. Sp. 9-11,5 x 5-6,5 µm. Ch 22-80 x 12-45. Pl. 55-120 x 12-40 µm.



7

(1) **Basidia predominantly 2-spored.**

8

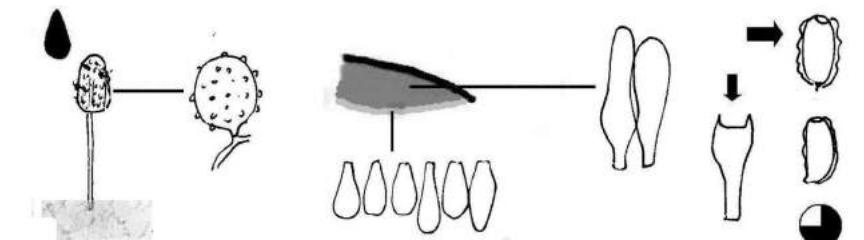
**Basidia predominantly 4-spored.**

9

7\*

(7) **Spores up to ca. 15 µm long.**

Small to medium-sized. Sp. 11-15 x 5,5-7,5 µm. Ch. 40-145 x 20-55 µm. Pl. 40-175 x 20-55 µm.

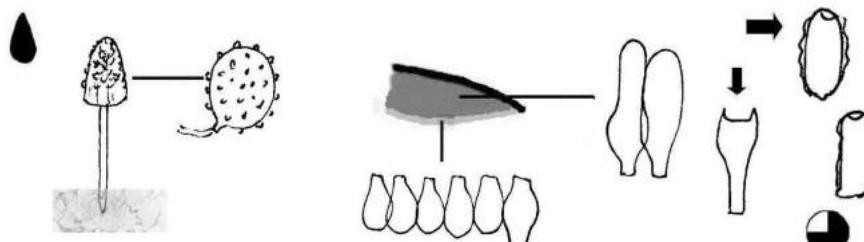


*Coprinopsis cinereofloccosa* (P. D. ORTON) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus cinereofloccosus* P. D. ORTON)

8\*

**Spores up to ca. 20 µm long.**

Small to medium-sized. Sp. 14-20 x 7,5-10,2 µm. Ch. 42-90 x 14-44 µm. Pl. 64-105 x 15-40 µm.

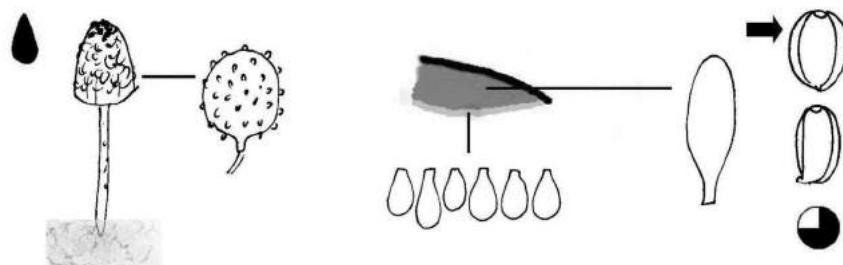


*Coprinopsis saccharomyces* (P. D. ORTON) P. ROUX & GUY GARCIA  
(Syn.: *Coprinus saccharomyces* P. D. ORTON)

9

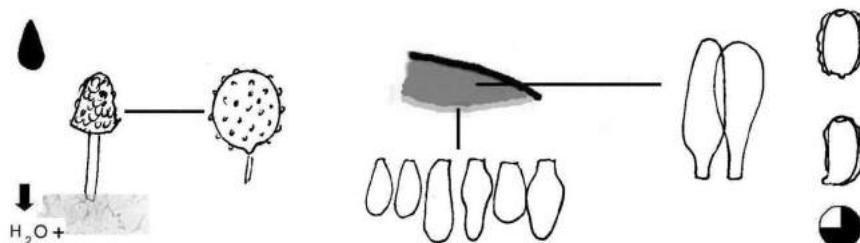
(7) **Perispore smooth.**

Medium-sized to large. Sp. 10-14 x 5-8,5 µm. Ch. 20-110 x 15-52 µm. Pl. 40-140 x 15-40 µm.



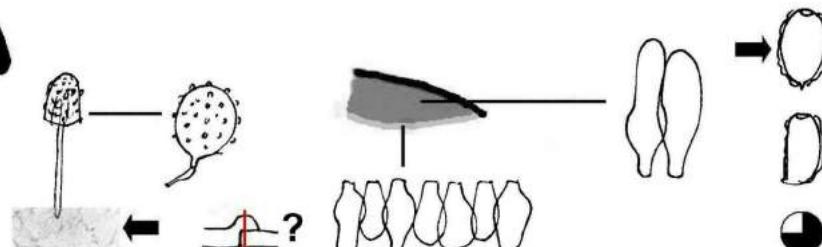
***Coprinopsis semitalis* (P. D. ORTON) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus semitalis* P. D. ORTON)

- 9\*      **Perispore wrinkled.**
- 10      (9)      **Spores up to ca. 17 µm long.**  
Small to medium-sized. Sp. 11-17 x 6,5-9,6 µm. Ch. 30-40 x 14-20 µm. Pl. (25-) 35-120 (-240) x 10-20 µm. Wet places.
- 10



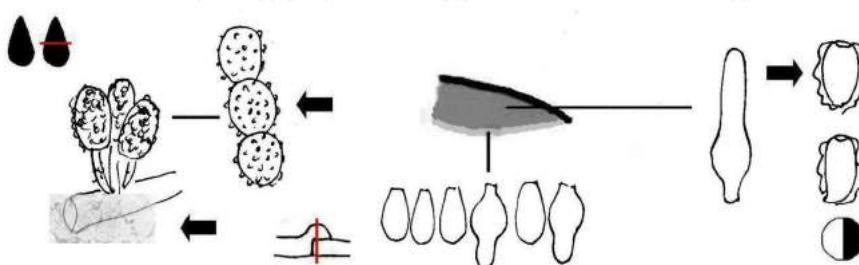
***Coprinopsis martinii* (P.D. ORTON) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus martinii* J. FAVRE, *Coprinus martinii* P. D. ORTON)

- 10\*      **Spores shorter.**
- 11      (10)      **Terrestrial, odor narcotic.**  
Medium-sized. Sp. (8,7-) 10-12,5 x 5,5-7,5 µm. Ch. 55-100 x 30-42 µm. Pl. 55-100 x 30-42 µm.
- 11



***Coprinopsis narcotica* (BATSCH: FR.) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus narcoticus* (BATSCH: FR.) FR.)

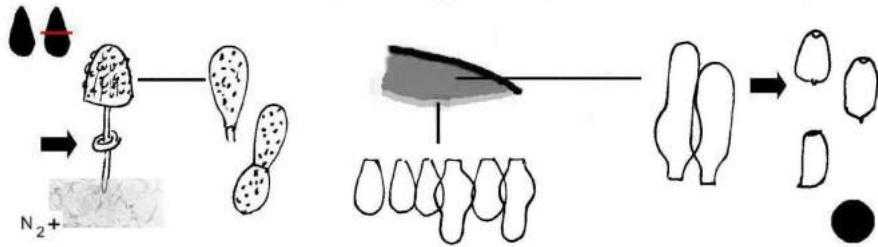
- 11\*      **Lignicol, odor otherwise.**  
Small to medium-sized. Sp. (7,5-) 9,5-13 x (4,5-) 6,5-8 µm, perispore very large. Ch. 25-60 x 15-25 µm. Pl. 70-110 x 30-40 µm.



***Coprinopsis laanii* (KITS VAN WAV.) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus laanii* KITS VAN WAV.)

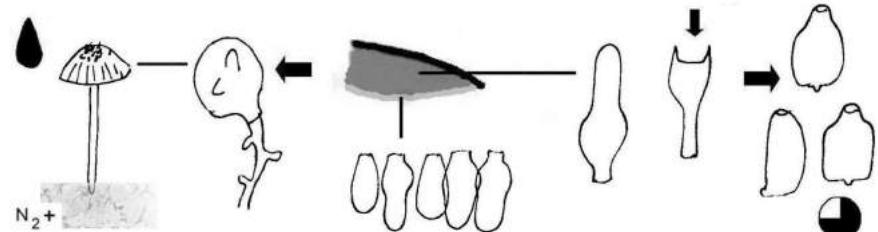
### Part 3.3.

- 1      **Stipe with an annulus.**  
Small. Sp. 7-9,5 (-10,5) x 6,5-8,5 (-9) x 5-6,5 (-7) µm. Ch. 20-60 x 25-40 µm. Pl. 30-60 x 20-35 µm. V. globose to subglobose, often encrusted, colorless cells. Dung, fertilized soil.



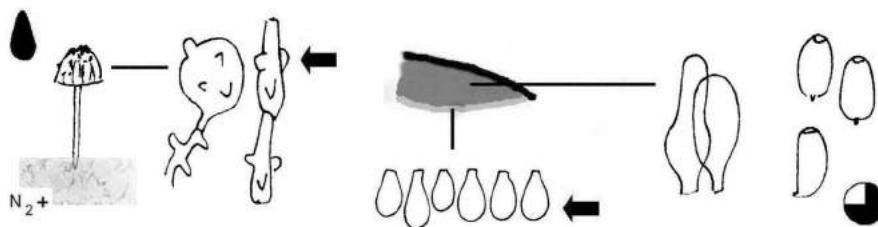
***Coprinopsis ephemerooides* (DC.) WATLING & M. J. RICHARDSON**  
(Syn.: *Coprinus ephemerooides* (BULL.: FR.) FR., *Coprinus bulbillosus* PAT.)

- |    |   |    |
|----|---|----|
| 1* | <b>Stipe without an annulus.</b>  | 2  |
| 2  | (1) <b>Predominantly on manure or dung-straw mixture.</b>   | 3  |
| 2* | <b>Habitat otherwise.</b>   | 13 |
| 3  | (2) <b>Basidia 2-spored.</b><br>Large. Sp. 13,5-17 x 12,5-15,5 µm. Ch. 30-90 x 20-50 µm. Pl. 80-200 x 30-74 µm. V. globose to subglobose cells with some projections. |    |



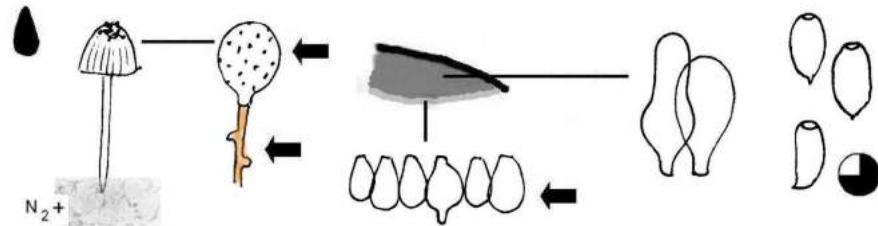
***Coprinopsis pachysperma* (P. D. ORTON) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus pachyspermus* P. D. ORTON)

- |    |  |   |
|----|--|---|
| 3* | <b>Basidia 4-spored.</b>   | 4 |
| 4  | (3) <b>Cheilocystidia only globose.</b>  | 5 |
| 4* | <b>Cheilocystidia globose and utri-/lageniform.</b>  | 7 |
| 5  | (4) <b>Spores up to 9 µm long.</b><br>Small to medium-sized. Sp. 6-9 x 4,2-5 µm. Ch. 20-50 x 15-35 µm. Pl. 30-100 x 15-35 µm. V. subglobose cells, mixed with subcylindrical cells with projections. |   |



***Coprinopsis utrifera* (JOSS. EX WATLING) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus utrifer* JOSS.)

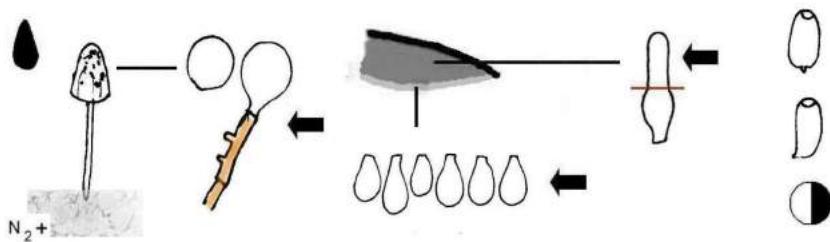
- |    |   |   |
|----|---|---|
| 5* | <b>Spores longer.</b>   | 6 |
| 6  | (5) <b>Spores up to 16 µm long.</b><br>Medium-sized. Sp. 8,5-16 x 5-9 (-12-14) µm. Ch. 14-80 x 11,5-50 µm, sometimes mucronat. Pl. 50-150 x 15-60 µm. V. globose cells, thin- to slightly thickwalled, sometimes encrusted. |   |



***Coprinopsis cothurnata* (GODEY) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus cothurnatus* GODEY)

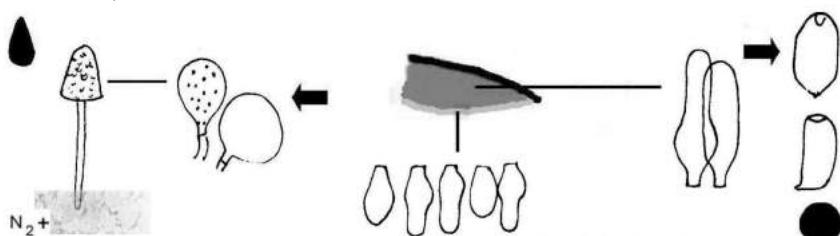
- |    |   |  |
|----|---|--|
| 6* | <b>Spores up to 13 (14,5) µm long.</b><br>Medium-sized. Sp. 11,0-13 (-14,5) x 7,4-9,2 µm. Ch. 35-50 x 15-25 µm. Pl. absent. V. globose cells and subcylindrical, slightly diverticulate, thin- to slightly thickwalled cells. |  |
|----|---|--|

Morocco.



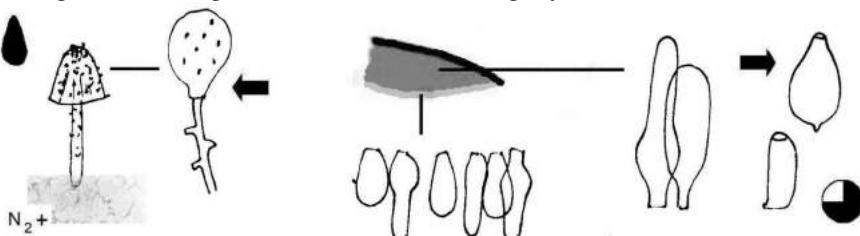
**Coprinopsis heterocoma (MALENÇON) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus heterocomus* MALENÇON)

- 7 (4) Spores up to 19 µm long.  
Small to medium-sized. Sp. 11-19 x 11-16 µm. Ch. 30-80 x 15-50 µm. Pl. 50-150 x 25-60 µm. V. globose cells, sometimes encrusted.



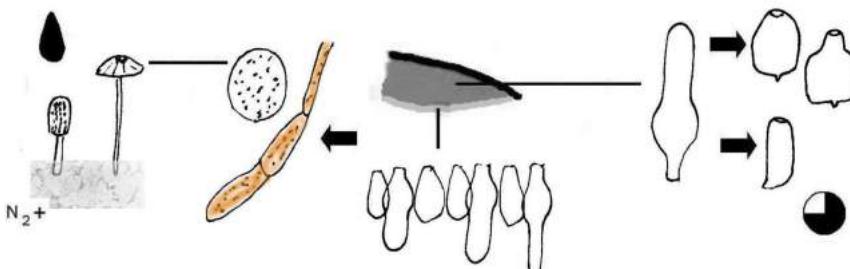
**Coprinopsis nivea (PERS.) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus niveus* (PERS.) FR., *Coprinus latisporus* P.D. ORTON)

- 7\* Spores shorter. 8  
8 (7) Spores frontally often rounded 3-5-angular, laterally strongly flattened. 9  
8\* Spores otherwise. 11  
9 (8) Spores rounded 3-angular, up to ca. 14 µm long.  
Medium-sized. Sp. 9-14 x 7,5-11,5 µm. Ch. 28-100 x 14-35 µm. Pl. (25-) 73-185 x (11,5-) 25-60 µm. V. globose to subglobose cells, sometimes slightly encrusted.



**Coprinopsis pseudonivea (BENDER & ULIJÉ) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus pseudoniveus* BENDER & ULIJÉ)

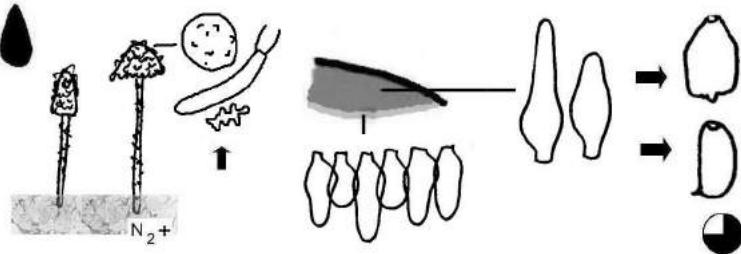
- 9\* Spores rounded 5-angular, shorter.  
10 (9) Veil dimorph, spores up to 7,5 µm broad .  
Tiny to small. Sp. (5,6-) 7,5-9,7 x (5,3-) 6,2-7,5 µm. Ch. 33-55 x 5,5-19 µm. Pl. 40-60 x 13,5-27 µm. V. globose to subglobose cells, also subcylindrical cells, sometimes slightly encrusted, colorless or pale brownish.



**Coprinopsis cordispora (T. GIBBS) WATLING & M. J. RICHARDSON**  
(Syn.: *Coprinus cordisporus* T. GIBBS, *Coprinus volvaceominimus* CROSSL., *Coprinus cardiasporus* BENDER)

- 10\* Veil trimorph, spores up to ca. 10 µm broad.  
Small. Sp. 8,7-11,5 x 7,4-9,7 x 6,3-7,4 µm. Ch. 25-90 x 20-35 µm. Pl. 65-125 x 25-40 µm. V.

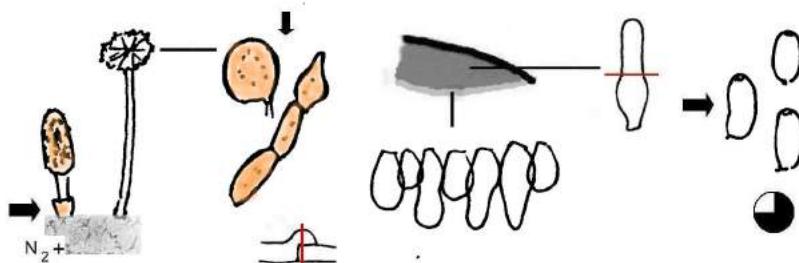
globose to subglobose cells, also subcylindrical cells and diverticulate elements. Japan.



*Coprinopsis igarashi* FUKIHARU & K. SHIMIZU

11 (8) Pleurocystidia absent.

Tiny. Sp. (4,8-) 5,3-8,3 (-9,1) x 2,7-3,8 µm. Ch. 10-65 x 10-35 µm. V. globose to subglobose cells, colorless or brownish, often encrusted; also subcylindrical cells, mostly encrusted and brownish.

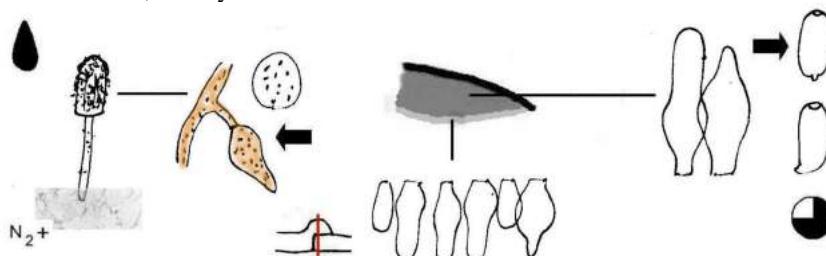


*Coprinopsis cerkezii* TKALČEC, MEŠIĆ, I. KUŠAN & MATOČEC

11\* Pleurocystidia present.

12 (11) Spores up to 6 µm broad, veil cells colorless or pale brownish.

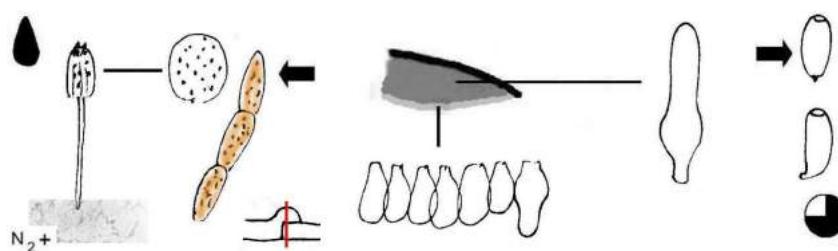
Small. Sp. (6,2-) 7-9,5 (-11) x 3,7-5,5 (-6) µm. Ch. 22-60 x 10-40 (-45) µm. Pl. (35-) 40-80 (-120) x 15-38 µm. V. globose to subglobose cells, colorless or brownish, often encrusted; also subcylindrical cells, mostly encrusted and brownish.



*Coprinopsis poliomalla* (ROMAGN.) DOVERI, GRANITO & LUNGHINI  
(Syn.: *Coprinus poliomallus* ROMAGN.)

12\* Spores up to 4,5 µm broad, veil cells often strongly brown.

Tiny. Sp. (5,5-) 7-7,5 (-9) x 3,5-4,5 µm. Ch. 16,5-50 x 8-11 µm. Pl. 65-90 x 20-25 µm. V. globose to subglobose cells, colorless or brownish, often encrusted; also subcylindrical cells, mostly encrusted and brownish.



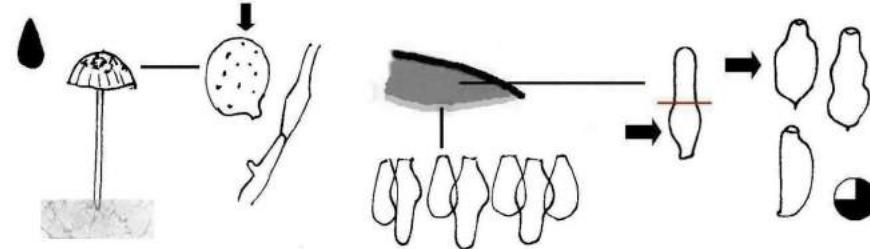
*Coprinopsis pseudocortinata* (LOCQ. EX CACIALLI, CAROTI & DOVERI) DOVERI, GRANITO & LUNGHINI

(Syn.: *Coprinus pseudocortinatus* LOCQ.)

13 (2) Spores frontally hexagonal to irregular, apically with a papilla.

Medium sized. Sp. 6-8,3 x 4,8-6 µm. Ch. 20-35 x 8,5-15,5 µm. Pl. absent. V. globose to

subglobose cells, sometimes slightly encrusted.



*Coprinus iocularis* ULJE

14

13\* Spores otherwise.

14 (13) Pleurocystidia absent.

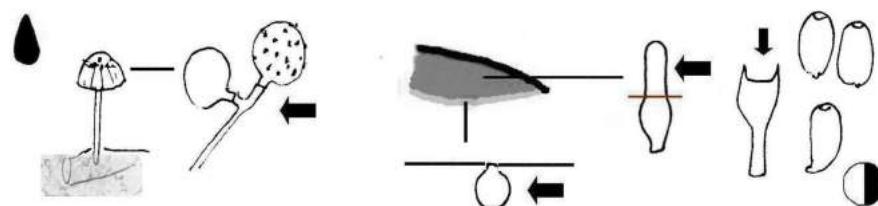
14\* (13) Pleurocystidia present.

15 (14) Cheilocystidia practically absent.

15\* (14) Cheilocystidia present.

16 (15) Basidia 2-spored.

Small to medium-sized. Sp. 7,3–11,5 × 5,5–9 µm. True ch. absent, only some scattered sphaeropedunculate cells present. V. globose to subglobose cells, thinwalled, colorless, often encrusted.

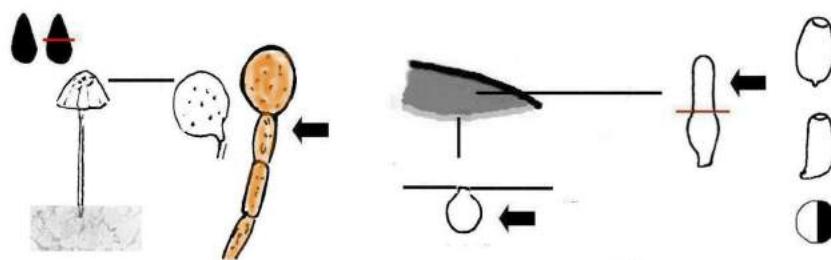


*Coprinopsis bellula* (ULJÉ) P. ROUX & EYSSARTIER

(Syn.: *Coprinus bellulus* ULJE)

16\* Basidia 4-spored.

Tiny to small. Sp. (7-) 8-9,5 x 4,5-5 (-6) µm. True ch. absent, only some scattered sphaeropedunculate cells present. V. globose to subglobose cells, often thickwalled and encrusted, colorless or brownish; also subcylindrical cells, often thickwalled, brownish and encrusted.

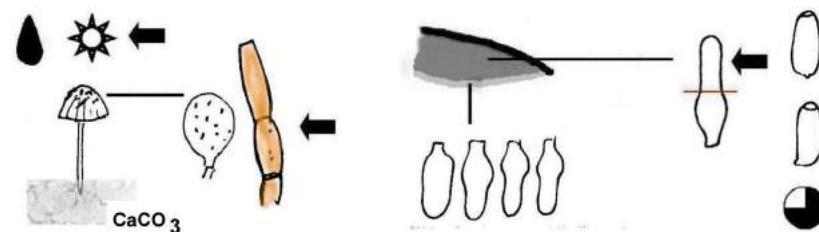


*Coprinopsis cortinata* (J. E. LANGE) GMINDER

(Syn.: *Coprinus cortinatus* J. E. LANGE)

17 (15) Spores often more than 10 µm long.

Tiny to small. Sp. (7,5-) 10-11,2 x (4,5-) 5,5-7 (-8,7) µm. Ch. 25-50 x 7-25 µm. V. globose to subglobose and subcylindrical cells, thin- to thickwalled, colorless or brownish, often strongly encrusted. Dry grassland.



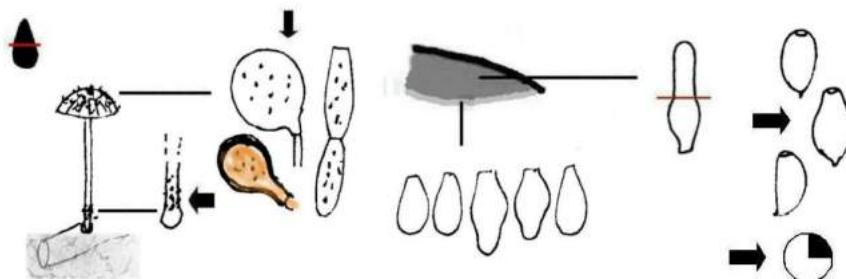
*Coprinopsis candidata* (ULJÉ) NOORDEL.

(Syn.: *Coprinus candidatus* ULJE)

17\* Spores always less than 10 µm long.

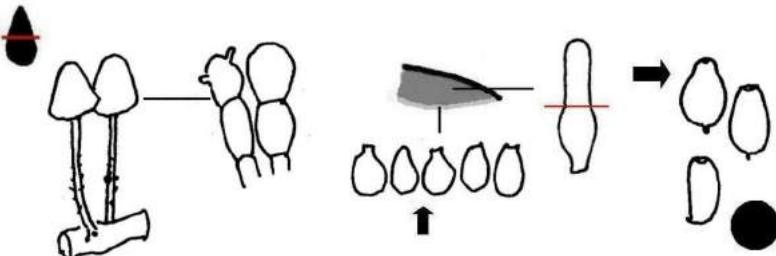
18

- 18 (17) Stipe base with greyish floccs, true cheilocystidia present, spores pale.  
 Tiny. Stipe base with greyish floccs. Sp. 6,5-9 x 3,8-5,2 µm. Ch. 10-28 x 8-15 µm. V. globose to subglobose and subcylindrical cells, thin- to slightly thickwalled, sometimes encrusted.



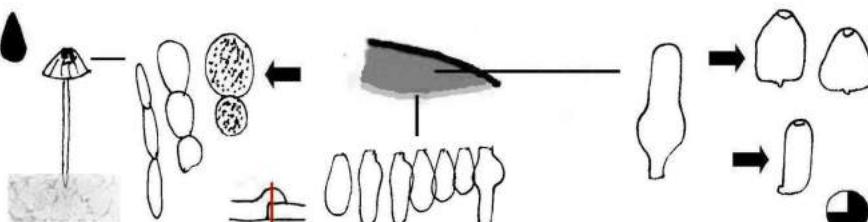
*Coprinopsis coniophora* (ROMAGN.) REDHEAD, VILGALYS & MONCALVO  
 (Syn.: *Coprinus coniophorus* ROMAGN.)

- 18\* Stipe base without greyish floccs, only clavate cheilocystidia present, spores dark.  
 Small. C. strikingly pale. Sp. 8,5-9,5 x 6,5-7 µm, laterally flattened. Ch. 20-20 x 12-24 µm, only clavate. V. chains of subglobose to ventricose cells, sometimes with outgrowths. Wood debris, São Tomé (Africa).



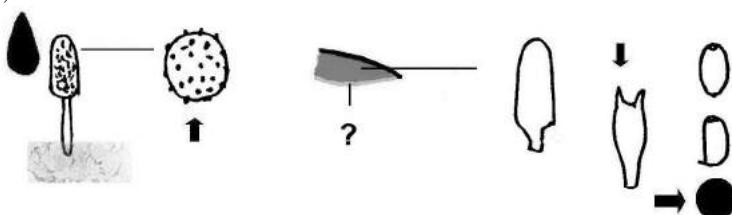
*Coprinopsis afronivea* DESJARDIN & B. A. PERRY

- 19 (14) Spores up to ca. 14 µm long.  
*Coprinopsis pseudonivea* (BENDER & ULJÉ) REDHEAD, VILGALYS & MONCALVO  
 (see 9)
- 19\* Spores shorter.
- 20 (19) Spores frontally rounded 3-5-angular, laterally strongly flattened.  
 Small. Sp. 5,6-7,5 x 5,6-7,5 x 3,7-4,4 µm. Ch. 27-50 x 15-20 µm. Pl. 35,5-55 x 16,5-27 µm. V. globose to subglobose and subcylindrical cells, thinwalled, often encrusted.



*Coprinopsis patouillardii* (QUÉL.) G. MORENO  
 (Syn.: *Coprinus patouillardii* QUÉL.)

- 20\* Spores otherwise.
- 21 (20) Basidia 2-spored.  
 Small. Sp. 7-9 x 6,5-7 µm. Ch. unknown. Pl. 45-60 x 16-20 µm. V. cells 13-44 µm in diam. Fallen leafs, Venezuela.

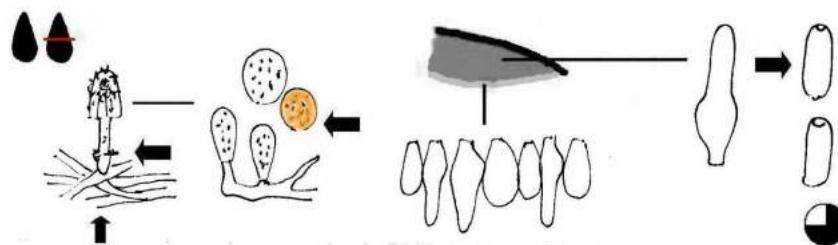


*Coprinus caracasensis* Dennis

- 21\* Basidia 4-spored.
- 22

22 (21) Spores frontally subcylindrical.

Tiny to small. Sp. 8-11,5 x 6-7,5 µm. Ch. 18-45 x 8-13 µm. Pl. up to 60 µm long. V. globose cells, often thickwalled, yellowish and encrusted; fusiforme and utriforme cells also present.

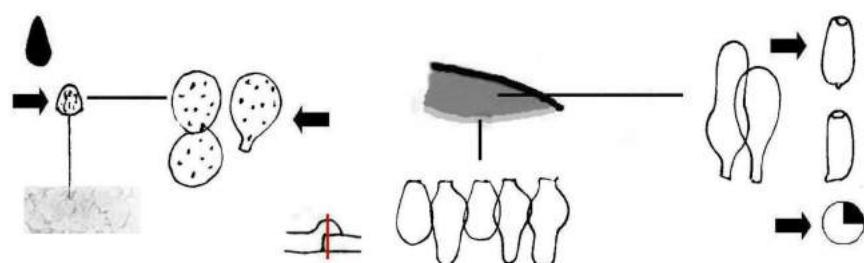


*Coprinus pilosotomentosus* BENDER

22\* Spores frontally ellipsoid.

23 (22) Spores shorter than 10 µm.

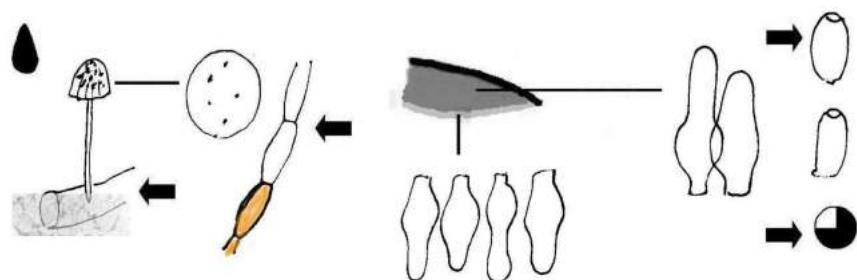
Tiny. Sp. 6,7-9,7 x 4,7-6,8 µm. Ch. 25-50 x 16-28 µm. Pl. 25-55 x 14-28 µm. V. globose to subglobose cells, thinwalled, often encrusted.



*Coprinus idae* ULJÉ

23\* Spores longer than 10 µm.

Tiny to small. Sp. 9,7-12,3 x 5,7-7,5 µm. Ch. 44-80 x 12-35 µm. Pl. 39-50 x 15-26 µm. Globose and subcylindrical cells, thin- to thickwalled, colorless or yellowish, sometimes encrusted.

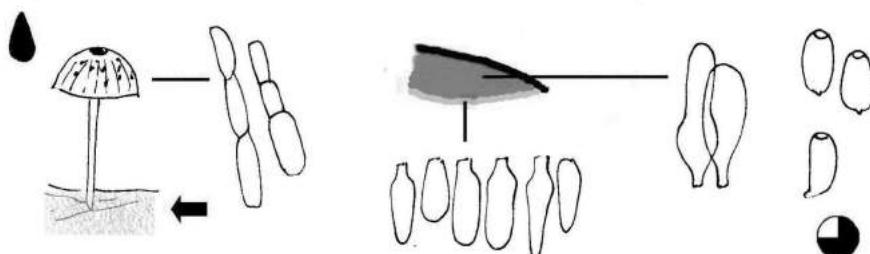


*Coprinus nemoralis* BENDER

**Part 3.4.**

1 At sea dunes on *Ammophila arenaria*.

Small to medium-sized. Sp. 8,3-13,5 x (6-) 6,2-9,5 (-10,5) µm. Ch. 20-100 x 15-40 µm. Pl. 55-115 x 20-42 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis ammophilae* (COURTEC.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus ammophilae* COURTEC.)

1\* Habitat otherwise.

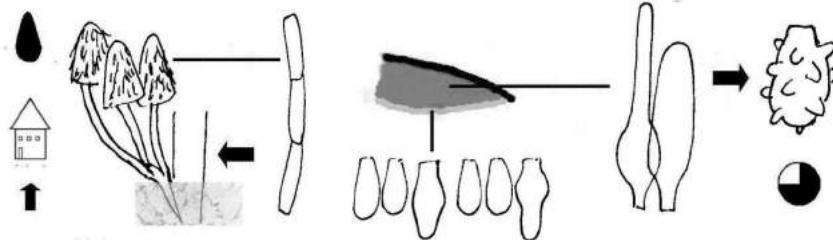
2

2 (1) In green houses and suchlike. 3

2\* Habitat otherwise. 7

3 (2) Spores warty.

Medium-sized. Sp. 7,3-9,8 x 4,6-5,8 µm. Ch. 30-90 x 20-35 µm. Pl. 30-150 x 20-40 µm. V. chains of subcylindrical colorless cells. Flower pot with Yuccapalm.

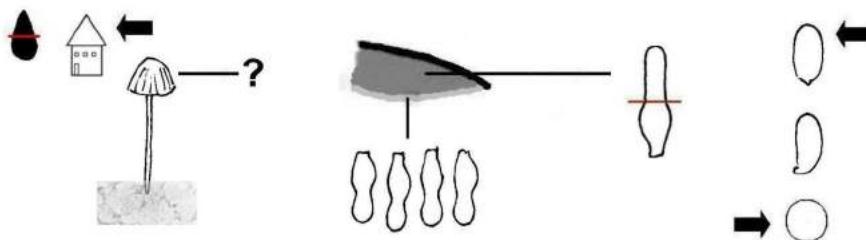


*Coprinopsis calospora* (BAS & ULJE) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus calosporus* BAS & ULJE)

3\* Spores smooth. 4

4 (3) Spores nearly hyalin.

Small. Sp. 9-10,5 x 5,8-6,2 µm, germ pore absent or very indistinct. Ch. 25-45 x 8-12 µm. V. not noted. Greenhouse.

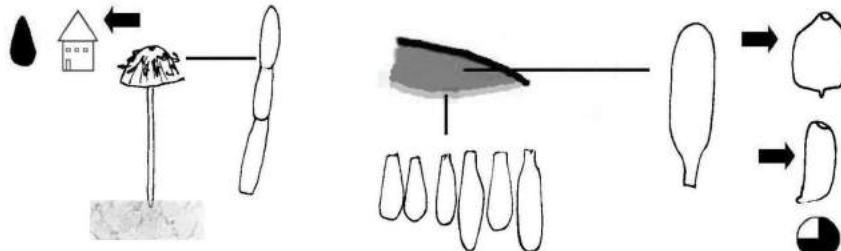


*Coprinopsis musae* ÖRSTADIUS & E. LARSS.

4\* Spores distinctly pigmented. 5

5 (4) Spores frontally subglobose, laterally strongly flattened.

Small to medium-sized. Sp. 9,3-11,3 x 9,3-10,2 µm. Ch. 11-92,4 x 10-29,3 µm. Pl. 112-168 x 27-58,3 µm. V. chains of subcylindrical colorless cells.

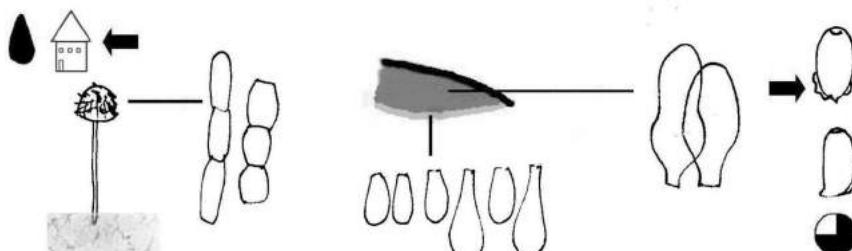


*Coprinopsis undulata* (BOGART EX BOGART) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus undulatus* BOGART)

5\* Spores otherwise. 6

6 (5) Spores with a perispore, germ pore central.

Small. Sp. 10,9-15,1 x 7,5-9 µm, with a perispore. Ch. 60-90 x 32-45 µm. Pl. 70-137,5 x 30-55 µm. V. chains of subcylindrical colorless cells.

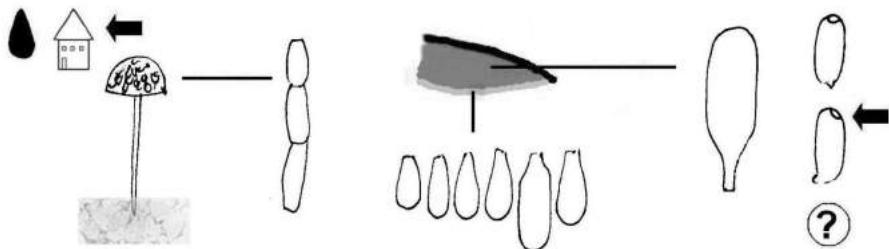


*Coprinopsis tectispora* (BOGART EX BOGART) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus tectisporus* BOGART)

6\* Spores without a perispore, germ pore excentrical.

Medium-sized. Sp. 10,6-15 x 6,7-9,1 µm. Ch. 12,5-100 x 25-40 µm. Pl. 77-125 x 30-58 µm. V.

chains of subcylindrical colorless cells.



*Coprinus arachnoideus* BOGART ex BOGART

7 (2) On dung or dung-straw mixture.

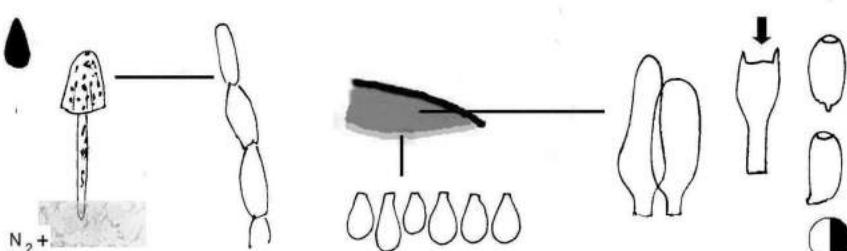
8

Habitat otherwise.

17

8 (7) Basidia 2-spored.

Small. Sp. 9,1-12,6 x 5,9-8,4 µm. Ch. 30-80 x 20-35 µm. Pl. 40-80 x 20-40 µm. V. chains of subcylindrical colorless, sometimes encrusted cells.



*Coprinopsis bicornis* (ULJÉ & HORVERS) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus bicornis* ULJÉ & HORVERS)

8\* Basidia 4-spored.

9

9 (8) Stipe with a large root, spores with a large central, truncate germ pore, often surrounded by a bulge.

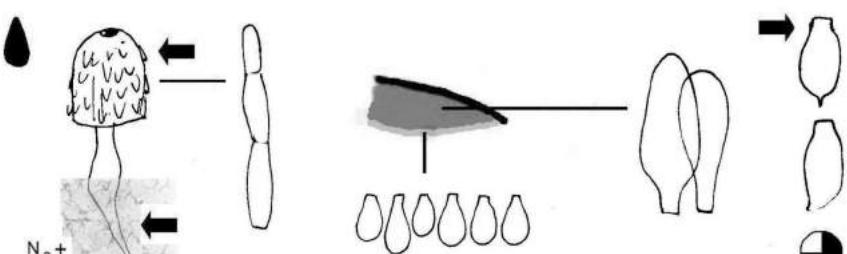
10

Otherwise.

11

10 (9) Habit robust, stipe up to ca. 15 mm thick.

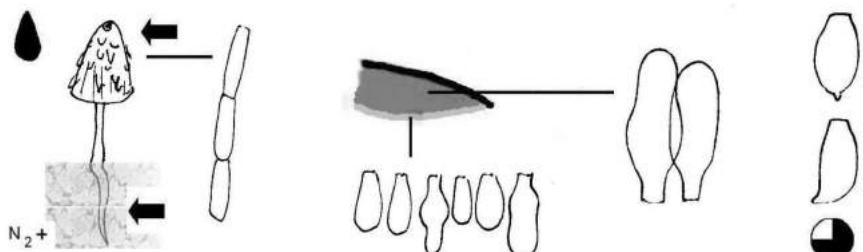
Large. Sp. 11,2-13,5 x 7-8,8 µm, germ pore ever surrounded by a distinct bulge. Ch. 40-120 x 25-70 µm. Pl. up to 150 x 65 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis annulopora* (ENDERLE) P. SPECHT & H. SCHUBERT  
(Syn.: *Coprinus annuloporus* ENDERLE)

10\* Habit gracil, stipe up to ca. 5 mm thick.

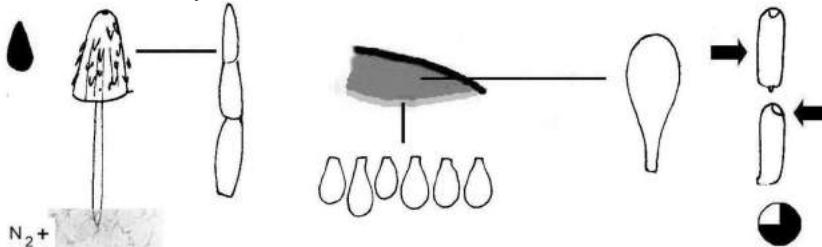
Medium-sized to large. Sp. (7,5-) 8,5-13,7 x (5-) 5,5-8 µm, germ pore often surrounded by a indistinct bulge. Ch. 22-80 x 15-55 µm. Pl. 52-125 x 24,5-70 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis cinerea* (SCHAEFF.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus cinereus* (SCHAEFF.) GRAY, *Coprinus delicatulus* APINIS,  
*Coprinus fimetarius* var. *cinereus* (L.) FR., *Coprinus fimetarius* var. *macrorhizus* (PERS.) SACC.,

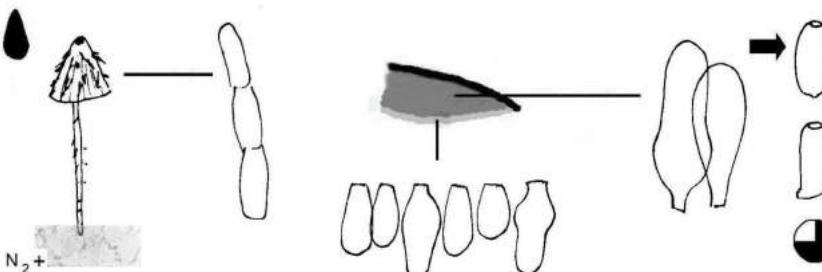
*Coprinus macrorhizus* (PERS.) REA, *Coprinopsis unneofibrillosa* (DENNIS) REDHEAD, VILGALYS & MONCALVO, *Coprinus brunneofibrillosus* DENNIS

- 11 (9) Spores subcylindrical, up to 19 µm long, germ pore excentrical.  
Medium-sized to large. Sp. 12-19 x 6-9 µm. Ch. 35-45 µm long. Pl. 45-70 µm long. V. chains of subcylindrical colorless or yellowish cells.



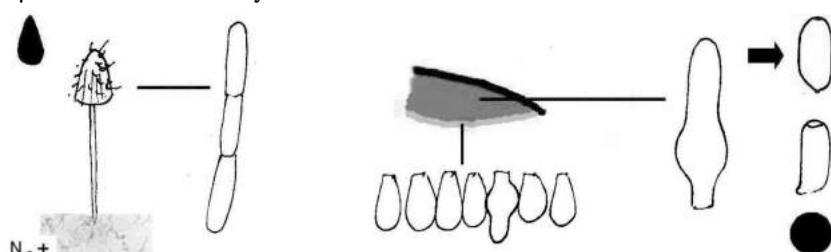
*Coprinus subcylindrosporus* E. LUDW.

- 11\* Spores otherwise. 12  
12 (11) Spores up to ca. 15 (17) µm long. 13  
12\* Spores shorter. 14  
13 (12) Spores frontally mostly ellipsoid.  
Medium-sized to large. Sp. 12-17 x 7,5-10 µm. Ch. 34-120 x 16-50 µm. Pl. 50-150 x 20-60 µm.  
V. chains of subcylindrical colorless cells.



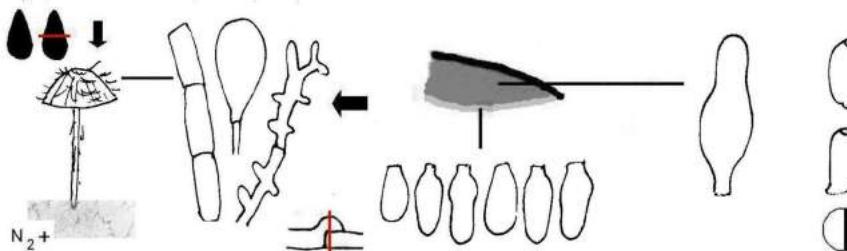
*Coprinopsis macrocephala* (BERK.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus macrocephalus* (BERK.) BERK.)

- 13\* Spores frontally mostly subcylindrical.  
Tiny to medium-sized. Sp. 10,6-14,5 (-15) x 6-8 (-8,5) µm. Ch. 20-110 x 8-40 µm. Pl. 33-150 x 16,5-55 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis radiata* (BOLTON) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus radiatus* (BOLTON) GRAY, *Coprinus fimetarius* (L.) FR.)

- 14 (12) Spores longer than 10 µm. 15  
14\* Spores shorter than 10 µm. 16  
15 (14) Veil of young caps white.  
Small. Sp. 9,5-12,5 x 5-7,5 µm. Ch. 27-65 x 11-38 µm. Pl. 60-95 x 22-38 µm. V. polymorphic,  
chains of subcylindrical colorless cells, somewhat very enlarged, and strongly diverticulate cells.

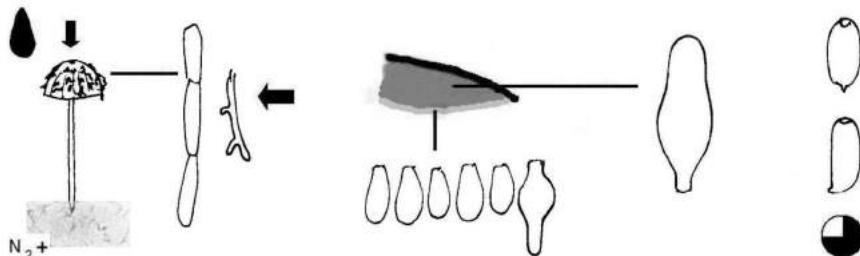


*Coprinopsis candidolanata* (DOVERI & ULJÉ) KEIRLE, HEMMES & DESJARDIN  
 (Syn.: *Coprinus candidolanatus* DOVERI & ULJÉ)

15\*

**Veil of young caps brown.**

Small to medium-sized. Sp. (7,6-) 9,8–12 (-14,4) x 4,8–9,2 µm. Ch. mostly sphaeropedunculate, 10–21 µm broad, some utriform. Pl. 42–70 x 26–30 µm. V. chains of subcylindrical colorless or yellowish pigmented cells, also diverticulate cells present.

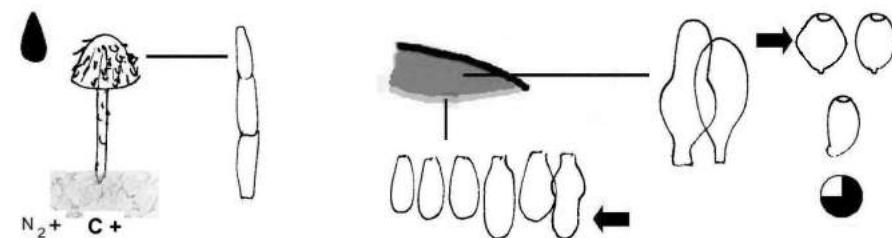


*Coprinopsis villosa* L. NAGY, DESJARDIN, VÁGVÖLGYI & PAPP

16

(14) **Spores broad ellipsoid, submitriform.**

Medium-sized to large. Sp. (6,5-) 7-8,7 (9,5) x 5-7 (-8) µm. Ch. 22-90 x 15-50 µm. Pl. 50-120 x 20-55 µm. V. chains of subcylindrical colorless cells. Also on fire places.



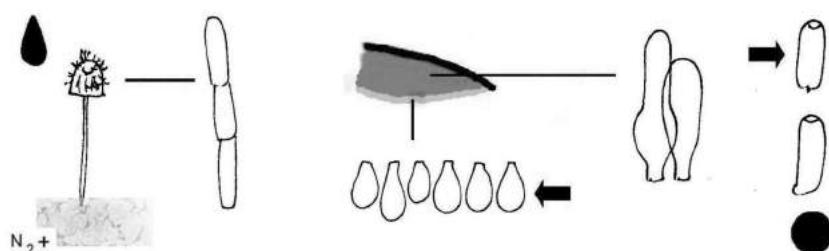
*Coprinopsis jonesii* (PECK) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus jonesii* PECK, *Coprinus funariarum* MÉTROD, *Coprinus lagopus* var. *sphaerosporus* KÜHNER & JOSS.)

16\*

**Spores long ellipsoid.**

Tiny to small. Sp. 7-9,7 x 4-5,8 µm. Ch. 25-60 x 10-28 µm. Pl. 30-100 x 10-30 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis pseudoradiata* (KÜHNER & JOSS. ex WATLING) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus pseudoradiatus* KÜHNER & JOSS.)

17

(7) **Spores warty.**

18

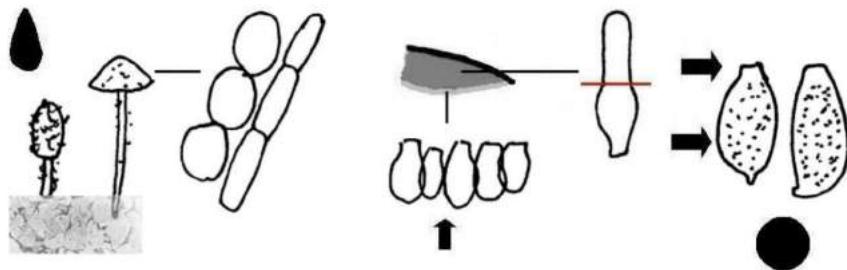
**Spores smooth.**

19

18

(17) **Pleurocystidia absent, spores very large.**

Tiny to small. Sp. 19,5-24 x 12-15 µm. Ch 50-100 x 32-60 µm. V. chains of subglobose and subcylindrical colorless cells.

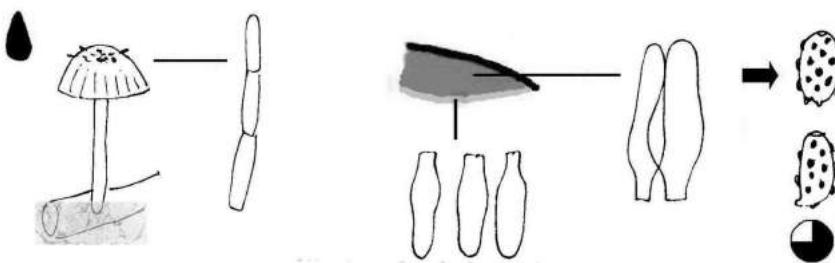


*Coprinopsis rugosomagnispora* GIERCZYK, PIETRAS, PIATEK, GRYC, CZERNIAWSKI & RODRIGUEZ-FLAKUS

18\*

Pleurocystidia present, spores smaller.

Medium-sized to large. Sp. 10-14,5 x 6,5-8,5 µm. Ch. 50-170 x 30-65 µm. Pl. 80-185 x 35-50 µm. V. chains of subcylindrical colorless cells.



*Coprinus alopecius* LASCH

(Syn.: *Coprinopsis insignis* (PECK) REDHEAD, VILGALYS & MONCALVO, *Coprinus insignis* PECK)

19

(17) Robust, fleshy species, stipe base with a ridge-like or wolly annular zone.

20

19\*

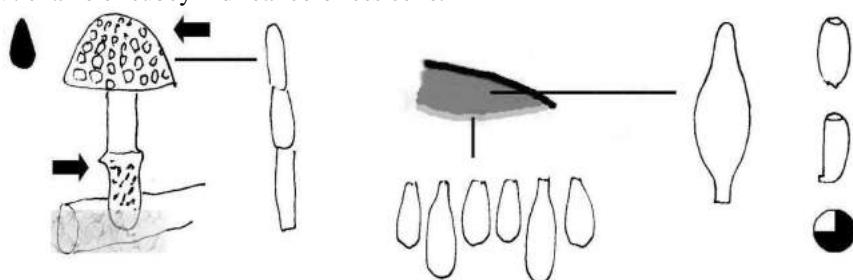
More fragile species, stipe otherwise.

23

20

(18) Stipe base with a wolly annular zone, veil as patches.

Very large, fleshy. Sp. 7,5-10 (-10,5) x 4-5 (-5,5) µm. Ch. 50-80 x 15-25 µm. Pl. 80-200 x 18-35 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis variegata* (PECK) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus variegatus* PECK, *Coprinus atramentarius* var. *variegatus* (PECK) RICK, *Coprinus quadrifidus* PECK, *Coprinus ebulbosus* PECK)

20\*

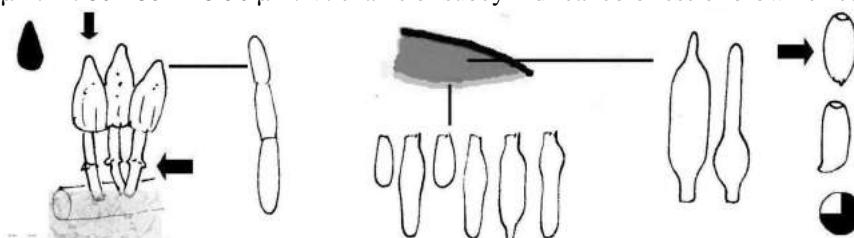
Stipe base with a ridge-like annular zone, veil as scales.

21

21

(20) Cap up to ca. 50 mm broad, often with a papilla, spores up to 6 µm broad.

Medium-sized to large, fleshy. Stipe with a volva-like zone. Sp. 6-10,7 x 4-6 µm. Ch. 65-110 x 18-30 µm. Pl. 80-180 x 18-30 µm. V. chains of subcylindrical colorless or brownish cells.



*Coprinopsis acuminata* (ROMAGN.) REDHEAD, VILGALYS & MONCALVO

(Syn.: *Coprinus acuminatus* (ROMAGN.) P. D. ORTON, *Coprinus atramentarius* var. *acuminatus* ROMAGN.)

21\*

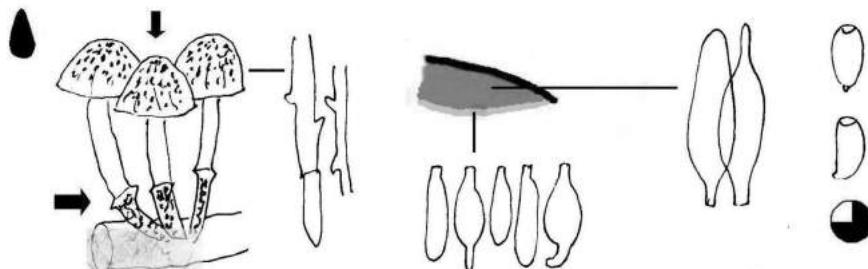
Cap broader, without a papilla, spores up to 6,5 µm broad.

22

22

(21) Cap young with ochraceous color tones, strongly brown scaly.

Large to very large, fleshy. Stipe with a volva-like zone. Sp. 7,5-11,5 x 4,4-6,5 µm. Ch. 33-110 x 8,2-35,5 µm. Pl. 75-170 x 22-40 µm. V. chains of subcylindrical colorless or brownish cells, sometimes slightly diverticulat.

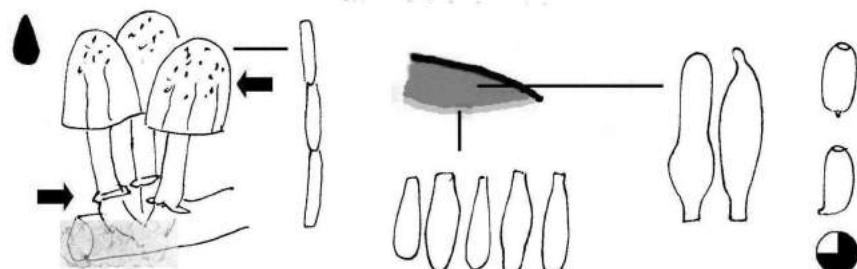


*Coprinopsis romagnesiana* (SINGER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus romagnesianus* SINGER, *Coprinus atramentarius* var. *squamosus* BRES.,  
*Coprinus atramentarius* var. *romagnesianus* (SINGER) KRIEGLST.,  
*Coprinus squamosus* (BRES.) ROMAGN.)

22\*

**Cap without ochraceous color tones, not strongly brown scaly.**

Large to very large, fleshy. Stipe with a volva-like zone. Sp. (6,5-) 7-11 x (4-) 4,5-6,5 µm. Ch. up to 100 µm long. Pl. up to 200 µm long. V. chains of subcylindrical colorless or brownish cells.

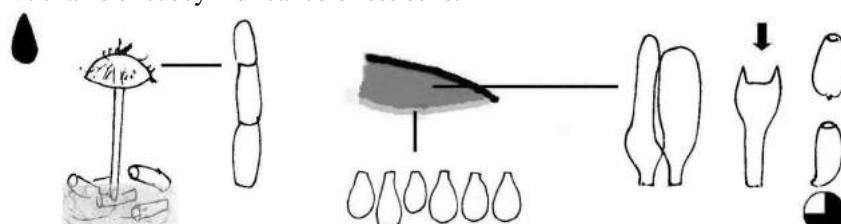


*Coprinopsis atramentaria* (BULL.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus atramentarius* (BULL.) FR.)

23

(19) **Basidia 2-spored.**

Small to medium-sized. Sp. 9-14 (-16,3) x 6,8-10,5 µm. Ch. 30-75 x 17-44 µm. Pl. 70-110 x 26-40 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis scobicola* (P. D. Orton) Redhead, Vilgalys & Moncalvo  
(Syn.: *Coprinus scobicola* P. D. Orton)

23\*

**Basidia 4-spored.**

24

(23) **Spores nearly hyaline.**

25

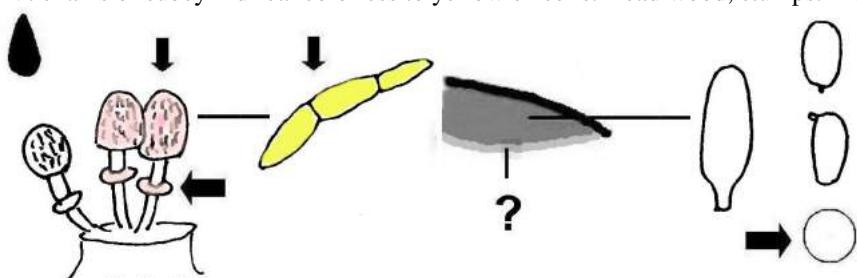
**Spores darker pigmented.**

27

25

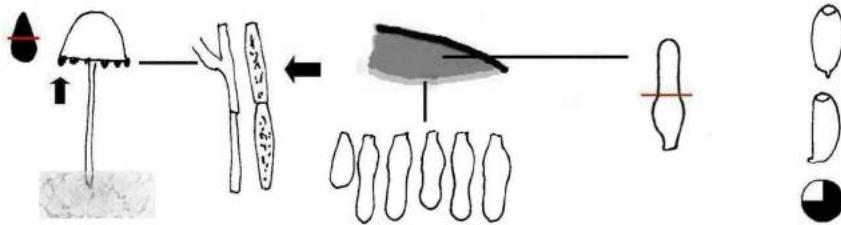
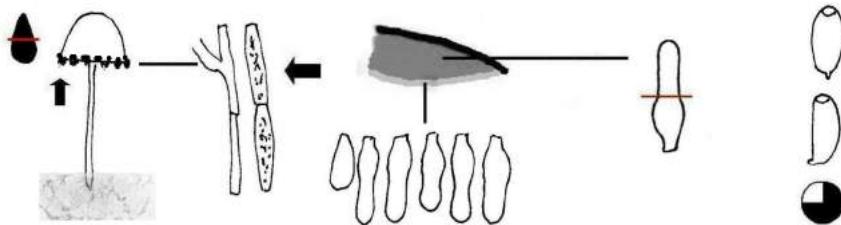
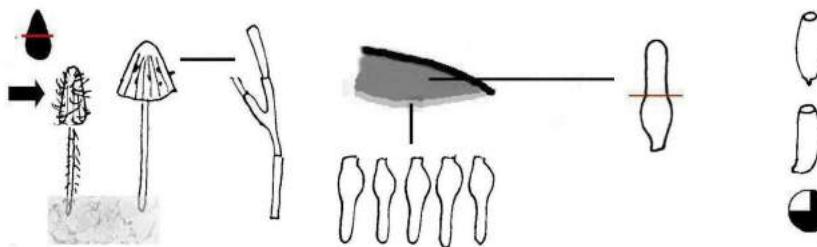
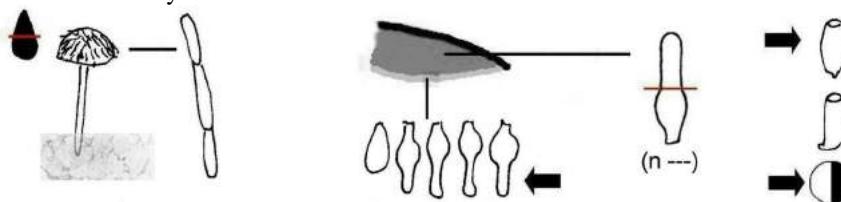
(24) **Stipe with an annulus, pileus with pinkish tones, spores without germ pore.**

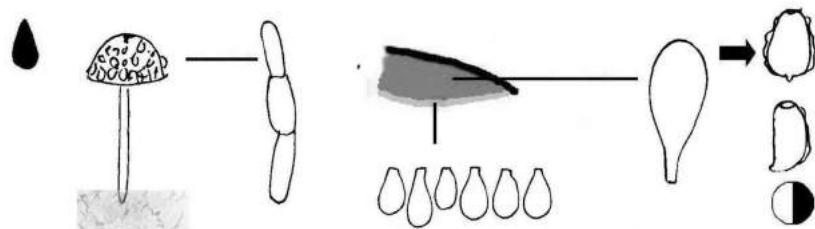
Small to medium sized. Sp. 4-5,3 (-6) x 2,5-3,6 µm, nealy hyaline. Ch. unknown. Pl. 28-36 x 9-12 µm. V. chains of subcylindrical colorless to yellowish cells. Dead wood, stumps. Mexico.



*Coprinopsis mexicana* (MURRILL) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus mexicanus* MURRILL)

- 25\* Stipe, pileus and spores otherwise. 26
- 26 (25) Spores up to 8,5 µm long. Medium-sized to large. Sp. 6,5-8,5 x 4-5 µm, germ pore absent. Ch. 25-50 x 5-18 µm. V. chains of subcylindrical colorless cells, partly strongly encrusted. Japan.
- 
- Coprinopsis cineraria* (HAR. TAKAH.) ÖRSTADIUS & E. LARSS.  
(Syn.: *Psathyrella cineraria* HAR. TAKAHASHI)
- 26\* Spores longer. 28
- Large. Sp. (8-) 9-12,5 (-13,7) x (5,2-) 5,5-7 µm, germ pore absent. Ch. 30-50 (-60) x 8-27 µm. V. chains of subcylindrical colorless cells, strongly encrusted.
- 
- Coprinopsis melanthina* (FR.) ÖRSTADIUS & E. LARSS.  
(Syn.: *Psathyrella melanthina* (FR.) ROMAGN.)
- 27 (24) Pleurocystidia absent. 28
- 27\* Pleurocystidia present. 33
- 28 (27) Spores max. 9 µm long, germ pore absent. Small. Sp. 6,5-9 x 4,5-6 µm. Ch. 30-46 x 12-15 µm. V. chains of subcylindrical colorless cells.
- 
- Coprinopsis submicrospora* (HEYKOOP & G. MORENO) ÖRSTADIUS & E. LARSS.  
(Syn.: *Psathyrella submicrospora* HEYKOOP & G. MORENO)
- 28\* Spores longer, germ pore present. 29
- 29 (28) Spores shorter than 10 µm. Small. Sp. 7,8-9,7 x 5-6 µm. Ch. 27-48 x 10-18 µm. Pl. probaly overlooked. V. chains of subcylindrical colorless cells.
- 
- Coprinopsis babosiae* L. NAGY, VÁGVÖLGYI & PAPP
- 29\* Spores longer. 30
- 30 (29) Veil exclusively present near the margin of the cap. 31
- 30\* Veil almost present up to the center of the cap. 32

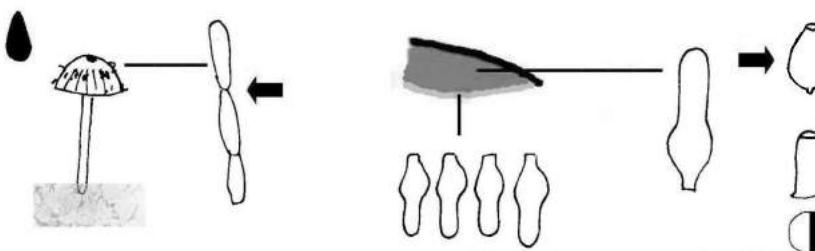
- 31 (30) Veil exclusively appendiculate on the margin of the cap.**  
 Small to large. Sp. (10-) 11,2-15 x 5,5-7,5 µm. Ch. (16,5-) 20-45 (-60) x (5,5-) 7-17,5 µm. V. chains of subcylindrical colorless cells, often encrusted.
- 
- Coprinopsis marcescibilis* (BRITZELM.) ÖRSTADIUS & E. LARSS.  
 (Syn.: *Psathyrella marcescibilis* (BRITZELM.) SINGER)
- 31\*** **Veil appendiculate and near the margin of the cap.**  
 Small to large. Sp. 11-17 x 6-8 µm. Ch. 25-40 x 11-15 µm. V. chains of subcylindrical colorless cells,
- 
- Coprinopsis pseudomarcescibilis* HEYKOOP, G. MORENO & P. ALVARADO
- 32 (30) Spores up to ca. 16 µm long, black brown.**  
 Small. Sp. (11,6-) 12,4-16,2 (-16,8) x (5,8-) 6-8 µm. Ch. 25-50 x 10-20 µm. V. chains of subcylindrical colorless cells.
- 
- Coprinopsis lotinae* (PICÓN) PICÓN  
 (Syn.: *Coprinus lotinae* PICÓN; remark: It is probably *Psathyrella myceniformis* DENNIS)
- 32\*** **Spores up to ca. 12 µm long, grey brown.**  
 Small to medium-sized. Sp. 8-12 x (4-) 4,5-6 µm. Ch. 25-55 x 8-15 (-16,5) µm. Pl. extremely rare. V. chains of subcylindrical colorless cells.
- 
- Coprinopsis canocephala* (KAUFFMAN) ÖRSTADIUS & E. LARSS.  
 (Syn.: *Psathyrella canocephala* (KAUFFM.) A. H. SM.)
- 33 (27) Spores fusiform, mitriform, distinctly ovoid.** 34
- 33\*** **Spores +/- ellipsoid.** 37
- 34 (33) Spores with a perispore.**  
 Medium-sized to large. Sp. 6,7-8,8 x 6-7,5 µm. Ch. 12,5-50 x 17-22 µm. Pl. 110-142 x 45-52 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis brunneistrigulata* (BOGART EX BOGART) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus brunneistrigulatus* BOGART)

34\* Spores without a perispore. 35

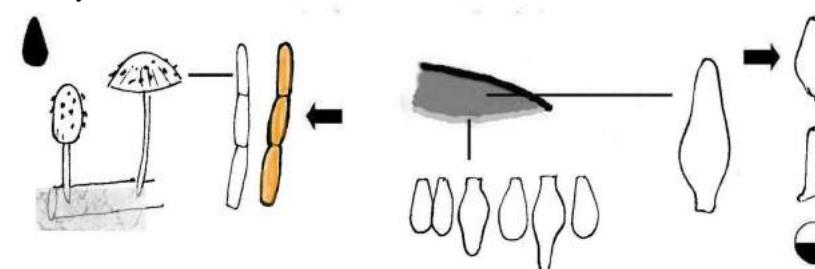
35 (34) Spores +/- fusiform.  
Medium-sized. Sp. 9,2–12,5 x 5,8–7,3 µm. Ch. 62–120 x 22–60 µm. Pl. 55–110 x 25–38 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis fusispora* L. NAGY, VÁGVÖLGYI AND PAPP

35\* Spores +/- mitriform. 36

36 (35) Spores mitriform.  
Medium-sized. Sp. 7,8–11,7 x 6,3–8,2 µm. Ch. 30–140 x 15–50 µm. Pl. 67–150 x 25–60 µm. V. chains of subcylindrical colorless or brownish cells, thin- to thickwalled.



*Coprinopsis mitraespora* (BOHUS) L. NAGY, VÁGVÖLGYI & PAPP  
(Syn.: *Coprinus mitraesporus* BOHUS, *Coprinus spelaiophilus* BAS & ULJE,  
*Coprinopsis spelaiophila* (BAS & ULJE) REDHEAD, VILGALYS & MONCALVO)

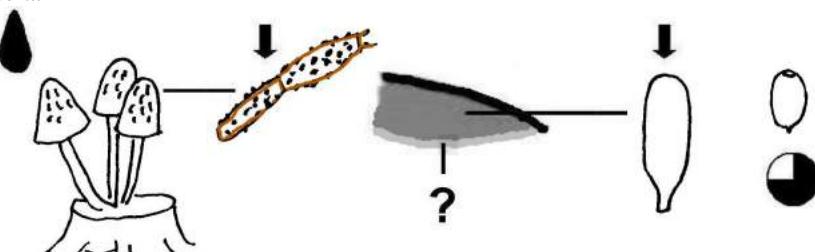
36\* Spores submitriform, broadly ellipsoid.

*Coprinopsis jonesii* (PECK) REDHEAD, VILGALYS & MONCALVO  
(see 14)

37 (33) Veil cells partially strongly encrusted. 38

37\* Veil cells not or only slightly encrusted. 40

38 (37) Spores up to 7,5 µm long.  
Medium-sized. Cap with small dark veil scales. Sp. 6–7,5 x 4–5 µm. Ch. unknown. Pl. 70 x 20 µm, long ellipsoid. Veil cells with brownish walls. Caespitose on stumps of cotton plants. Venezuela.

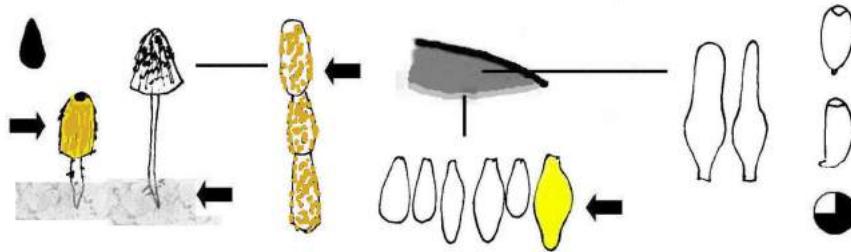


*Coprinus maculatus* DENNIS

38\* Spores longer. 39

39 (38) Veil cells strongly yellowish encrusted, young cap with a grey-yellowish veil.  
Medium-sized. Stipe often with a pseudorhiza. Sp. (8,5–) 10–15 x (5–) 5,5–7,5 µm. Ch. 70–150 x

15-55 µm. Pl. 40-150 x 16-50 µm.

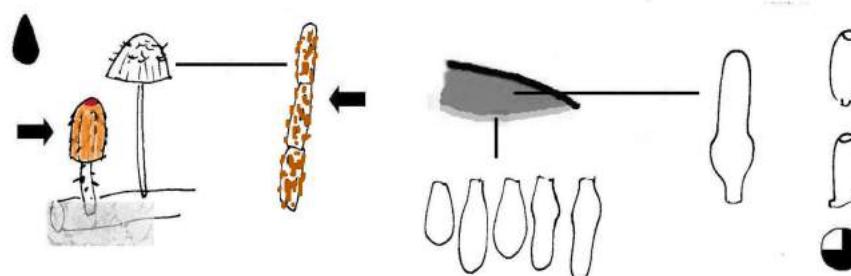


***Coprinopsis ochraceolanata* (BAS) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus ochraceolanatus* BAS, *Coprinus citrinovelatus* E. LUDW. & P. ROUX,  
*Coprinus callistoflavus* DONELLI & SIMONINI)

39\*

**Veil cells strongly brownish encrusted, young cap with a reddish veil.**

Medium-sized. Stipe sometimes with a pseudorhiza. Sp. 7,5-13,2 x (4,5-) 5-8 µm. Ch. 25-65 x 15-30 µm. Pl. 60-130 x 20-40 µm.



***Coprinopsis erythrocephala* (LÉV.) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus erythrocephalus* (LÉV.) FR.)

40

**(37) Germ pore distinctly excentral.**

41

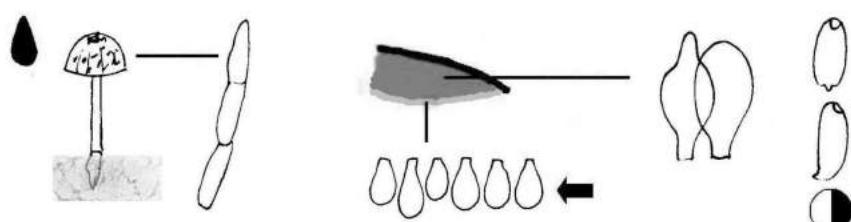
**Germ pore central or indistinctly excentral.**

42

41

**(40) Cheilocystidia only globose.**

Medium-sized. Sp. 8,7-12,1 x 6,2-8,8 µm. Ch. 22,5-70 x 25-45 µm. Pl. 55-75 x 28-45 µm. V. chains of subcylindrical colorless cells.

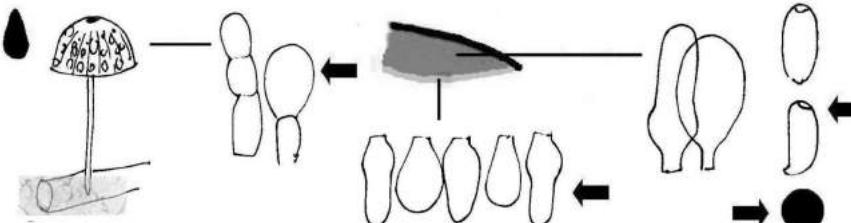


***Coprinopsis alutaceivelata* (BOGART) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus alutaceivelatus* BOGART)

41\*

**Cheilocystidia globose and utriform.**

Medium-sized to large. Sp. 10-14,4 x 6,7-9,6 µm. Ch. 10-120 x 22-70 µm. Pl. 70-120 x 28-70 µm. V. chains of subcylindrical colorless cells, some strongly enlarged.



***Coprinopsis bubalina* (BOGART) REDHEAD, VILGALYS & MONCALVO**  
(Syn.: *Coprinus bubalinus* BOGART)

42

**(40) Spores up to ca. 10,5 µm long.**

43

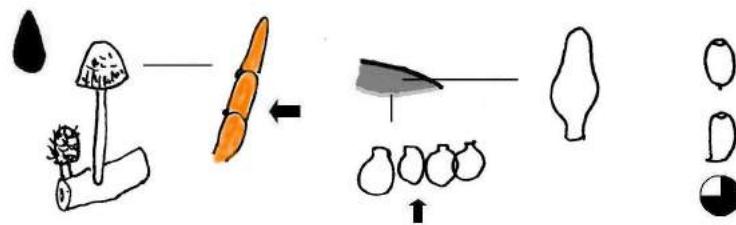
**Spores longer.**

45

43

**(42) Cheilocystidia only globose.**

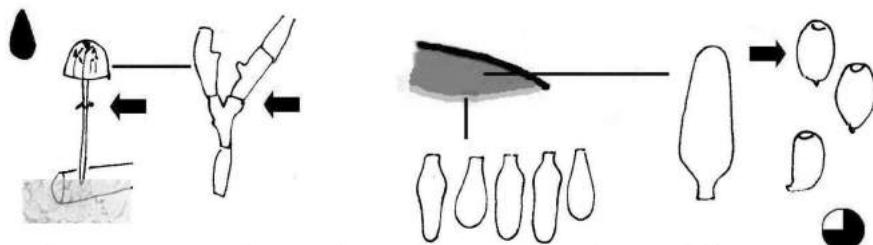
Medium sized. Sp. 6-8 x 3,5-4,5 µm. Ch. 20-25 x 15-20 µm. Pl. 50-100 x 20-35 µm. V. thinwalled, cells golden brown. Kenya, Tanzania, Trinitad.



*Coprinopsis jamaicensis* (MURILL) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus jamaicensis* MURILL)

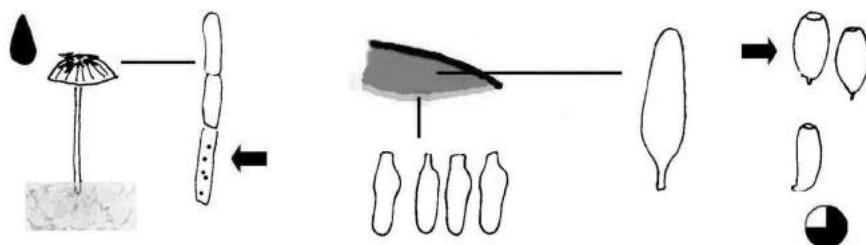
- 43\* **Cheilocystidia not only globose.**
- 44 (43) **Lignicol, veil cells slightly diverticulat.**  
Small. Stipe sometimes with an annulus. Sp. 7,5-10,7 x 5,4-7,5 µm. Ch. (28-) 80-135 x 11-38 µm. Pl. 90-182 x 27-45 µm. V. chains of subcylindrical colorless cells.

44



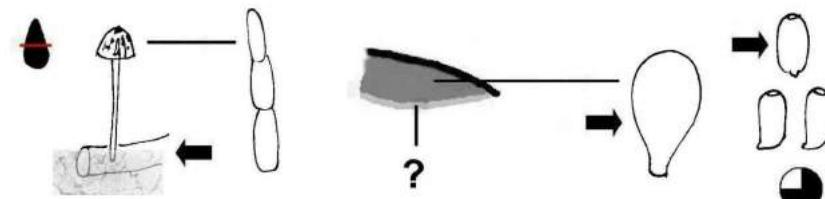
*Coprinus alnivorus* BOGART

- 44\* **Terricol, veil cells smooth.**  
Small. Sp. 5,5-8,7 (-10,5) x 4,5-5 (-7) µm. Ch. 25-105 x 12-40 µm. Pl. 65-120 x 25-33 µm. V. chains of subcylindrical cells, sometimes yellowish and slightly encrusted.



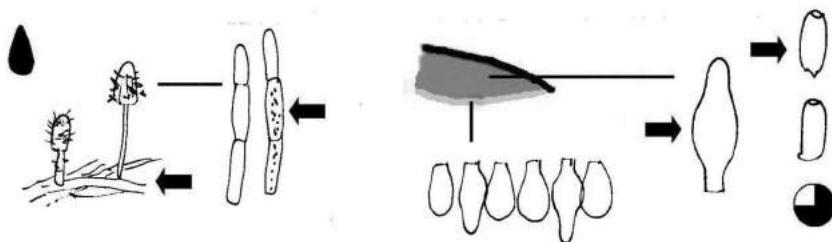
*Coprinopsis geesterani* (ULJÉ) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus geesteranii* ULJÉ)

- 45 (43) **Tiny to very small species, cap maximally 10 mm broad.** 46
- 45\* **Larger species, cap minimally ca. 30 mm broad.** 47
- 46 (45) **Lignicol, veil grey.**  
Tiny to very small. Sp. 8,7-13,8 x 6,2-8,5 µm. Ch. not noted. Pl. 60-80 x 23-26 µm. V. chains of subcylindrical colorless cells.



*Coprinopsis marcida* (BOGART EX BOGART) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus marcidus* BOGART)

- 46\* **Herbicol, veil white.**  
Tiny. Sp. 10-14 x 6,5-8,8 µm. Ch. 22-58 x 14-25 µm. Pl. similar the ch., rare. V. chains of subcylindrical colorless cells, some slightly encrusted.



*Coprinopsis nevillei* GUY GARCÍA & VELLINGA

47 (45) Not deliquescent.

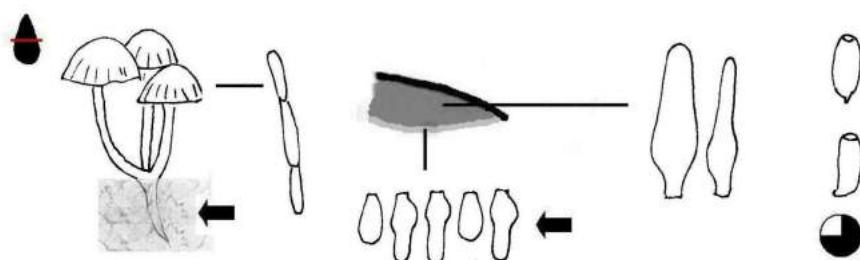
48

47\* Deliquescent.

50

48 (47) Cheilocystidia utriform.

Large, usually densely caespitose, stipe mostly with a common pseudorhiza. Sp. 8-12 x 5-6,5 µm. Ch. 22-65 (-80) x 10-16,5 (-25) µm. Pl. 35-90 x 12-25 µm. V. chains of subcylindrical colorless cells.



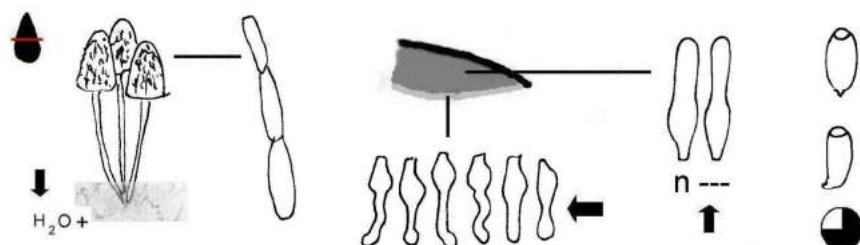
*Coprinopsis pannuciooides* (J. E. LANGE) ÖRSTADIUS & E. LARSS.  
(Syn.: *Psathyrella pannuciooides* (J. E. LANGE) M.M. MOSER)

48\* 48\* Cheilocystidia very versiform.

49

49 (48) Spores 10,5-13,7 (-15) x 5,0-7,0 (-8) µm, dark blackish brown.

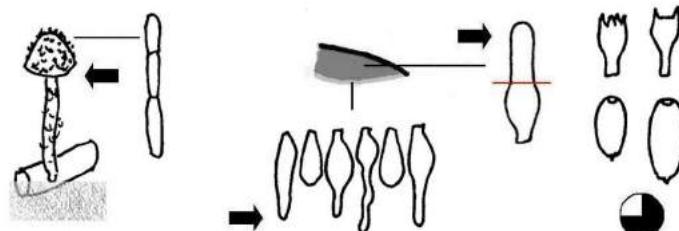
Medium-sized, mostly caespitose. Sp. 10,5-13,7 x 5,0-7,0 µm. Ch. 30-87 x 6,8-16,5 (-19) µm. Pl. 40-50 x 8,5-16,5 µm, very rare, easily overlookable. V. chains of subcylindrical colorless cells.



*Coprinopsis udicola* ÖRSTADIUS, A. MELZER & E. LARSS.

49\* Spores 9,4-10,6 x 5-6,3 µm, dark brown.

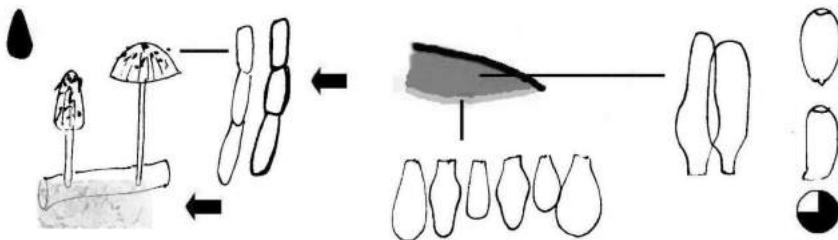
Medium-sized. Sp. 9,4-10,6 x 5-6,3 µm (larger if 1- or 2-spored basidia present). Ch. 35,5-44 x 8,2-22 µm. Pl. absent. V. chains of subcylindrical colorless cells.. Known only from Italy.



*Coprinopsis aesantiensis* A. MELZER, G. FERISIN & F. DOVANA

50 (47) Veil cells partly distinctly thickwalled.

Small to medium-sized. Sp. 9,3-13,1 x 5,7-8,3 µm. Ch. 30-50 x 18-37 µm. Pl. 40-90 x 24-35 µm. V. chains of subcylindrical colorless cells, sometimes with thickened walls.

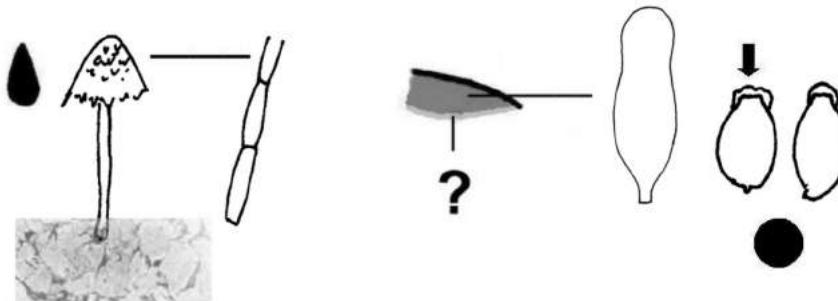


*Coprinopsis pachyderma* (BOGART EX BOGART) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus pachydermus* BOGART)

50\* Veil cells always more or less thinwalled. 51

51 (50) Spores with an annulus and a partial perispore.

Medium-sized.  $9,5-13,3 \times 6,8-9,1 \mu\text{m}$ . Ch. unknown. Pl.  $40-100 \mu\text{m}$  long. V. chains of subcylindrical colorless cells, thin- to minimally thickwalled. Nigeria.

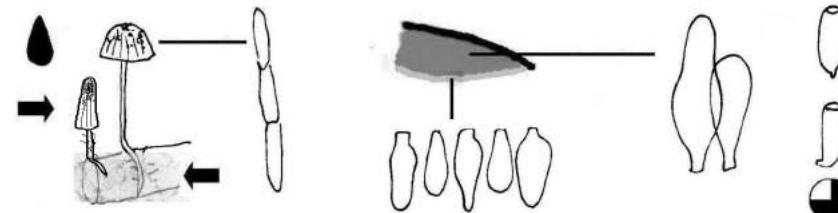


*Coprinopsis afrocinerea* MEŠIĆ, TKALČEC, ČERKEZ, I. KUŠAN & MATOČEC

51\* Spores otherwise. 52

52 (51) Medium-sized, veil sparse developed, stipe with a short pseudorhiza.

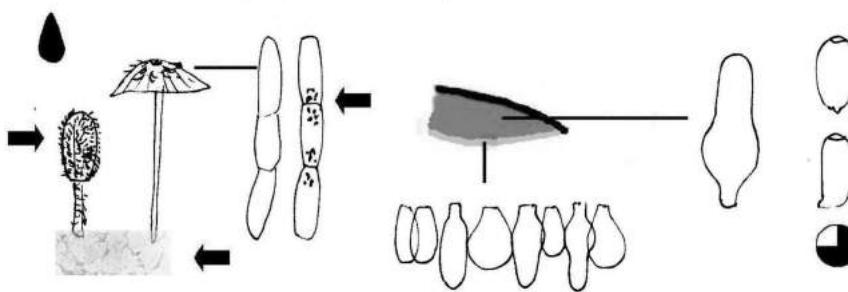
Sp.  $9,7-14,7 \times 5,8-8 \mu\text{m}$ . Ch.  $35-115 \times 18-55 \mu\text{m}$ . Pl.  $70-160 \times 28-55 \mu\text{m}$ . V. chains of subcylindrical colorless cells, sometimes slightly encrusted.



*Coprinopsis krieglsteineri* (BENDER) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus krieglsteineri* BENDER)

52\* Medium-sized to large, veil strongly developed, stipe without a pseudorhiza.

Sp.  $(10,5-) 11,2-13,5 (-14,5) \times 6-7,5 \mu\text{m}$ . Ch.  $20-80 \times 11-33 \mu\text{m}$ . Pl.  $75-150 \times 30-55 \mu\text{m}$ . V. chains of subcylindrical colorless cells, some slightly encrusted.



*Coprinopsis lagopus* (FR.) REDHEAD, VILGALYS & MONCALVO  
(Syn.: *Coprinus lagopus* (FR.) FR.)

