

Key of the species of the genus *Otidea*

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Nicolas Van Vooren (nicolas@vanvooren.info)



Preliminary note:

1) The shape of the spores is numbered to simplify the redaction into the key:

Type I	Type II	Type III
Elliptic	Oblong	Navicular to fusiform (with rounded ends)

2) The working names are placed between « » and they don't have to be used, in a publication, as they are.

1. Ascoma cupuliform, not split on one side (or very exceptionally)2
1. Ascoma cupuliform or ear-shaped, split or open laterally.....3
2. Apothecia basely cupuliform, totally blackish; paraphyses forked at apex or with some outgrowths; spores type III: 18-24 × 10-12 μm *O. apophysata* sensu Boudier
2. Apothecia small (Ø ≤ 1 cm), cupuliform; hymenium ± dark brown; external surface pale brown; paraphyses with simple apex; spores type I: 18-21 × 10-12 μm *O. daliensis*
2. Apothecia shortly stipitate, all fawn to brownish; paraphyses with apex having often some outgrowths; spores type I: 19-21 × 11-12 μm *O. propinquata*
3. Ascoma presenting, on fresh material, bright yellow tinges4
3. Ascoma presenting yellowish, whitish cream, light beige, orange, fawn to alutaceous brown tinges5
3. Ascoma presenting dark colours: brown-black, violaceous, olivaceous brown, grey-brown, dark brown, etc.11
4. Apothecia shortly stipitate; hymenium whitish to pale yellow; outside bright yellow; spores type I-II: 10.5-12 × 5-6 μm *O. phlebophora*
4. Same as previous, with higher spores: 19-21 × 9-12 μm *O. cantharella* ?
4. Apothecia substipitate; hymenium pale beige, sometimes with pinkish tinges; outside lemon-coloured; spores type I-II: 11-12 × 5.5-6.5 μm *O. concinna*
5. External surface distinctly furfuraceous6
5. External surface glabrous or delicately furfuraceous7
6. Apothecia ear-shaped, small, totally ochraceous yellow, outside furfuraceous; spores type I: 11.5-13.5 × 6-7 μm *O. felina* sensu Bresadola
6. Apothecia very elongated, outside mustard-yellow to yellowish brown, with small furrows; hymenium yellow to yellowish beige; spores type I: 9.5-12 × 5.5-6 μm. Conifers*O. tuomikoskii*
6. Same as previous, but with whitish hymenium; spores type I: 10-13 × 5-6.5 μm..... « *O. pseudotuomikoskii* »
6. Apothecia less elongated, outside alutaceous yellow to ochraceous beige, with small reddish-brown hairs; hymenium with pinkish tinges; spores type I: 9.5-11 × 5-6 μm..... *O. papillata*
6. Same as previous but with whitish to pale cream hairs *O. papillata* f. *pallidefurfuracea*
7. Ascoma presenting a different colour between the hymenium and the external surface8
7. Ascoma presenting a less or more uniform colour; spores length ≤ 15 μm9
7. Same as previous; spores length > 15 μm10

8. External surface yellow orange to fawn yellow, often dotted with reddish marks, hymenium paler, with distinct pinkish tinges; spores type I: $11-13 \times 6-7 \mu\text{m}$ *O. onotica*
8. Same as previous but with smaller spores: $8.5-10.5 \times 5.2-7 \mu\text{m}$ *O. onotica* var. *brevispora*
8. Apothecia rarely auricular; outside \pm pale beige, hymenium brown to alutaceous; spores type II: $12-16 \times 6-7.5 \mu\text{m}$ *O. alutacea*
8. Apothecia auricular; outside beige to fawn yellow; hymenium (always darker) brown; spores type I: $12-14.5 \times 7-8.5 \mu\text{m}$ *O. leporina* sensu auct.
9. Apothecia totally white-cream; spores type I: $11-13 \times 5.5-7 \mu\text{m}$ *O. lactea*
9. Apothecia small, very pale beige, outside \pm ochraceous with age; spores type I: $10-11.5 \times 6-6.5 \mu\text{m}$. Gregarious, under *Larix* « *O. laricina* »
9. Apothecia totally alutaceous beige to chesnut-brown; spores type II: $12-15 \times 6-7 \mu\text{m}$ *O. alutacea*
9. Same as previous but with smaller spores: $9-11 \times 5-6 \mu\text{m}$ *O. microspora*
9. Apothecia small, fawn yellow to beige, \pm ochraceous with age; spores type I: $8.5-11 \times 5-6.5 \mu\text{m}$ *O. formicarum*
9. Apothecia small, totally ochraceous-orange; spores type I: $12-14 \times 7.5-8.5 \mu\text{m}$ « *Otidea aurantiaca* »
10. Apothecia non stipitate, totally fawn yellow to ochraceous beige; spores type I: $17-20 \times 10-11 \mu\text{m}$ *O. caligata* sensu Nannfeldt p.p.
10. Apothecia stipitate, red-brown; spores type I-II: $18-20 \times 10-11 \mu\text{m}$ *O. caligata*
10. Apothecia shortly stipitate, hymenium fawn, outside more dull; spores type III: $21-24 \times 9-11 \mu\text{m}$ « *Otidea boudieri* » (= *O. felina* sensu Boudier)
11. Apothecia presenting on the outside some visible violaceous tinges..... 12
11. Apothecia without these tinges..... 13
12. External surface furfuraceous, with a lightening blue-violet colour, hymenium ochraceous yellow contrasting; spores type III: $12-15 \times 5.5-6.5 \mu\text{m}$ *O. mirabilis*
12. External surface \pm furfuraceous, with violet tinges more fleeting, hymenium ochraceous yellow contrasting; spores type III: $13-16 \times 5.5-7 \mu\text{m}$. Continental, under *Fagus* or *Fagus/Abies* « *O. subgrandis* »
12. Same as previous, outside quickly folded, hymenium olivaceous yellow; spores type III: $12-14 \times 5.5-6.5 \mu\text{m}$. *Mediterranean*, under deciduous trees..... *O. bufonia* p.p.
12. Apothecia totally purplish brown to violet; spores type III, delicately verrucose ($\times 1000$): $14.5-16 \times 7-7.7 \mu\text{m}$. Under *Larix*..... *O. lilacina* ?
13. Apothecia presenting on the outside some visible olivaceous tinges..... 14
13. Apothecia without these tinges..... 15
14. External surface olivaceous grey-brown, without violaceous tinges, hymenium ochraceous yellow, contrasting; spores type III: $14-17 \times 6-7 \mu\text{m}$ *O. grandis*
14. Same as previous, with spores delicately verrucose « *O. grandis* var. *sinensis* » (= *O. grandis* sensu Zhuang)
14. External surface olivaceous brown, hymenium dark olivaceous green; spores type ? : $13-15 \times 3-4 \mu\text{m}$ *O. olivacea*
14. Same as previous, blackening; spores type I: $14-17 \times 8-8.5 \mu\text{m}$ « *O. olivaceoides* » (= *O. olivacea* Cao & Fan, inval.)
15. Paraphyses with diverticulate apex, forked, etc. 16
15. Paraphyses with simple apex..... 17
16. External surface grey-brown to brownish, hymenium dark brown; spores type II-III: $18-24 \times 8.5-12 \mu\text{m}$; in wet areas (*Alnetum*, etc.) *O. apophysata*
16. Cupuliform; tinges more uniform, brown to ochraceous fawn; spores type I: $19-21 \times 11-12 \mu\text{m}$; in mountains, under conifers *O. propinquata*
17. Apothecia stipitate, blackish grey-brown; spores type III: $14-16 \times 6.5-7 \mu\text{m}$ « *O. sancta-helena* »

17. Apothecia high, deep, dark-coloured, brown-grey to blackish brown, with purplish tinges; spores type III: 13-16 × 6-7 μm *O. umbrina* « gr. 2 »
17. External surface grey-brown (*terre d'ombre*), with ± visible purplish tinges, drying in yellowish brown-grey; hymenium reddish brown; spores type III: 13-15 (16) × 6-7 μm *O. umbrina* « gr. 1 »
17. External surface brown-grey, furfuraceous; hymenium dark brown; apothecia typically mouse ear-shaped; spores type III: 11-13 × 7-7.5 μm. Under *Picea abies*..... *O. myosotis*
17. Apothecia clustered, substipitate; outside greyish brown to sepia; hymenium paler; spores type II: 18-20 × 10-11 μm..... *O. platyspora*

Insufficiently known taxa

Otidea cinerascens Velen., *Novit. mycol. noviss.*, p. 152 (1947).

Otidea nannfeldtii Harmaja, *Karstenia*, 15, p. 31 (1976).

Otidea pusilla Rahm, *Schweiz. Z. Pilzk.*, 36 (3), p. 35 (1981), inval. (? = *O. fusconigra* Jamoni).

Excluded taxa

Otidea auriculariiformis Henn., *Hedwigia*, 36 (4), p. 232 (1897).

The microscopic features of the original description let us think that it isn't an *Otidea*.

Otidea austica (Pers.) Bonorden, *Handb. Allgem. Mykol.*, p. 205 (1851).

Basionym: *Peziza austica* Pers., *Observ. mycol.*, 1, p. 27 (1796).

Otidea cochleata (L. : Fr.) Fuckel, *Jahrb. Nass. Ver. Naturk.*, 23-24, p. 329 (1870).

Basionym: *Peziza cochleata* L., *Spec. Pl.*, 2, p. 1181 (1753).

This taxon was interpreted in various ways during the past time. The most collections identified under this name have to be related to *O. umbrina* s.l. or *O. bufonia*.

Otidea violacea A. L. Smith & Ramsbottom, *Trans. Br. mycol. Soc.*, 5, p. 237 (1916).

The type has been revised in 1932 by Nannfeldt; it's a *Peziza* species.