

# Compiled information for the suggested fungi

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## Legend

The information on the following pages are based on answered questionnaires from mycologist in each country (see page 12) and the original proposal to the Bern Convention (document T-PVS (2001) 34). The green map shows where each fungus have been recorded after 1980. This map possibly gives a more appropriate picture of the distribution and occurrence than the figures in the table. The red map shows in which county each fungus is red-listed and where it has been recorded including findings also before 1980.

## Natura 2000 habitats

Habitat types from which each ECCF fungus is reported from the individual countries. The most important habitats are in bold.

## Status in Europe

The total number of known localities, and the number of post 1980 localities, is reported.

## Red List categories

Definitions vary slightly between countries due to the use of IUCN reference of different date (Table 4; see [www.redlist.org](http://www.redlist.org) and [www.iucn.org](http://www.iucn.org); Currently in use are the IUCN 2001 Categories and Criteria 3.1)

Revised IUCN criteria 1994 and 2001; EX=Extinct, RE=Regionally Extinct (introduced 2000), CR=Critically Endangered, EN=Endangered, VU=Vulnerable, NT=Near Threatened, DD=Data Deficient and LC=Least Concern.

IUCN criteria prior 1994; Ex=Extinct (0), E=Endangered (1), V=Vulnerable (2), R=Rare (3) and CD=Care demanding (4). I=Indeterminate, data deficient but likely threatened (used by Poland).

## Protected areas

Number of localities (post 1980) located within protected areas and when appropriate, Natura 2000 areas. Using these figures, the percentage of protected localities was calculated. Countries delivering estimates are indicated in Table 2. All numerals are real figures, except those from France and Germany, which are estimates. From Finland, the figures are estimates based on the number of observations. In the case of Italy, figures were only known for a portion of the localities.

# *Amanita friabilis* (P. KARST.) BAS



Recorded from 19 countries

124 localities in Europe;  
not known outside Europe

Red-listed in 11 countries

Major habitat: Alluvial forest with  
*Alnus* (91EO)

30 % of localities in protected /  
Natura 2000 areas

## Brief description

A small amanita with grey cap and ash-grey patches. Stipe with basal swelling, sometimes lacking volva.

## Habitat

Mycorrhizal with alder (*Alnus glutinosa*, *A. incana*, *A. crispa*) in alder-swamps (*Alnion*, *Alno-Padion*), possibly also with *A. viridis* in the subalpine zone of Central Europe.

## Uses

None.

## Threat

Drainage of wetlands, eutrophication of surface-water, deforestation, planting of other tree species (mainly *Populus* and *Picea*).

Popular name	
Catalan	pentinella de vern
Dutch	elzeamaniet.
English	fragile amanita
Finnish	lepänkärpässieni.
French	amanite des aulnes
German	erlen-scheidenstreifling
Swedish	alflugsvamp

## NATURA 2000 HABITATS

Code	Habitat type	Austria	Belgium	Croatia	Czech Republic	Estonia	Finland	France	Germany	Italy	Latvia	Portugal	Slovenia	Spain	Sweden	Switzerland	United Kingdom
6310	Dehesas with evergreen <i>Quercus</i> spp.											x					
9010	Alluvial forests with <i>Alnus</i> & <i>Fraxinus</i>		x			x		x									
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>			x				x									
9080	Fennoscandian deciduous swamp woods				x				x		x						
91EO	Alluvial forests with <i>Alnus</i> & <i>Fraxinus</i>	x	x	x	x				x	x	x	x	x	x	x	x	x

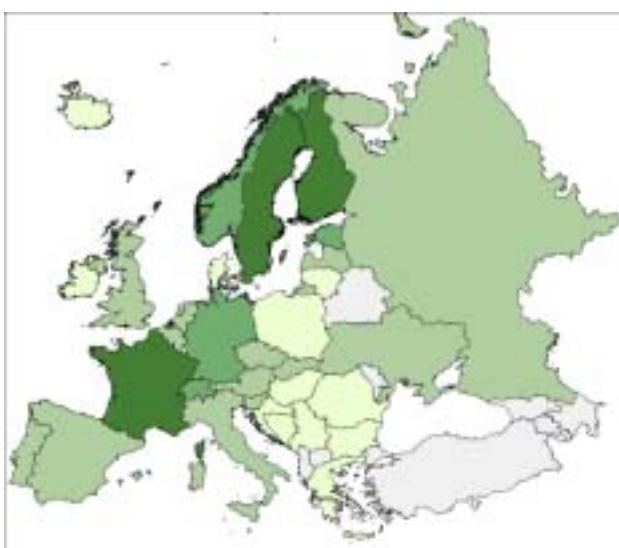
## References

- Reid, D.A. 1987. Not. Roy. Bot. Garden Edinburgh 44(3) : 505  
 Fraiture, A. 1993. Les *Amanitopsis* d'Europe. Op. Bot. Belg. 5 : 101-103  
 Larsson,K.H. (ed.)1997. Rödlistade svampar i Sverige – Arifakta. [Swedish Red Data Book of Fungi 1997]: 21.  
 Corriol. 1999. Bull. Soc. Mycol. Fr. 115(2) : 205-208

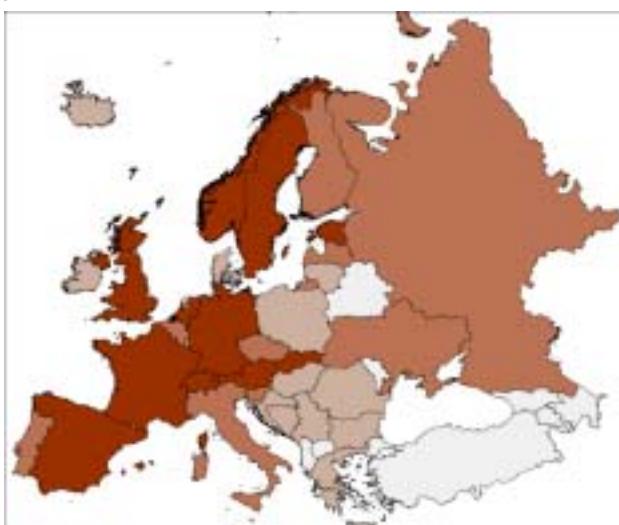
# STATUS IN EUROPE

**AMANITA FRIABILIS**  
 NUMBER OF LOCALITIES

■ 16 to 50  
■ 6 to 15  
■ 1 to 5  
■ NOT PRESENT  
■ NO DATA


**AMANITA FRIABILIS**  
 RED LIST STATUS

■ REDLISTED  
■ NOT REDLISTED  
■ NOT PRESENT  
■ NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia	1?	0			
Austria	3	3	Cd	0	2	Cyprus					
Belgium	2	2		0	2?	Czech Republic	4	n.d.			
Denmark				5	7	Estonia	6	6	NT	3	3
Finland	29	25		2	8	Hungary					
France	25	20	EN	2	8	Iceland					
Germany	20	15	EN	8		Latvia	1	1		0	
Greece						Lithuania					
Italy	2	2				Malta					
Luxemburg						Moldavia					
Netherlands	3	2	V	0	0	Norway	8	8	V		
Portugal	1	1		0	0	Poland					
Republic of Ireland						Romania					
Spain	1	1	CR	0	1	Slovakia - PbL	2	n.d.	VU		
Sweden	33	27	NT		6	Slovenia	1	1			
United Kingdom	4	4	EN	0		Switzerland	8	6	CR		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine	p	0			

# *Amylocystis lapponica* (ROMELL) BONDARTSEV & SINGER



Recorded from 12 countries

1045 known localities in Europe;  
rare in Russia, Siberia and USA

Red-listed in 7 countries

Major habitat: Western taiga (9010)

38 % of localities in protected /  
Natura 2000 areas

## Brief description

A medium-sized polypore with annual, soft fruitbodies with a strong and distinctive odour.

## Habitat

Saprotrophic on old dead logs and trunks of spruce (*Picea*) in virgin coniferous forests.

## Uses

None.

## Threat

Loss of virgin forests caused by forestry.

Popular name	
Finnish	pursukääpä
French	polypore lapon
German	lappländischer saftporling
Swedish	lappticka

## NATURA 2000 HABITATS

Code	Habitat type	Bulgaria	Estonia	Finland	Italy	Slovenia	Sweden
9010	Western taiga	x	x	x			x
9410	Acidophilous <i>Picea</i> forest of the montane to the alpine levels					x	
9420	Alpine <i>Larix decidua</i> and/or <i>Pinus cembra</i> forests				x		
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>			x			x

## References

- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 27. ArtDatabanken, SLU, Uppsala
- Kotiranta, H. & Niemelä, T. 1996. Uhanalaiset kävävät Suomessa (Threatened polypores in Finland): 29-30. Oy Edita Ab, Helsinki.

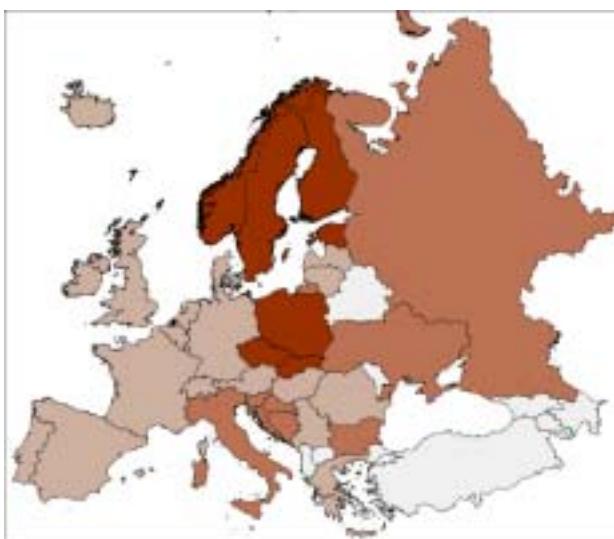
# STATUS IN EUROPE

**AMYLOCYSTIS LAPPONICA**  
 NUMBER OF LOCALITIES

- 51 to 1 500
- 16 to 50
- 1 to 5
- NOT PRESENT
- NO DATA


**AMYLOCYSTIS LAPPONICA**  
 RED LIST STATUS

- REDLISTED
- NOT REDLISTED
- NOT PRESENT
- NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia - PbL	1	1		1	
Austria						Cyprus					
Belgium						Czech Republic - PbL	1	n.d.	CR		
Denmark						Estonia	1	1	EN	1	
Finland	280	252	VU	189	189	Hungary					
France						Iceland					
Germany						Latvia					
Greece						Lithuania					
Italy	1	1				Malta					
Luxemburg						Moldavia					
Netherlands						Norway	22	21	V		
Portugal						Poland	1	0	E	1	
Republic of Ireland						Romania					
Spain						Slovakia	1	n.d.	VU	1	
Sweden	815	767	NT		200	Slovenia	1	1			
United Kingdom						Switzerland					
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria	2	1		1		Ukraine	p				

# *Antrodia albobrunnea* (ROMELL) RYVARDEN



Recorded from 8 countries

397 localities in Europe;  
northern circumpolar

Red-listed in 5 countries

Major habitat: Western taiga (9010)  
coniferous forests on, or connected  
to, glaciofluvial eskers (9060)

58 % of localities in protected /  
Natura 2000 areas

## Brief description

A perennial, crust-like polypore, about hand-sized, corky,  
with a pleasant smell of dried apples.

## Habitat

On very old *Pinus* logs and trunks in old-growth forests on  
oligotrophic soils.

## Uses

None.

## Threat

Loss of pine dominated old-growth forests and old trees  
due to forestry.

Popular name	
Finnish	keltarihmakääpä
French	tramète blanc et brun
German	weissbraune tramete
Swedish	fläckporing

## NATURA 2000 HABITATS

Code	Habitat type	Finland	France	Italy	Lithuania	Spain	Sweden
9010	Western taiga	x			x		x
9060	Coniferous forests on, or connected to, glaciofluvial eskers	x			x		x
9410	Acidophilous picea forest of the montane to the alpinelevels		x				
9535	Mediterranean pine forest with endemic black <i>Pinus</i>			x		x	

## References

- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 31. ArtDatabanken, SLU, Uppsala
- Kotiranta, H. & Niemelä, T. 1996. Uhanalaiset kävävät Suomessa (Threatened polypores in Finland): 59-60. Oy Edita Ab, Helsinki.

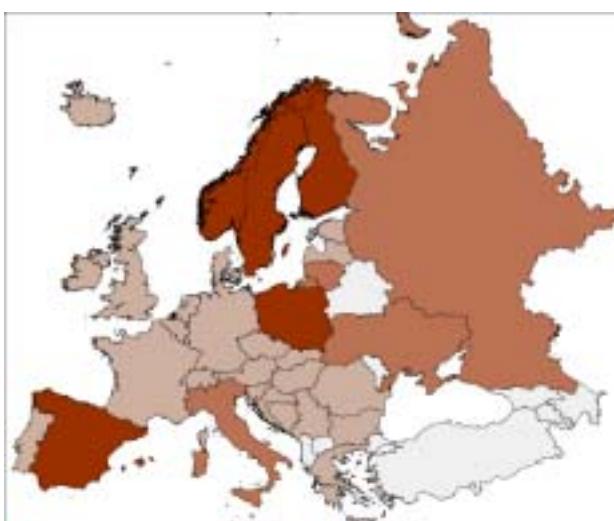
## STATUS IN EUROPE

**ANTRODIA ALBOBRUNNEA**  
NUMBER OF LOCALITIES

■	51 to 1 500
■	16 to 50
■	1 to 5
■	NOT PRESENT
■	NO DATA

**ANTRODIA ALBOBRUNNEA**  
RED LIST STATUS

■	REDLISTED
■	NOT REDLISTED
■	NOT PRESENT
■	NO DATA



Country	No of localities in					Country	No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports n.d. = no recent data p = present PbL = protected by law						Croatia					
EU15 countries						Cyprus					
Austria						Czech Republic					
Belgium						Estonia					
Denmark						Hungary					
Finland	200	180	NT	137	148	Iceland					
France						Latvia					
Germany						Lithuania	8	n.d.			
Greece						Malta					
Italy	1?	n.d.				Moldavia					
Luxemburg						Norway	32	20	Cd		
Netherlands						Poland	1	0	R	1	
Portugal						Romania					
Republic of Ireland						Slovakia					
Spain	2	2	EN	0	0	Slovenia					
Sweden	232	195	VU		70	Switzerland					
United Kingdom						Turkey					
EU13 and remaining European Bern Convention countries						Ukraine	p				
Bulgaria											

# *Armillaria ectypa* (Fr.) EMEL.



Recorded from 12 countries

57 localities in Europe;  
also recorded in Japan

Red-listed in 10 countries

Major habitat: Alkaline fens (7230),  
Active raised bogs (7110)

46 % of localities in protected /  
Natura 2000 areas

## Brief description

A fairly large agaric with brown, squamulose pileus, easily distinguished from related species by the lack of a ring, and typically growing solitary or in loose groups and occurrence in bogs, often amongst Sphagnum.

## Habitat

Probably saprotrophic in peat bogs and fens, usually among living Sphagnum.

## Uses

None.

## Threat

Changes in groundwater regimes in and around bogs, eutrophication of groundwater, peat digging.

Popular name	
Danish	ringløs honningsvamp
Dutch	moerashoningzwam.
English	marsh honey fungus
Finnish	nevamesisieni
French	armillaire des marais
German	weissbraune trame
Swedish	kärrhonungsskvil

## NATURA 2000 HABITATS

Code	Habitat type	Austria	Belgium	Czech Republic	Denmark	Finland	France	United Kingdom	Sweden	Switzerland
6410	Calcareous fens with <i>Carex lasiocarpa</i>								x	
7110	Active raised bogs	x	x				x			
7130	Blanket bog			x			x	x		
7140	Transition mires and quaking bogs			x		x	x			
7150	Depressions on peat substrates			x						
7160	Fennoscandian mineral-rich springs and springfens				x	x				
7210	Semi-natural tall herb humid meadow				x					x
7220	Petrifying spring with tufa formation			x		x				
7230	Alkaline fens			x	x			x	x	
7310	Aapa mires							x	x	

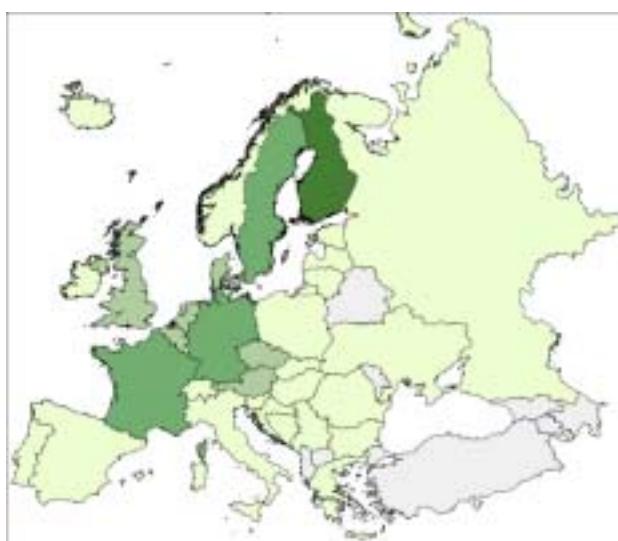
## References

- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 39. ArtDatabanken, SLU, Uppsala
- Termorshuizen, A.J. in Bas, C. et al. 1995. Flora Agaricina Nederlandica 3: 38-39. Rotterdam, Brookfield.

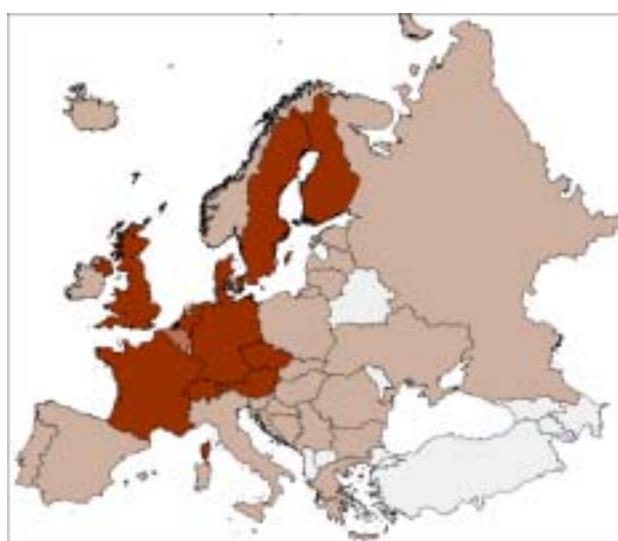
## STATUS IN EUROPE

ARMILLARIA ECTYPA  
NUMBER OF LOCALITIES

16 to 50  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA

ARMILLARIA ECTYPA  
RED LIST STATUS

REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia					
Austria	1	1	E	0	0	Cyprus					
Belgium	1	1		1	1	Czech Republic - PbL	3	n.d.	EN		
Denmark	5	2	E	1		Estonia					
Finland	30	17	VU	3	3	Hungary					
France	15	12	EN	5	6	Iceland					
Germany	15	10	CR	9		Latvia					
Greece						Lithuania					
Italy						Malta					
Luxemburg						Moldavia					
Netherlands	3	2	V	1	1	Norway					
Portugal						Poland	1	0			
Republic of Ireland						Romania					
Spain						Slovakia					
Sweden	12	9	NT		3	Slovenia					
United Kingdom	5	3	VU	2		Switzerland	1	0	Ex		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# *Boletopsis grisea* (PECK) BONDARTSEV & SINGER



Recorded from 15 countries

254 localities in Europe;  
also in boreal parts of  
Asia and North America

Red-listed in 5 countries

Major habitat: Western taiga (9010)

16 % of localities in protected /  
Natura 2000 areas

## Brief description

Medium-sized to rather large, terrestrial polypore with stipitate, annual, fleshy fruitbodies in grey colours.

## Habitat

Mycorrhizal with *Pinus sylvestris* in pine dominated forests with lichens or Ericaceae on very poor, acidic soils.

## Uses

None.

## Threat

Deforestation of oligotrophic pine forests; air pollution, i.e. nitrogen deposition; use of fertilisers and liming to enlarge timber production.

Popular name	
Catalan	mariner
Finnish	sudenkääpä
French	faux-bolet gris
German	grauer russporling
Swedish	tallgråticka

## NATURA 2000 HABITATS

Code	Habitat type	Estonia	Finland	Spain	Sweden	Switzerland
9010	Western taiga	x	x		x	
9410	Acidophilous <i>Picea</i> forest of the montane to the alpinelevels		x			x
9060	Coniferous forests on, or connected to, glaciofluvial eskers		x		x	
9430	Subalpine and montane <i>Pinus uncinata</i> forests			x		

## References

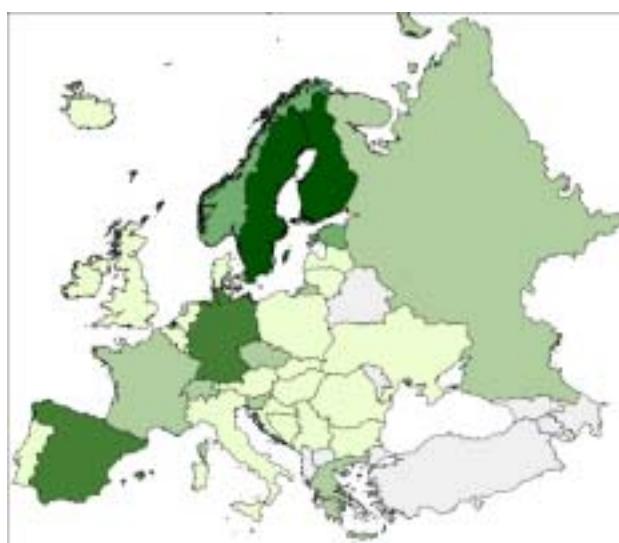
- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 48. ArtDatabanken, SLU, Uppsala
- Niemelä, T. & Saarenoksa, R. 1989. On Fennoscandian polypores 10. *Boletopsis leucomelaena* and *B. grisea* described and illustrated. Karstenia 29: 12-28.

**Taxonomic note:** *Boletopsis grisea* has been confused in the past with the related species *B. leucomelaena* (Pers.) Fayod. *B. leucomelaena* grows mostly associated with *Picea* and has a more southern distribution.

## STATUS IN EUROPE

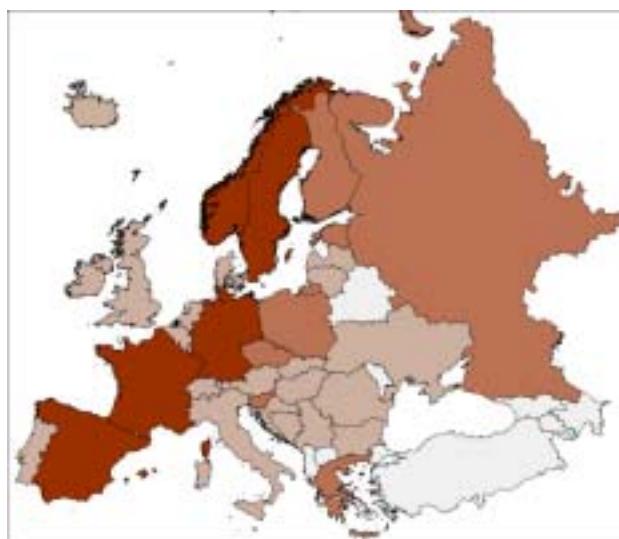
**BOLETOPSIS GRISEA  
NUMBER OF LOCALITIES**

51 to 1500  
 15 to 50  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA



**BOLETOPSIS GRISEA  
RED LIST STATUS**

REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic	35				
Denmark	3	0				Estonia	16	7			2
Finland	90	81				Hungary					
France	10	5	EN			Iceland					
Germany	20	20	EN			Latvia					
Greece	1	1				Lithuania					
Italy	<15?	0				Malta	1	1		1	
Luxemburg						Moldavia					
Netherlands						Norway	10	9	Cd		
Portugal						Poland	p	0			
Republic of Ireland						Romania					
Spain	27	24	VU		6	Slovakia					
Sweden	124	101	NT			Slovenia - PbL	3	3			
United Kingdom						Switzerland	2	2			
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# *Boletus dupainii* BOUDIER



Recorded from 11 countries

96 known localities in Europe,  
recently recorded in USA

Red-listed in 6 countries

Major habitat: Medio-European  
limestone beech forests (9150)

41 % of localities in protected /  
Natura 2000 areas

## Brief description

A very striking bolete with a smooth, bright blood-red, shiny lacquered-looking cap and flesh changing from pale yellow to blue.

## Habitat

Mycorrhizal with frondose trees in warm, calcareous woods (*Castanea*, *Fagus*, *Quercus*).

## Uses

Indicated by some authors as edible, by others as suspect or slightly poisonous. In any case not harvested on a large scale and without commercial value.

## Threat

Deforestation, coniferous plantations, forest fires.

Popular name	
Catalan	mataparent vermell mataparent de Dupain
English	Dupain's bolete
French	bolet de Dupain
German	blutroter hexenröhrling

## NATURA 2000 HABITATS

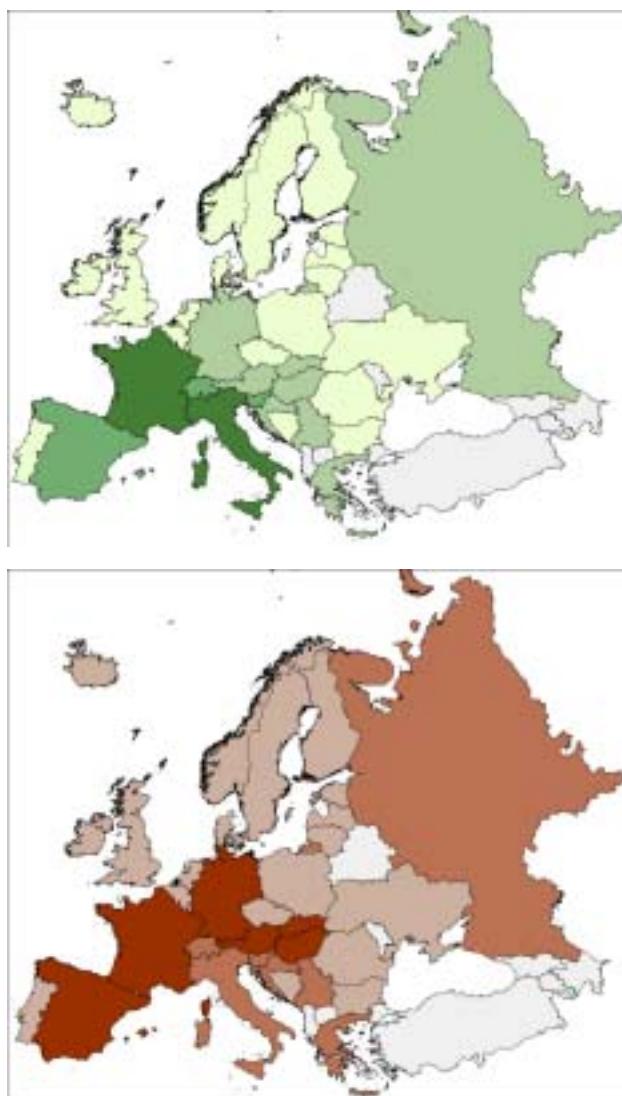
Code	Habitat type	Austria	Croatia	France	Germany	Italy	Slovenia	Switzerland
9150	Medio-European limestone beech forests of the Cephalanthero-Fagion			x	x		x	
9160	Medio-European oak or oak-hornbeam forests	x						x
9170	Gilio-carpinetum oak-hornbeam forests					x		
9330	<i>Quercus suber</i> forests					x		
9340	<i>Quercus ilex</i> and <i>Q. rotundifolia</i> forests		x			x		
91G0	Pannonic woods with <i>Quercus petraea</i> and <i>Carpinus betulus</i>		x					
91H0	Pannonic woods with <i>Quercus pubescens</i>							

## References

Engel, H., Kriegsteiner, G.J., Dermek, A. & Watling, R. 1983. Dickröhrlinge, Die Gattung *Boletus* in Europa: 87-90. H. Engel, Weidhausen

Breitenbach, J. & Kränzlin, F. 1991. Pilze der Schweiz 3 : 54, pl. 7. Mykologia, Luzern.

## STATUS IN EUROPE



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
EU15 countries						Croatia - PbL	5	4		0	
Austria	1	1	Cd	0	0	Cyprus					
Belgium						Czech Republic					
Denmark						Estonia					
Finland						Hungary	2	2	E		
France	50	35	EN	4	10	Iceland					
Germany	8	5	CR	2		Latvia					
Greece	3	3			1	Lithuania					
Italy	20	19		2	1	Malta					
Luxemburg						Moldavia					
Netherlands						Norway					
Portugal						Poland					
Republic of Ireland						Romania					
Spain	14	14	VU	4	10	Slovakia - PbL	<10	n.d.	EN		
Sweden						Slovenia - PbL	7	7			
United Kingdom						Switzerland	6	6			
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# *Bovista paludosa* Lév.



Recorded from 17 countries

190 localities in Europe;  
known from Asia and  
northern North America

Red-listed in 13 countries

Major habitat: alkaline Fen (7230)

49 % of localities in protected /  
Natura 2000 areas

## Brief description

A small, pale, subglobose to pyriform puffball, often more or less stipitate, characterised by its occurrence in bogs.

## Habitat

Saprotrophic amongst mosses in calcareous marshes (fens).

## Uses

None.

## Threat

Draining of wetlands, peat digging, decreased mowing of fens.

Popular name	
English	fen bovist
Finnish	lettotuhkelo.
French	boviste des marais
German	moor-bovist
Swedish	sumpäggsvamp

## NATURA 2000 HABITATS

Code	Habitat type	Austria	Czech Republic	Estonia	Finland	France	Germany	Lithuania	Poland	Romania	Sweden	Switzerland	United Kingdom
6410	Molinia meadows on calcareous, peaty or clayey-silt-laden soils		x							x			
7110	Active raised bogs	x										x	
7140	Transition mires and quaking bogs		x		x								
7160	Fennoscandian mineral-rich springs and springfens			x							x		
7210	Calcareous fens									x		x	
7230	Alkaline fens			x	x	x	x	x	x	x			x
7240	Alpine pioneer formations of <i>caricion bicoloris-atrofuscae</i>			x		x							

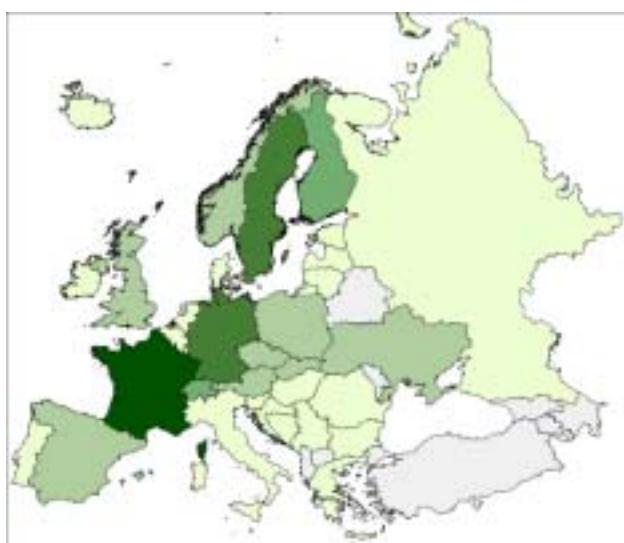
## References

- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. (Swedish Red Data Book of Fungi 1997): 62. ArtDatabanken, SLU, Uppsala
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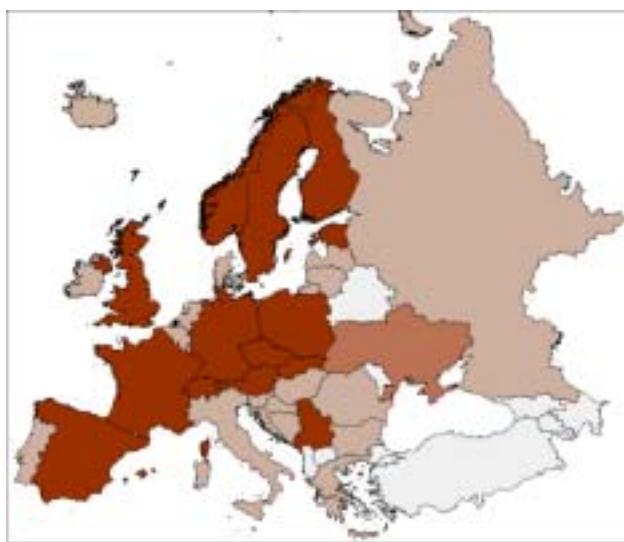
# STATUS IN EUROPE

**BOVISTA PALUDOSA**  
 NUMBER OF LOCALITIES

- 11 to 1500
- 10 to 50
- 8 to 15
- 1 to 5
- NOT PRESENT
- NO DATA


**BOVISTA PALUDOSA**  
 RED LIST STATUS

- RELISTED
- NOT RELISTED
- NOT PRESENT
- NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia					
Austria	p	n.d.	R			Cyprus					
Belgium						Czech Republic - PbL	10	n.d.	EN		
Denmark						Estonia	3	0	NT		
Finland	19	10	VU	4	6	Hungary					
France	>100	80	VU	8	24	Iceland					
Germany	55	35	CR	30		Latvia					
Greece						Lithuania	1	n.d.			
Italy	<3	n.d.				Malta					
Luxemburg						Moldavia					
Netherlands						Norway	3	1	R		
Portugal						Poland	7	2	V	1	
Republic of Ireland						Romania	2	0		1	
Spain	1	1	VU	0	1	Slovakia	1	n.d.	NT		
Sweden	90	49	NT		20	Slovenia					
United Kingdom	5	2	CR	1		Switzerland	12	10	EN		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine	p				

# *Cantharellus melanoxeros* DESM.: FR.



## Brief description

A rather small to medium sized chanterelle with a yellowish cap and stipe, contrasting with the pinkish to violaceous, underside; entire fruitbody blackening when bruised.

## Habitat

Mycorrhizal with *Fagus* and *Quercus* in deciduous forests on rich, calcareous soils.

## Uses

Edible and tasty, often collected when encountered by mushroom pickers. Occasionally sold on local markets, but commercial value low.

## Threat

Deforestation, changed land use, coniferous plantations, possibly air pollution.

Recorded from 17 countries

398 localities in Europe;  
not known outside Europe

Red-listed in 9 countries

Major habitat: *Asperulo-Fagetum*  
beech-forests (9130)

44 % of localities in protected /  
Natura 2000 areas

Popular name	
Catalan	rossinyolic ennegrit
Danish	sværtende kantarel
English	blackening chantarelle
Finnish	nuhruvahvero
French	chanterelle noircissante
German	schwärzender pfifferling
Swedish	svartnande kantarell

## NATURA 2000 HABITATS

Code	Habitat type	Austria	Denmark	Estonia	Finland	France	Germany	Luxembourg	Slovenia	Sweden	Switzerland	United
9020	Fennoscandian hemiboreal natural old broad-leaved deciduous forests			x	x					x		
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>				x							
9070	Fennoscandian wooded pastures									x		
9120	Atlantic acidophilous beech forests											
9130	<b>Asperulo-fagetum beech forests</b>	x					x					
9150	medio-european limestone beech forests of the cephalanthero-fagion		x				x		x			
9160	sub-Atlantic and Medio-European oak forests						x					x
9170	Galio-carpinetum oak-hornbeam forests	x				x			x		x	
91AO	Old sessile oak woods					x		x				x
9110	Luzulo-Fagetum Beech Forest					x	x	x		x		
9130	Asperulo-Fagetum Beech forest					x	x			x	x	x

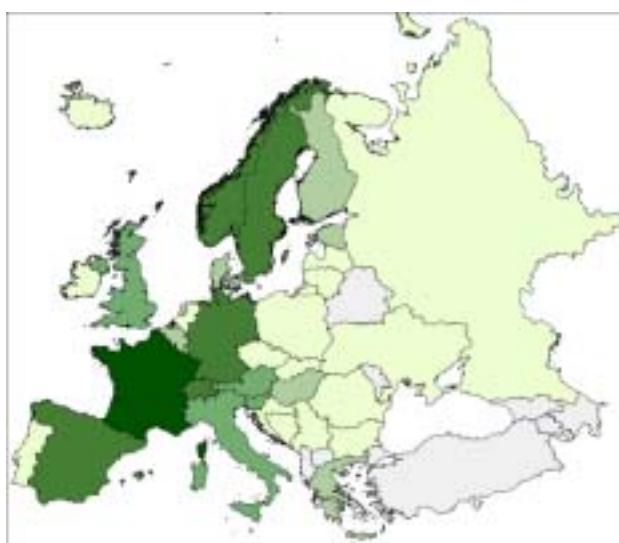
## References

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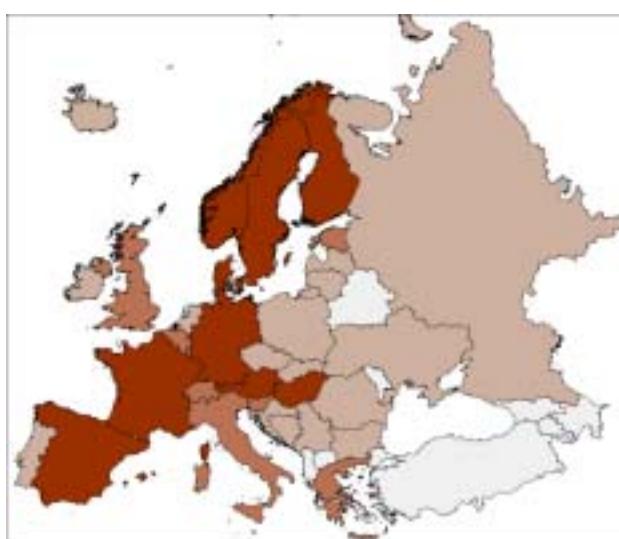
# STATUS IN EUROPE

**CANTHARELLUS MELANOXEROS**  
 NUMBER OF LOCALITIES

■ 51 to 1566  
■ 16 to 50  
■ 6 to 15  
■ 1 to 5  
■ NOT PRESENT  
■ NO DATA


**CANTHARELLUS MELANOXEROS**  
 RED LIST STATUS

■ RELISTED  
■ NOT RELISTED  
■ NOT PRESENT  
■ NO DATA



Country	No of localities in				Country	No of localities in			
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas
<i>= no reports        n.d. = no recent data        p = present        PbL = protected by law</i>									
EU15 countries					Croatia				
Austria	7	7	R	0	Cyprus				
Belgium	9	5		0	Czech Republic				
Denmark	4	4	E		Estonia	1	1		1
Finland	5	2	NT	1	Hungary	3	3	E	
France	>150	150	VU	15	Iceland				
Germany	70	50	EN	15	Latvia				
Greece	2	2			Lithuania				
Italy	22	14			Malta				
Luxemburg	2	2			Moldavia				
Netherlands					Norway	49	49	V	
Portugal					Poland				
Republic of Ireland					Romania				
Spain	27	27	VU	3	Slovakia				
Sweden	33	33	VU		Slovenia	8	8		
United Kingdom	6	6		2	Switzerland	35	35		
EU13 and remaining European Bern Convention countries									
Bulgaria					Turkey				
					Ukraine				

# Cortinarius ionochlorus MAIRE



Recorded from 8 countries

181 localities in Europe

Red-listed in 3 countries

Major habitat: *Quercus ilex* forests (9340)

53 % of localities in protected / Natura 2000 areas

## Brief description

A striking, medium sized agaric with olive green cap and yellow-green stipe with remains of a veil, contrasting with lilac lamellae, with characteristic odour.

## Habitat

Mycorrhizal with broad-leaved trees, mainly in thermophilous, undisturbed, evergreen deciduous forests, e.g. with *Quercus ilex* on calcareous soil; in Germany with *Fagus*.

## Uses

None.

## Threat

Deforestation, changed land-use, possibly nitrogen deposition and forest fires.

Popular name	
Catalan	cortinari verd
French	cortinaire vert et violet
German	violettblättriger klumpfuss
Spanish	Cortinario violeta y verde

## NATURA 2000 HABITATS

Code	Habitat type	Croatia	France	Germany	Italy	Portugal
6130	Dehesas with evergreen <i>Quercus</i> spp.					x
9130	Asperulo-Fagetum beech forests		x	x	x	
9150	Medio-european limestone beech forests of the cephalanthero-fagion	x	x			
9340	<i>Quercus ilex</i> forests	x	x		x	
91HO	Pannonic woods with <i>Quercus pubescens</i>	x				

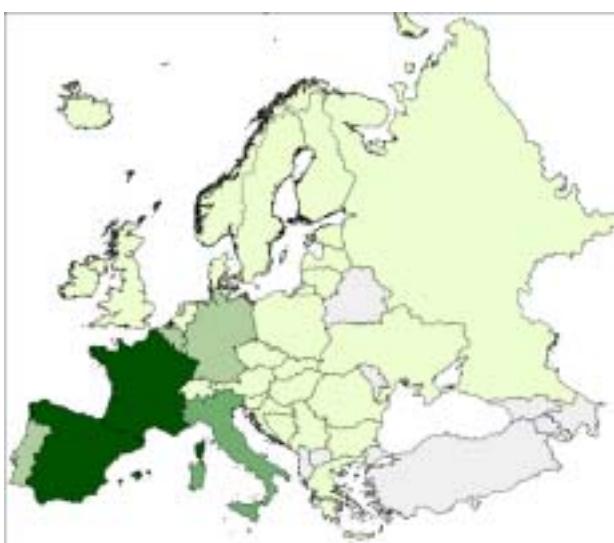
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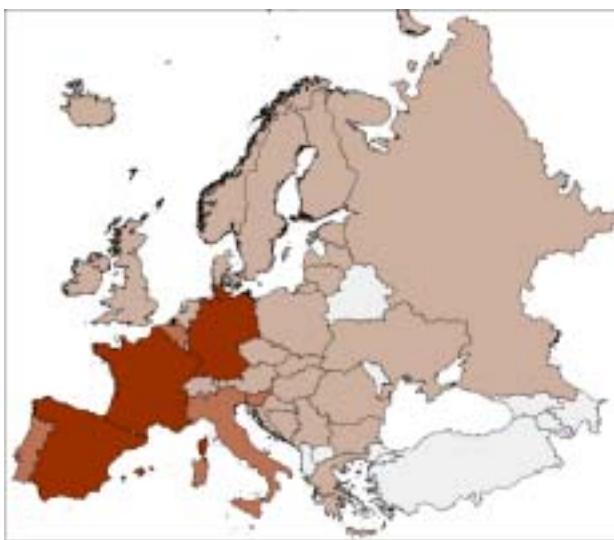
# STATUS IN EUROPE

**CORTINARIUS IONOCHLORUS**  
 NUMBER OF LOCALITIES

51 to 1500
6 to 15
1 to 5
NOT PRESENT
NO DATA


**CORTINARIUS IONOCHLORUS**  
 RED LIST STATUS

REDLISTED
NOT REDLISTED
NOT PRESENT
NO DATA



Country	No of localities in					Country	No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports n.d. = no recent data p = present PbL = protected by law						= no reports n.d. = no recent data p = present PbL = protected by law					
EU15 countries						Croatia	1	0			
Austria						Cyprus					
Belgium	2	1				Czech Republic					
Denmark						Estonia					
Finland						Hungary					
France	>100	100	VU	5	25	Iceland					
Germany	7	5	CR	3		Latvia					
Greece						Lithuania					
Italy	17	15		1	3	Malta					
Luxemburg						Moldavia					
Netherlands						Norway					
Portugal	2	2		0	0	Poland					
Republic of Ireland						Romania					
Spain	59	58	VU	0	58	Slovakia					
Sweden						Slovenia	p				
United Kingdom						Switzerland					
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# *Entoloma bloxamii* (BERK. & BROOME) SACC.



Recorded from 24 countries

292 localities in Europe;  
also North-America and Asia

Red-listed in 15 countries

Major habitat: Semi-natural dry  
grasslands and scrubland faces on  
calcareous substrates (6210)

38 % of localities in protected / Natura  
2000 areas

## Brief description

A medium sized to rather large agaric, well-characterised by the blue pileus and stipe in combination with pink lamellae.

## Habitat

Saprotrophic in poor, old, unfertilised meadows and hayfields on calcareous, loamy soils.

## Uses

None.

## Threat

Discontinuing maintenance of habitat, agricultural improvement including addition of fertilisers, cessation of grazing or mowing, afforestation.

Popular name	
Danish	blå rødblad
Dutch	blauwe molenaarssatijzwaam
English	Bloxam's entoloma
French	entolome de Bloxam
German	blauer rötling
Swedish	blå rödskvilling

## NATURA 2000 HABITATS

### Code Habitat type

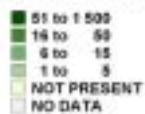
	Austria	Croatia	Denmark	Estonia	France	Germany	Lithuania	Luxembourg	Republic of Ireland	Slovenia	Spain	Sweden	Switzerland	United Kingdom
6120	Semi-natural dry grasslands and scrubland facies							x		x				
6150	Siliceous alpine and boreal grasslands										x		x	
6170	Alpine and subalpine calcareous grasslands	x	x	x	x	x		x	x	x	x	x	x	x
6210	Seminatural dry grassland and scrubland facies on calcareous substrates	x	x	x	x	x		x	x	x	x	x	x	x
6230	Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas		x			x		x			x		x	
6240	Sub-pannonian steppic grasslands					x								
6270	Fennoscandian lowland species-rich dry to mesic grasslands										x			
6410	<i>Molinia</i> meadows on calcareous, peaty or clayey soils												x	
6510	Lowland hay meadows	x									x		x	
6520	Mountain hay meadows	x									x		x	
6530	Fennoscandian wooded meadow										x		x	
9020	Fennoscandian hemiboreal natural old broad-leaved deciduous forests					x					x		x	
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>					x					x			
9070	Fennoscandian wooded pasture										x			
9330	<i>Quercus suber</i> forests									x				
9340	<i>Quercus ilex</i> and <i>Q. rotundifolia</i> forests								x	x				

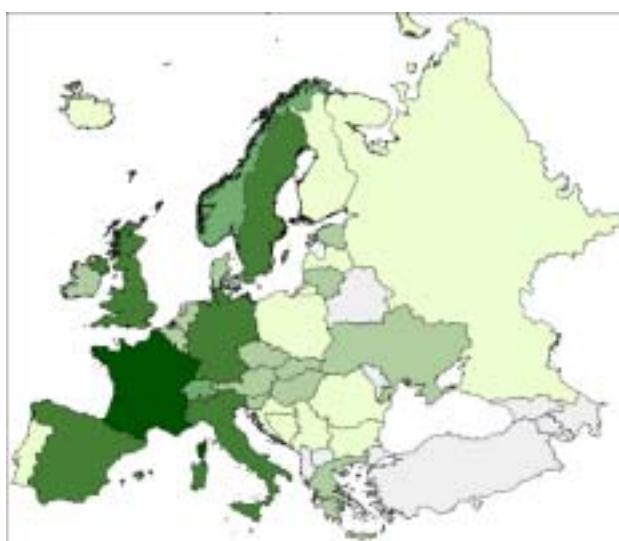
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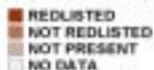
# STATUS IN EUROPE

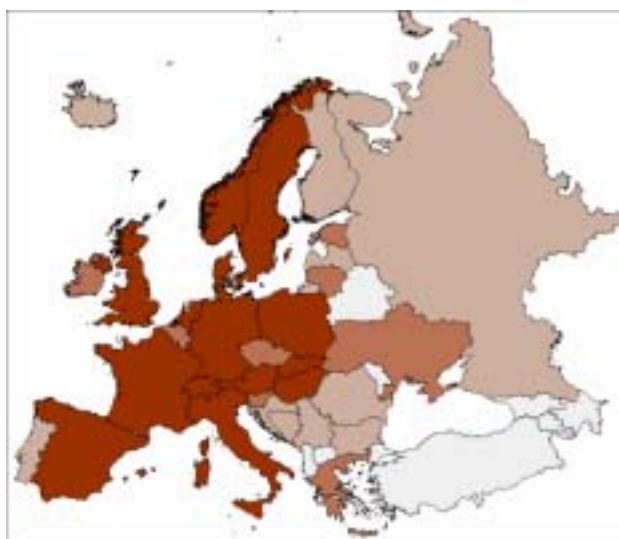
**ENTOLOMA BLOXAMII**  
NUMBER OF LOCALITIES


  
 51 to 1 500  
 19 to 50  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA



**ENTOLOMA BLOXAMII**  
RED LIST STATUS


  
 REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in					Country	No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
EU15 countries						Croatia	1	0			
Austria	3	2	V	0	1	Cyprus					
Belgium	6	3		0	3	Czech Republic	5	n.d.			
Denmark	4	4	E	2	1	Estonia	9	5		1	2
Finland						Hungary	2	2	R		
France	80	60	EN	15	15	Iceland					
Germany	50	40	VU	15		Latvia					
Greece	2	2			0	Lithuania	2	1			
Italy	29	23	yes	1	5	Malta					
Luxemburg	2	1	R			Moldavia					
Netherlands	8	5	R	1	1	Norway	11	11	E		
Portugal						Poland	1	0	I		
Republic of Ireland	5	4		3	3	Romania					
Spain	30	29	VU	3	18	Slovakia	2	n.d.	NT		
Sweden	56	34	VU		9	Slovenia	5	5			
United Kingdom	74	45	EN	15		Switzerland	18	15	EN		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine	p				

# ***Geoglossum atropurpureum* BATSCH: FR.**



Recorded from 12 countries

122 localities in Europe;  
also Macaronesian and North America

Red-listed in 9 countries

Major habitat: Seminatural dry  
grasslands and scrubland facies on  
calcareous substrates (6210)

34 % of localities in protected /  
Natura 2000 areas

## Brief description

A slender, clavate earth-tongue with purplish black colours.

## Habitat

Saprotrophic in old, unfertilised grasslands and grass-heath communities on acidic to subneutral, sandy and loamy soils, in pastures as well as mown grasslands; sometimes reported from forests and forest clearings.

## Uses

None.

## Threat

Discontinuing maintenance of habitat, agricultural improvement including addition of fertilisers, cessation of grazing or mowing, afforestation.

Popular name	
Danish	purpurfarvet jordtunge
Dutch	purperbruine aardtong
English	damp purple earth tongue
Finnish	violetinmusta maakieli
French	géoglosse pourpre-noir
German	schwarzrote erdzunge
Swedish	purpurbrun jordtunga

## NATURA 2000 HABITATS

### Code Habitat type

		Denmark	Estonia	Finland	France	Germany	Spain	Sweden	Switzerland	United Kingdom
2130	Fixed coastal dunes with herbaceous vegetation	x				x				x
2150	Atlantic decalcified fixed dunes (Calluno-Ulicetea)					x				
2310	Dry sand heaths with <i>Calluna</i> and <i>Genista</i>					x				
4030	European dry heaths				x					
6210	Seminatural dry grasslands and scrubland facies on calcareous substrates	x	x	x			x			
6230	species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas	x	x	x	x		x		x	
6410	Seminatural tall herb humid meadow							x	x	
6410	Molinia meadows on calcareous, peaty or clayey soils								x	
6510	Lowland hay meadows							x		
6520	Mountain hay meadows									
6530	Fennoscandian wooded meadows			x			x			
9330	<i>Quercus suber</i> forests					x				

## References

- Breitenbach, J. & Kränzlin, F. 1984. Pilze der Schweiz 1: 132, pl. 134. Mykologia, Luzern  
 Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. (Swedish Red Data Book of Fungi 1997): 236.  
 ArtDatabanken, SLU, Uppsala.

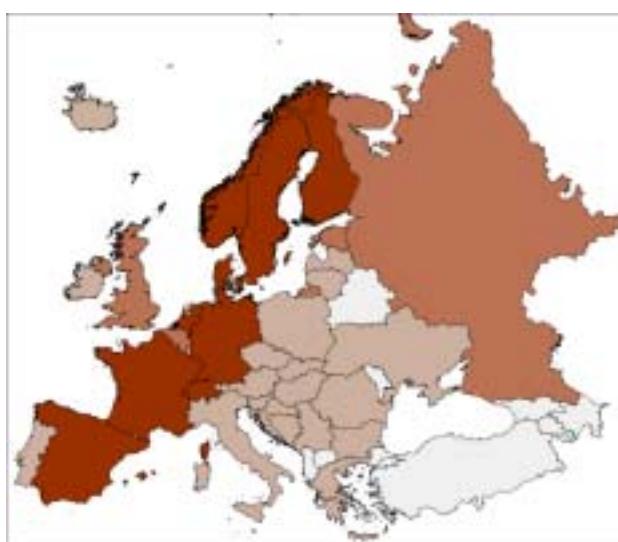
# STATUS IN EUROPE

**GEOGLOSSUM ATROPURPUREUM**  
 NUMBER OF LOCALITIES

16 to 50  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA


**GEOGLOSSUM ATROPURPUREUM**  
 RED LIST STATUS

RELISTED  
 NOT RELISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in					Country	No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		= no reports n.d. = no recent data p = present PbL = protected by law	Total no of localities known	No of localities known after 1980	Red List Category	protected areas
EU15 countries						Croatia					
Austria						Cyprus					
Belgium	4	1		0	1	Czech Republic					
Denmark	15	10	V	3	2	Estonia	3	3		3	1
Finland	16	9	EN	1	1	Hungary					
France	15	12	CR	2	2	Iceland					
Germany	7	7	CR	2		Latvia					
Greece						Lithuania					
Italy						Malta					
Luxemburg						Moldavia					
Netherlands	8	2	E	0	0	Norway	29	22	Cd		
Portugal						Poland					
Republic of Ireland						Romania					
Spain	3	3	EN	0	3	Slovakia					
Sweden	85	37	NT		10	Slovenia					
United Kingdom	13	12		3		Switzerland	4	4	CR		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# Gomphus clavatus (PERS.: FR.) GRAY



Recorded from 25 countries

955 localities in Europe;  
also recorded from Asia and North America

Red-listed in 17 countries

Major habitat: Acidophilous *Picea*forests of the  
montane to alpine levels (*Vaccinio – Piceetea*) (9410)  
and (9110 and 9130)

22 % of localities in protected / Natura 2000 areas

## Brief description

A highly characteristic fungus with fairly large, lilac-coloured, club-shaped fruitbodies with flattened apex and veined appearance below.

## Habitat

Mycorrhizal with coniferous trees (*Abies*, *Picea*) and with beech (*Fagus*) in mature coniferous and deciduous forests on calcareous and subneutral, loamy soils and clay, mainly in the montane and subalpine zones.

## Uses

Edible and tasty, often collected by mushroom pickers. Occasionally sold on local markets, but commercial value low.

## Threat

Loss and degradation of habitat due to cutting and forest management. Possibly eutrophication of forest soils.

Popular name	
Catalan	gots de vi
Danish	køllekanarel
English	Pig's Ear
Finnish	pölkysieni
French	chanterelle violette
German	schweinsohr
Swedish	violgubbe

## NATURA 2000 HABITATS

Code	Habitat type	Austria	Bulgaria	Czech Republic	Denmark	Estonia	Finland	France	Germany	Latvia	Lithuania	Luxembourg	Poland	Portugal	Romania	Slovenia	Spain	Sweden	Switzerland	United Kingdom
2270	Wooded dunes with <i>Pinus pinea</i> and/or <i>Pinus pinaster</i>												x							
9010	Western taiga					x	x			x	x						x			
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>					x	x			x	x						x			
9110	Luzulo-Fagetum beech forests			x	x						x						x			
9120	Atlantic acidophilous beech forests			x							x									
9130	Asperulo-feagetum beech forests	x						x	x										x	
9140	Medion European subalpine beech forest			x	x													x		
9150	Medio-European limestone beech			x	x					x						x		x		
9340	<i>Quercux ilex</i> forests															x	x			
9410	Acidophilous <i>Picea</i> forests of the montane to alpine levels		x								x		x	x	x		x			
9540	Mediterranean pine forest with endemic mesogean <i>Pinus</i>											x			x			x		

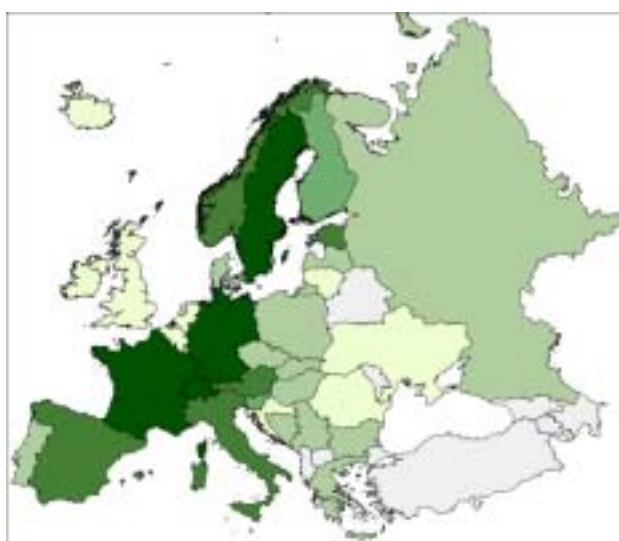
## References

- Breitenbach, J. & F. Kränzlin, Pilze der Schweiz 2: 368, pl. 480. 1986. Mykologia, Luzern  
Dähncke, R.M. 1993. 1200 Pilze: 1025. AT Verlag, Aarau  
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ArtDatabanken, SLU, Uppsala.

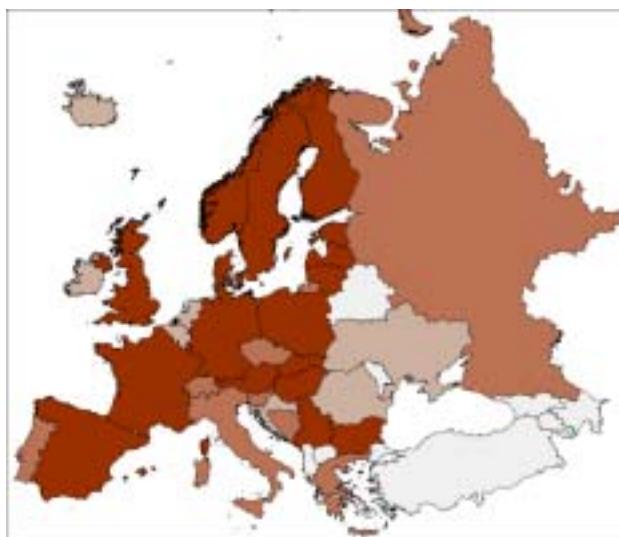
# STATUS IN EUROPE

**GOMPHUS CLAVATUS**  
 NUMBER OF LOCALITIES

- 51 to 1500
- 16 to 50
- 6 to 15
- 1 to 5
- NOT PRESENT
- NO DATA


**GOMPHUS CLAVATUS**  
 RED LIST STATUS

- REREDLISTED
- NOT REREDLISTED
- NOT PRESENT
- NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
<i>= no reports</i>						<i>= no reports</i>					
<i>n.d. = no recent data</i>						<i>n.d. = no recent data</i>					
<i>p = present</i>						<i>p = present</i>					
<i>PbL = protected by law</i>						<i>PbL = protected by law</i>					
EU15 countries						Croatia					
Austria	29	29	V	1	4	Cyprus					
Belgium						Czech Republic	8	n.d.			
Denmark	9	2	E			Estonia	22	21	VU	4	1
Finland	10	7	VU	1,75	1,75	Hungary	1	1	E		
France	>500	500	VU	50	50	Iceland					
Germany	60	60	EN	15		Latvia	5	5	E		
Greece	3	3			2	Lithuania	8	n.d.	E		
Italy	31	23		4	4	Malta					
Luxemburg	2	2	R			Moldavia					
Netherlands						Norway	>50	20	Cd		
Portugal	5	3		0	1	Poland	20	1	E	6	
Republic of Ireland	1	0				Romania	14	0		2	
Spain	38	37	EN	1	25	Slovakia - PbL	>10	n.d.	VU		
Sweden	204	132	NT		20	Slovenia - PbL	8	8			
United Kingdom	3	0	EN	1		Switzerland	>100	>100			
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria	3	1	V			Ukraine					

# *Hapalopilus croceus* (PERS.: FR.) DONK



Recorded from 24 countries

120 localities in Europe;  
known from North America

Red-listed in 11 countries

Major habitat: Sub-atlantic and medio-European oak  
or oak-hornbeam forests (9160)

61 % of localities in protected / Natura 2000 areas

## Brief description

A large, annual polypore, with striking orange colours and soft flesh.

## Habitat

A weak parasite on very old deciduous trees, surviving saprotrophically on dead trunks for many years. In most regions only growing on *Quercus* but also known from *Castanea* and *Robinia*.

## Uses

None.

## Threat

Felling of old oak trees, cutting of old stands of natural, deciduous forests.

Popular name	
Danish	safrangul poresvamp
English	orange polypore
Finnish	sahramikäpää
French	polypore safran
German	safrangelber weichporling
Swedish	saffransticka

## NATURA 2000 HABITATS

Code	Habitat type	Croatia	Czech Republic	Denmark	Estonia	France	Germany	Italy	Latvia	Lithuania	Poland	Portugal	Romania	Slovenia	Sweden	Switzerland
9020	Fennoscandian hemiboreal natural old broad-leaved deciduous forests				x					x					x	
9070	Fennoscandian wooded pasture					x									x	
9110	Luzulo-fagetum beech forest				x											
9120	Atlantic acidiphilous beech forest			x	x											
9130	Asperulo-fagetum beechforests			x	x											
9140	Medio-european subalpine beech woods with <i>Acer</i> and <i>Rumex arifolius</i>			x	x	x					x		x			
9160	Sub-Atlantic and Medio-European oak forests				x	x	x				x					
9170	Galio-carpinetum oak-hornbeam forests			x	x	x			x					x	x	x
9180	Tilio-Acerion froests of slopes, screens and ravins					x			x							
9190	Old acidiphilous oakwoods with <i>Quercus robur</i> on sandy plains					x							x			
9230	Galicio-Portuguese oak woods with <i>Quercus robur</i> and <i>Quercus pyrenaica</i>						x	x	x		x					
9260	<i>Castanea sativa</i> woods						x	x	x			x				
91EO*	Mixed ash-alder alluvial forests	x	x				x	x	x							
91FO	Ridarian mixed forests	x	x				x									
91GO	Pannonic woods with <i>Quercus petraea</i> and <i>Carpinus betulinus</i>	x														

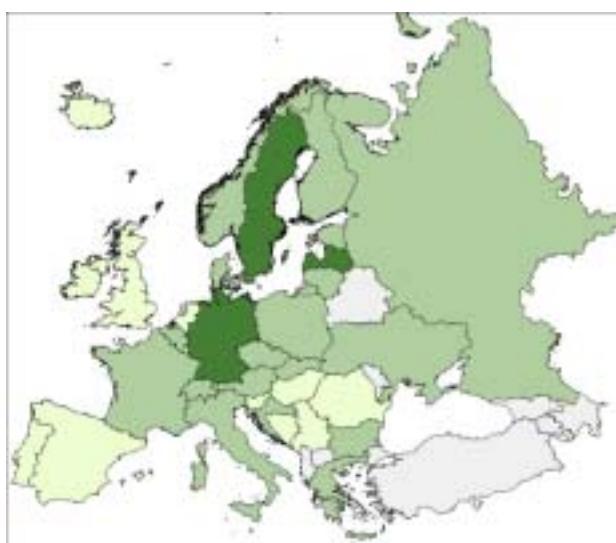
## References

- Jahn, H. 1979. Pilze die an Holz wachsen: 122-123. Baranek & Frost, Herford
- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 45. ArtDatabanken, SLU, Uppsala
- Ryvarden, L. & Gilbertson, R.L. 1993. European Polypores. Oslo 1993-94.

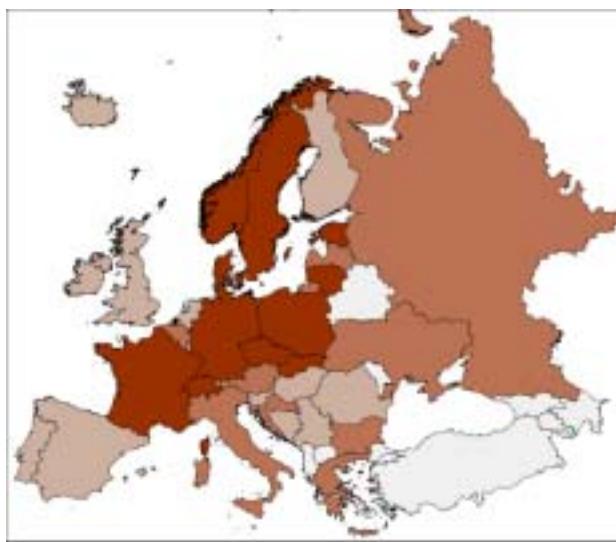
# STATUS IN EUROPE

**HAPALOPILUS CROCEUS**  
 NUMBER OF LOCALITIES

- 16 to 50
- 1 to 5
- NOT PRESENT
- NO DATA


**HAPALOPILUS CROCEUS**  
 RED LIST STATUS

- REDLISTED
- NOT REDLISTED
- NOT PRESENT
- NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia - PbL	2	1		1	
Austria	1	1		0	1	Cyprus	2				
Belgium	1	1		0	1?	Czech Republic - PbL	5				
Denmark	1	1	Ex			Estonia	2	2	CR		
Finland	1	1		1	0	Hungary	1	0		2	
France	2	2	CR	1		Iceland					
Germany	25	18	CR	12		Latvia - PbL	38	37		16	5
Greece	2	2			1	Lithuania	5	3	R	1	
Italy	1	1				Malta					
Luxemburg						Moldavia					
Netherlands						Norway	4	4	E		
Portugal	2	0				Poland	3	2	Ex		
Republic of Ireland						Romania	4	0		1	
Spain						Slovakia - PbL	2		VU		
Sweden - PbL	59	40	CR		25	Slovenia	<5				
United Kingdom						Switzerland	2	2	CR		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria	2	2				Ukraine	p				

# ***Haploporus odorus* (SOMMERF.: FR.) BONDARTSEV & SINGER**



Recorded from 5 countries

1586 localities in Europe;  
rare through Siberia to North America

Red-listed in 3 countries

Major habitat: Western taiga (9010)

15 % of localities in protected / Natura 2000 areas

## Brief description

A medium sized, thick, perennial, whitish polypore with very strong, characteristic smell of anise.

## Habitat

On old, large goat willows (*Salix caprea*) in mixed old forests, often close to moist depressions or along small brooks.

## Uses

None.

## Threat

Cutting of old *S. caprea* trees. Unfavourable conditions for novel establishment of goat willow mainly due to fire suppression.

Popular name	
English	Aniseed Polypore
Finnish	raidoantuoksukääpä
French	polypore odorant
German	wohlriechender weidenporling
Swedish	doftticka

## NATURA 2000 HABITATS

Code	Habitat type	Finland	Sweden
9010	Western taiga	x	x
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>	x	x
91DO	Bog woodland	x	

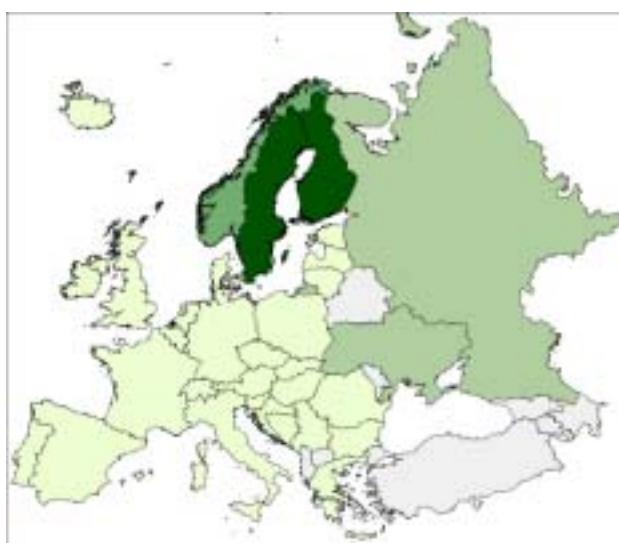
## References

- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 251. ArtDatabanken, SLU, Uppsala
- Kotiranta, H. & Niemelä, T. 1996. Uhanalaiset kävävät Suomessa (Threatened polypores in Finland): 48-49, pl. 13. Oy Edita Ab, Helsinki.

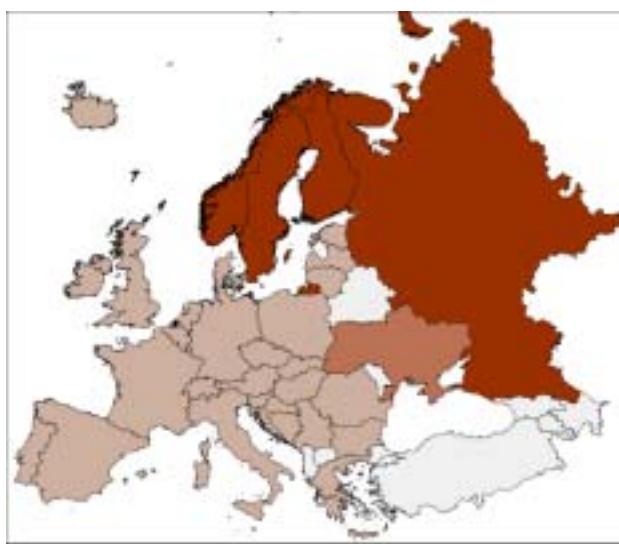
# STATUS IN EUROPE

**HAPLOPORUS ODORUS  
NUMBER OF LOCALITIES**

■ 51 to 1500  
■ 6 to 15  
■ 1 to 5  
■ NOT PRESENT  
■ NO DATA


**HAPLOPORUS ODORUS  
RED LIST STATUS**

■ REDLISTED  
■ NOT REDLISTED  
■ NOT PRESENT  
■ NO DATA



Country	No of localities in				Country	No of localities in				Country	No of localities in			
	Total no of localities	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas			
= no reports						= no reports								
n.d. = no recent data						n.d. = no recent data								
p = present						p = present								
PbL = protected by law						PbL = protected by law								
EU15 countries						Croatia								
Austria						Cyprus								
Belgium						Czech Republic								
Denmark						Estonia								
Finland	170	153	NT	116	116	Hungary								
France						Iceland								
Germany						Latvia								
Greece						Lithuania								
Italy						Malta								
Luxemburg						Moldavia								
Netherlands						Norway	13	12	E					
Portugal						Poland	1	0						
Republic of Ireland						Romania								
Spain						Slovakia								
Sweden - PbL	1465	1421	NT		120	Slovenia								
United Kingdom						Switzerland								
EU13 and remaining European Bern Convention countries						Turkey								
Bulgaria						Ukraine	p							

# *Hericium erinaceum* (BULL.: FR.) PERS.



## Brief description

A large to very large tooth fungus, made up of several layers of long, white spines, growing on old trees.

## Habitat

Growing as a weak parasite on trunks and thick branches of old, standing deciduous trees, mainly *Quercus* and *Fagus*, often in old wounds, often high above the ground and fruiting for many years on the same tree. It occurs in old, deciduous forests but also on planted trees in parks and along roadsides.

## Uses

Young fruitbodies are edible and occasionally harvested by mushroom pickers. The species is cultivated in eastern Asia and occasionally sold on European markets. The commercial value is limited.

## Threat

Intensive forest use (silviculture), cutting of old *Fagus* and *Quercus* trees, also along roads and in parks for safety reasons.

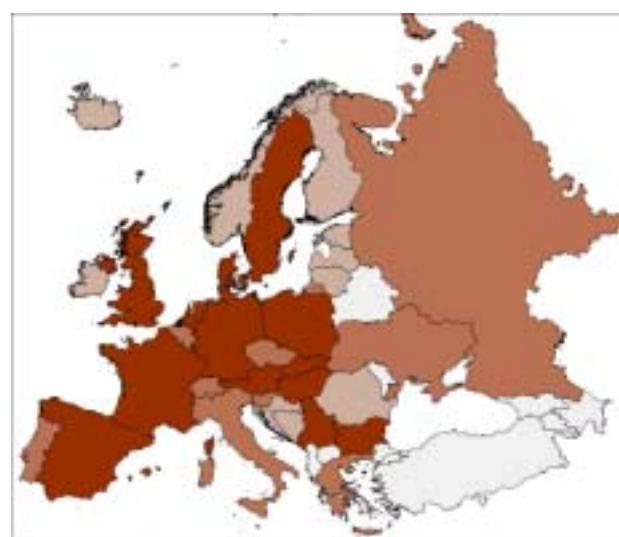
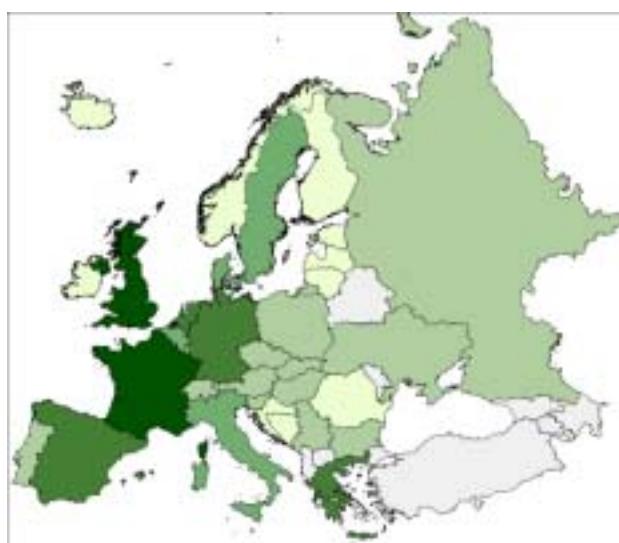
## NATURA 2000 HABITATS

Code	Habitat type	Austria	Croatia	Czech Republic	Denmark	France	Germany	Italy	Luxembourg	Poland	Portugal	Romania	Slovenia	Spain	Sweden	Switzerland	United Kingdom
9020	Fennoscandian hemiboreal natural old broad-leaved deciduous forests														x		
9070	Fennoscandian wooded pasture													x	x		
9110	Luzulo-fagetum beech forest	x		x	x	x	x		x	x				x	x		
9120	Atlantic acidophilous beech forest with <i>Ilex</i>				x	x	x	x						x		x	
9130	Asperulo-fagetum beechforests		x	x	x	x	x							x	x	x	x
9140	Medio-european subalpine beech woods with <i>Acer</i> and <i>Rumex arifolius</i>		x		x						x						
9150	Medio-european limestone beech forest			x	x	x											
9160	Sub-Atlantic and Medio-European oak forests				x	x						x	x	x	x	x	x
9170	Galio-carpinetum oak-hornbeam forests	x			x								x				
9180	Tilio-Acerion forests of slopes, screens and ravins					x										x	
9190	Old acidophilous oak woods				x												
9230	Galicio-Portuguese oak woods with <i>Quercus robur</i> and <i>Quercus pyrenaica</i>									x							
9240	<i>Quercus faginea</i> and <i>Quercus canariensis</i> iberian woods								x		x		x				
9330	<i>Quercus suber</i> forests							x					x		x		
9340	<i>Quercus ilex</i> forests								x				x		x		
91GO	Pannonic woods with <i>Quercus petraea</i> and <i>Carpinus betulus</i>	x															

## References

- Jahn, H. 1979. Pilze die an Holz wachsen: 78, pl. 42. Baranek & Frost, Herford  
 Marchand, A. 1976. Champignons du nord et du midi 4: pl. 336. Hachette, Perpignan  
 Pegler, D.N., Roberts, P.J. & Spooner, B.M. 1997. British chanterelles and tooth fungi: 56-57, figs 39-41. Royal Botanic Gardens, Kew.

# STATUS IN EUROPE



Country				No of localities in		Country				No of localities in	
				protected areas	Natura2000 areas					protected areas	Natura2000 areas
				Total no of localities known	No of localities known after 1980	Red List Category					Total no of localities known
							protected areas	Natura2000 areas			
EU15 countries											
Austria	4	4	Cd	0	4						
Belgium	10	7		0	2						
Denmark	18	9	V								
Finland											
France	>150	150	EN	15	15						
Germany	70	45	EN	30							
Greece	21	21			4						
Italy	16	12									
Luxemburg	2	2	R								
Netherlands	69	49	V	1	3						
Portugal	3	2		1	2						
Republic of Ireland											
Spain	57	42	EN	2	37						
Sweden - PbL	21	12	EN		3						
United Kingdom	102	70	VU	10							
EU13 and remaining European Bern Convention countries											
Bulgaria	3	1	E								

# *Hohenbuehelia culmicola* M. Bon



Recorded from 8 countries

40 localities in Europe;  
not known outside Europe

Red-listed in 4 countries

Major habitat: Shifting dunes along the shoreline with *Ammophila arenaria* (2120)

66 % of localities in protected / Natura 2000 areas

## Brief description

A small agaric with dark cap and eccentric to lateral stipe, growing on *Ammophila* culms in coastal sand dunes.

## Habitat

Saprotrophic on the base of culms of *Ammophila* in coastal dunes.

## Uses

None.

## Threat

Disturbance of sandy coasts by recreation facilities, coastal management (fixing of natural dune dynamics).

Popular name	
Dutch	helmharpoenzwam
English	marram oyster
French	pleurote des oyats
German	halm-muscheling

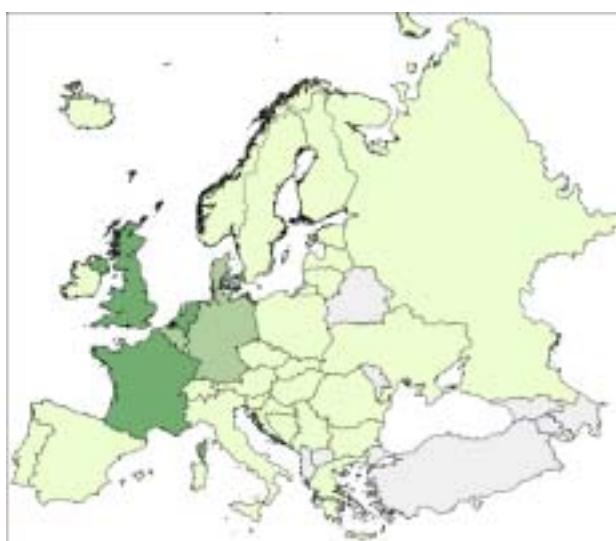
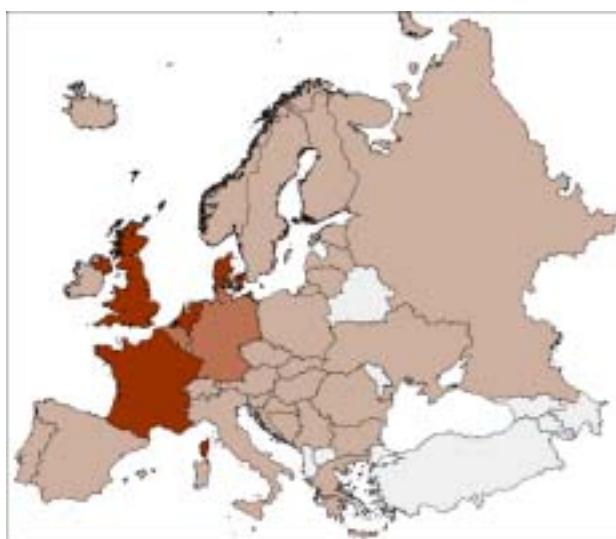
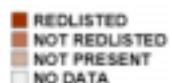
## NATURA 2000 HABITATS

Code	Habitat type	Belgium	Denmark	France	Germany	Italy	Republic of Ireland	United Kingdom
2120	Shifting dunes along the shoreline with <i>Ammophila arenaria</i>	x	x	x	x	x	x	x
2130	Fixed coastal dunes with herbaceous vegetation							x

## References

- Elborne, S. in Bas, C. et al. 1995. Flora Agaricina Neerlandica 3: 162. Rotterdam, Brookfield  
Watling, R. & Gregory, N. 1987. Brit. Fung. Fl. 6 : 42. Royal Botanic Gardens, Kew.

# STATUS IN EUROPE

**HOHENBUEHELIA CULMICOLA**  
 NUMBER OF LOCALITIES

**HOHENBUEHELIA CULMICOLA**  
 RED LIST STATUS


Country	No of localities in				Country	No of localities in			
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas
<i>= no reports n.d. = no recent data p = present PbL = protected by law</i>									
EU15 countries					Croatia				
Austria					Cyprus				
Belgium	3	2		0	Czech Republic				
Denmark	5	4	V		Estonia				
Finland					Hungary				
France	10	10	EN	3	Iceland				
Germany	4	4		2	Latvia				
Greece					Lithuania				
Italy	1	0			Malta				
Luxemburg					Moldavia				
Netherlands	13	13	R	4	Norway				
Portugal					Poland				
Republic of Ireland	1	0			Romania				
Spain					Slovakia				
Sweden					Slovenia				
United Kingdom	8	7	VU	3	Switzerland				
EU13 and remaining European Bern Convention countries									
Bulgaria					Turkey				
					Ukraine				

# *Hygrocybe calyptiformis* (BERK. & BROOME) FAYOD



## Brief description

This agaric is unmistakable with its medium to large, entirely pinkish fruitbodies with conical waxy pileus and thickish lamellae.

## Habitat

Old, undisturbed, unfertilised semi-natural grasslands including: meadows, grazed pastures, parks, lawns, churchyards and cemeteries. Lowland and montane.

## Uses

The species is regarded as edible but not tasty. It is rarely harvested by mushroom pickers, and lacks commercial value.

## Threat

Discontinuing maintenance of grasslands especially cessation of grazing, agricultural improvement including fertilisation and application of weedkiller, afforestation and change of land use.

Recorded from 22 countries

639 localities in Europe;  
also known from Asia and North-America

Red-listed in 11 countries

Major habitat: Semi-natural dry grasslands and scrubland facies on calcareous substrates (6210)

20 % of localities in protected / Natura 2000 areas

Popular name	
English	pink waxcap
French	hygrophore en capuchon
German	rosenroter saftling

## NATURA 2000 HABITATS

### Code Habitat type

	Croatia	Czech Republic	Denmark	France	Germany	Poland	Portugal	Republic of Ireland	Romania	Serbia and Montenegro	Slovenia	Spain	Switzerland	United Kingdom
2130 Fixed coastal dunes with herbaceous vegetation				x										
2270 Wooded dunes with <i>Pinus pinea</i> and/or <i>Pinus pinaster</i>							x							
6150 Siliceous alpine and boreal grasslands				x										x
6170 Alpine and subalpine calcareous grasslands			x	x										x
6210 Seminatural dry grassland and scrublands facies on calcareous substrates	x							x	x	x	x		x	x
6230 Species-rich <i>Nardus</i> grasslands on siliceous substrates in mountain areas		x					x	x				x	x	
6310 Dehesas with evergreen <i>Quercus</i> spp							x							
6410 Calcareous fens with <i>Carex lasiocarpa</i>		x												x
6510 Lowland hay meadows	x			x		x		x		x				x
6520 Mountain hay meadows			x		x				x					x
9150 Medio-European limestone beech												x		
9240 Galician-Portuguese oak woods with <i>Quercus robur</i> and <i>Quercus pyrenaica</i>							x							
9290 Cupressus forests							x		x					
21A0 Machair								x						

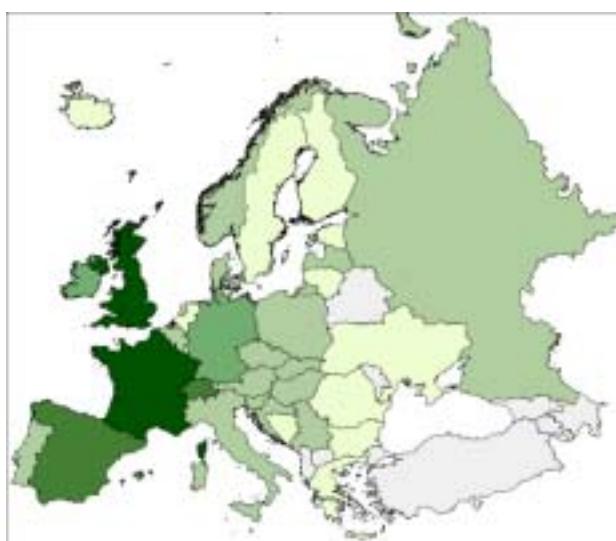
## References

- Boertmann, D. 1995. The Genus *Hygrocybe*: 136-137. Svampetryk, Greve, Denmark  
Breitenbach, J. & Kränzlin, F. 1991. Pilze der Schweiz 3: 102, pl. 80. Mykologia, Luzern.

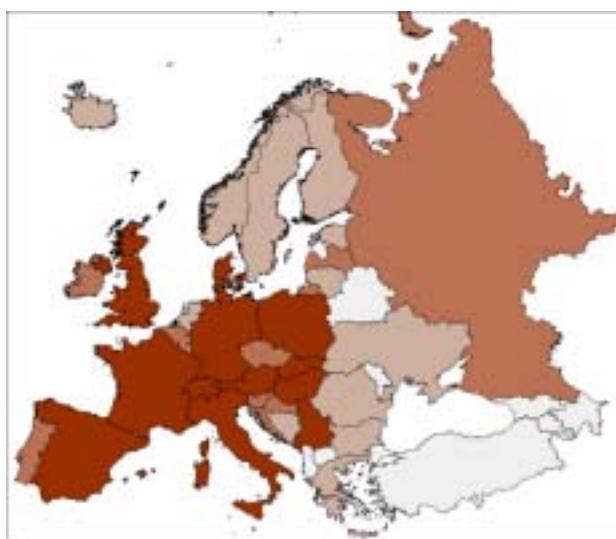
# STATUS IN EUROPE

**HYGROCYBE CALYPTIFORMIS**  
 NUMBER OF LOCALITIES

- 51 to 1 500
- 16 to 50
- 6 to 15
- 1 to 5
- NOT PRESENT
- NO DATA


**HYGROCYBE CALYPTIFORMIS**  
 RED LIST STATUS

- RELISTED
- NOT RELISTED
- NOT PRESENT
- NO DATA



Country	No of localities in					Country	No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports n.d. = no recent data p = present PbL = protected by law						= no reports n.d. = no recent data p = present PbL = protected by law					
EU15 countries						Croatia - PbL	5	3		1	
Austria	5	5	V	0	0	Cyprus					
Belgium	3	3		1	2	Czech Republic	5	n.d.			
Denmark	2	1	E			Estonia					
Finland						Hungary	1	1	V		
France	<100	70	CR	10	35	Iceland					
Germany	15	10	CR	5		Latvia	1	1			
Greece						Lithuania	1	n.d.			
Italy	5	2	yes	1	1	Malta					
Luxemburg						Moldavia					
Netherlands						Norway	1	1			
Portugal	3	2		2	2	Poland	7	3	V	2	
Republic of Ireland	>14	6		3	1	Romania	4	0		0	
Spain	17	17	EN	0	17	Slovakia	5	n.d.	DD		
Sweden						Slovenia	3	3			
United Kingdom	509	493	VU	50		Switzerland - PbL	18	18	EN		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria	1	0				Ukraine					

# *Hygrophorus purpurascens* (Alb. & Schw.: Fr.) Fr.



Recorded from 11 countries

42 localities in Europe;  
also north Africa, southeast Asia and  
north America

Red-listed in 7 countries

**Major habitat:** acidophilous *Picea*  
forests of the montane to alpine  
levels (*Vaccinio-Piceetea*) (9410)

17 % of localities in protected /  
Natura 2000 areas

## Brief description

A rather large agaric with whitish to pinkish fruitbodies with characteristic purple spots all-over, the stipe with a fugacious, curtain-like ring.

## Habitat

Mycorrhizal with *Picea alba* in coniferous forests on limestone, mainly in pastures with scattered trees.

## Uses

None.

## Threat

Deforestation, changing land management, especially intensive agriculture on formerly extensively used pasture grounds with scattered trees.

Popular name	
Dutch	purpervelekslijmkop
English	Purple-red Hygrophorus
French	hygrophore pourpré
German	beschleierter schneckling

## NATURA 2000 HABITATS

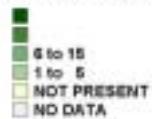
Code	Habitat type	Finland	France	Portugal	Romania	Slovenia	Sweden	Switzerland
9010	Western taiga	x					x	
9050	Fennoscandian herb-rich forest with <i>Picea abies</i>	x						
9070	Fennoscandian wooded pastures						x	
9130	Asperulo-Fagetum beech forests		x					
9230	Galicio-Portuguese oak woods with <i>Quercus robur</i> and <i>Quercus pyrenaica</i>			x				
9410	Acidophilous picea forests of the montane to alpine levels			x	x	x		x
9420	Alpine <i>Larix decidua</i> and/or <i>Pinus cembra</i> forests		x					
9430	Subalpine and montane <i>Pinus uncinata</i> forests							

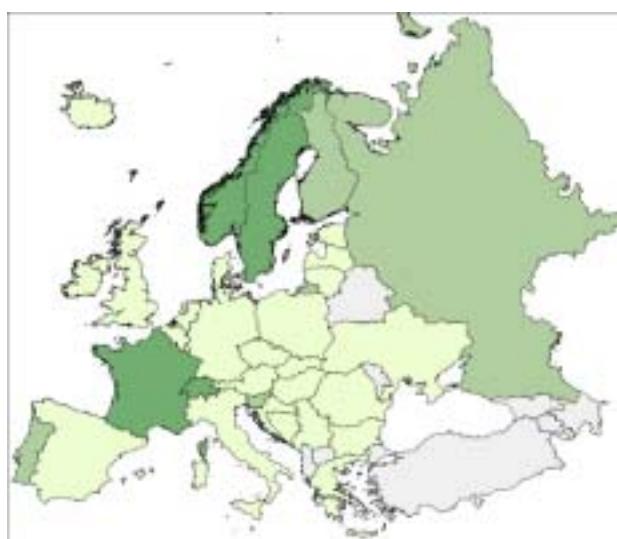
## References

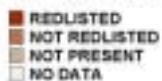
- Cetto, B. 1994. I Funghi dal vero 6: 453, pl. 2435. Arti Grafiche Saturnia, Trento; Galli, R. 1985. Gli igrofori delle nostre regioni: 100. La Tipotecnica, S. Vittore Olona, Italia  
 Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. (Swedish Red Data Book of Fungi 1997): 294.  
 ArtDatabanken, SLU, Uppsala.

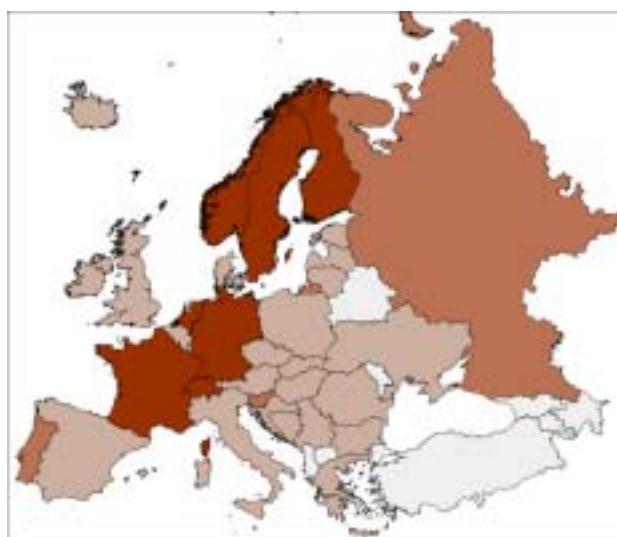
# STATUS IN EUROPE

**HYGROPHORUS PURPURASCENS**  
 NUMBER OF LOCALITIES


  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA


**HYGROPHORUS PURPURASCENS**  
 RED LIST STATUS


  
 REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in				Country	No of localities in				protected areas	Natura2000 areas
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic					
Denmark						Estonia					
Finland	1	1	CR			Hungary					
France	10	6	EN			Iceland					
Germany	3	0	EN			Latvia					
Greece						Lithuania					
Italy	2	n.d.				Malta					
Luxemburg						Moldavia					
Netherlands	1	0	Ex			Norway	11	10	V		
Portugal	1	1		0	1	Poland					
Republic of Ireland						Romania	1	0		0	
Spain						Slovakia					
Sweden	20	15	VU		3	Slovenia	1	1			
United Kingdom						Switzerland	8	8	VU		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# *Laricifomes officinalis* (VILL.: FR.) KOTL. & POUZAR



Recorded from 12 countries

84 localities in Europe;  
also known from Siberia and North-America

Red-listed in 6 countries

Major habitat: alpine *Larix decidua*-  
*Pinus cembra* forests (9420)

30 % of localities in protected / Natura  
2000 areas

## Brief description

A very large polypore with perennial, hoof-shaped fruitbodies, at first whitish, gradually darker to almost black, with a bitter taste.

## Habitat

In Europe a weak parasite on very old trees of *Larix decidua*, almost exclusively in natural, subalpine forests, exceptionally in plantations. In Siberia and Russian Far East also on other larch (*Larix* spp.) species.

## Uses

Traditional medicine and occasionally as decorative curiosity. No commercial value.

## Threat

Cutting of old *Larix* trees. Logging of subalpine forests, loss of habitat by constructing ski-runs and other infrastructure for winter sport, collecting of fruitbodies.

Popular name	
French	polypore officinal
German	lärchen-porling
Greek	λαρικός πορλίνγκ

## NATURA 2000 HABITATS

Code	Habitat type	Austria	France	Germany	Italy	Romania	Slovenia	Switzerland
6240	Subpannonic steppic grasslands	x						
9130	Asperulo – Fagetum beech forests		x			x		
9420	Alpine <i>Larix decidua</i> - <i>Pinus cembra</i> forests		x	x	x		x	x
9430	Montanae <i>Pinus sylvestris</i> forests				x	x		
9140	Medio-european subalpine beech woods with <i>Larix decidua</i>				x	x		

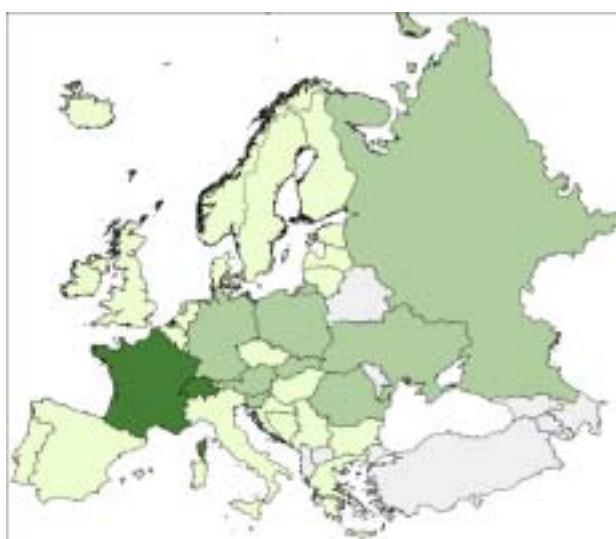
## References

- Breitenbach, J. & F. Kränzlin. 1986. Pilze der Schweiz 2: 316, pl. 401. Mykologia, Luzern  
Jahn, H. 1979. Pilze die an Holz wachsen: 150, pl. 123. Baranek & Frost, Herford.

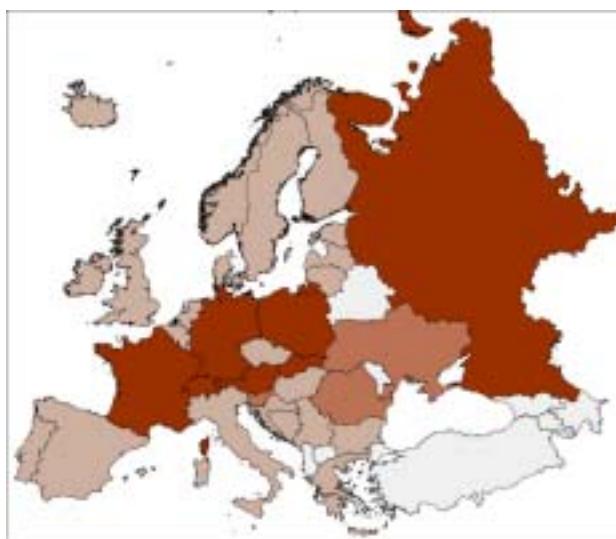
# STATUS IN EUROPE

**LARICIFOMES OFFICINALIS**  
 NUMBER OF LOCALITIES

- 16 to 50
- 1 to 5
- NOT PRESENT
- NO DATA


**LARICIFOMES OFFICINALIS**  
 RED LIST STATUS

- RELISTED
- NOT RELISTED
- NOT PRESENT
- NO DATA



Country	No of localities in				No of localities in							
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas	= no reports n.d. = no recent data p = present PbL = protected by law	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas	
EU15 countries												
Austria	4	4	V	0	2							
Belgium												
Denmark												
Finland												
France	<50	40	EN	8	8							
Germany	5	4	CR	3								
Greece	1	0			0							
Italy	1	n.d.										
Luxemburg												
Netherlands												
Portugal												
Republic of Ireland												
Spain												
Sweden												
United Kingdom												
EU13 and remaining European Bern Convention countries												
Bulgaria												

# *Leucopaxillus compactus* (Fr.) NEUHOFF



Recorded from 21 countries

161 localities in Europe;  
known from North America

Red-listed in 10 countries

Major habitat: *Asperulo-Fagetum*  
beech forests (9130), Fennoscandia  
hemiboreal natural old broad-leaved  
deciduous forest (9020)

34 % of localities in protected /  
Natura 2000 areas

## Brief description

A very large agaric with a convex, ochre-yellow pileus with involute margin and a very thick stipe.

## Habitat

Saprotrophic, terrestrial in deciduous woods on calcareous ground.

## Uses

None.

## Threat

Loss and change of habitat, deforestation, possibly air pollution.

## Popular name

Danish	trefarvet tragttridderhatt
Finnish	säämiskävalmuska
French	leucopaxille tricolore
German	dreifarbiger krempentrichterling
Swedish	brödmusseron

## NATURA 2000 HABITATS

### Code Habitat type

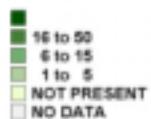
	Croatia	Czech Republic	Denmark	Estonia	Finland	France	Germany	Italy	Latvia	Lithuania	Romania	Slovenia	Sweden	Switzerland
2180														
6530				x										
<b>9020</b>			x										x	
9070				x									x	
9110					x								x	
<b>9130</b>						x		x				x	x	
9140						x							x	
9150			x										x	
9160					x								x	
9190						x		x						
9260	x													
9340						x			x					
9110*		x												
91GO	x													

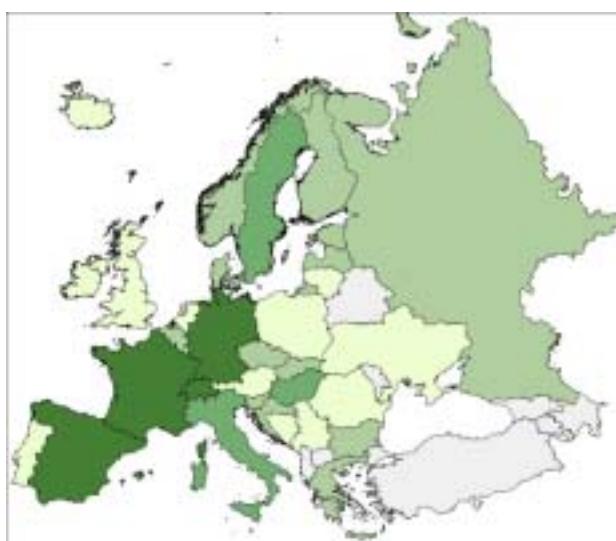
## References

- Breitenbach, J. & Kränzlin, F. 1991. Pilze der Schweiz 3: 216, pl. 252. Mykologia, Luzern  
 Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. (Swedish Red Data Book of Fungi 1997): 362.  
 ArtDatabanken, SLU, Uppsala  
 Ryman, S. & Holmåsen, I. 1984. Svampar. En fälthandbok. Interpublishing, Stockholm.

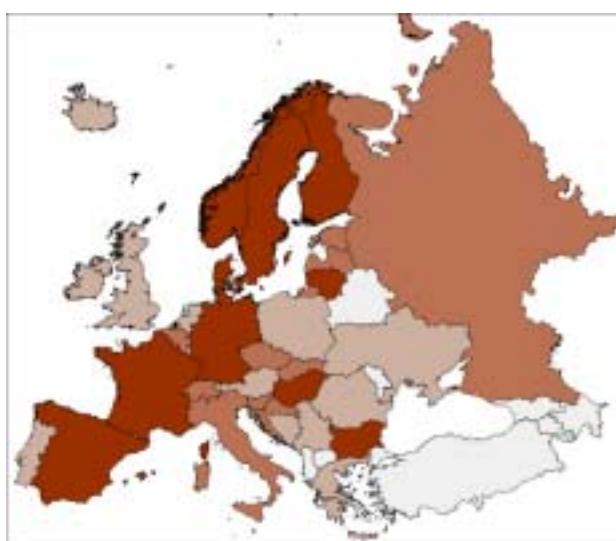
# STATUS IN EUROPE

**LEUCOPAXILLUS COMPACTUS**  
 NUMBER OF LOCALITIES


  
 96 to 50  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA


**LEUCOPAXILLUS COMPACTUS**  
 RED LIST STATUS


  
 REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in				Country	No of localities in			
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas
= no reports					= no reports				
n.d. = no recent data					n.d. = no recent data				
p = present					p = present				
PbL = protected by law					PbL = protected by law				
EU15 countries					Croatia - PbL	2	2		1
Austria					Cyprus				
Belgium	1	1			Czech Republic	1	n.d.		
Denmark	2	1	Ex	0	Estonia	5	3		2
Finland	1	1	CR		Hungary	7	7	R	
France	<50	40	EN		Iceland				
Germany	40	30	EN	10	Latvia - PbL	3	3		1
Greece	1	1			Lithuania	7	n.d.	R	
Italy	18	11		1	Malta				
Luxemburg					Moldavia				
Netherlands					Norway	1	1	V	
Portugal					Poland				
Republic of Ireland					Romania	2	0		1
Spain	21	21	VU	0	Slovakia	5	n.d.		
Sweden	15	11	VU		Slovenia - PbL	3	3		
United Kingdom					Switzerland	23	23		
EU13 and remaining European Bern Convention countries					Turkey				
Bulgaria	3	2	E		Ukraine				

# ***Lyophyllum favrei* R. HALLER AAR. & R. HALLER SUHR**



Recorded from 8 countries

25 localities in Europe;  
outside Europe only known from  
Caucasus mountains

Red-listed in 3 countries

Major habitat: *Asperulo-Fagetum*  
beech forests (9130)

50 % of localities in protected /  
Natura 2000 areas

## Brief description

A fairly large agaric with a striking contrast between the violet-grey pileus and yellow lamellae.

## Habitat

Saprotrophic in deciduous forests, mainly under *Fagus sylvatica* in alluvial forests in river valleys north of the Alps at rather low altitudes (350 to 600 m).

## Uses

None.

## Threat

Loss and change of habitat, e.g. by negative impact of recreational activities. Alluvial forests are threatened by silviculture and groundwater-drainage.

Popular name	
English	Favre's Lyophyllum
French	lyophylle de Favre
German	gelblärtiger rasling

NATURA 2000 HABITATS				
Code	Habitat type	France	Switzerland	United Kingdom
9130	Asperulo-Fagetum beech forests	x	x	x
91EO	Alluvial forests with <i>Alnus</i> and <i>Fraxinus</i>	x		
91FO	Ridarian mixed forests		x	

## References

- Breitenbach, J. & Kränzlin, F. 1991. Pilze der Schweiz 3: 222, pl. 259. Mykoflora, Luzern  
Hahn, C. 1995. *Lyophyllum favrei* Haller & Haller - Erstnachweis für Deutschland. Z. Mykologie 61: 39-44.

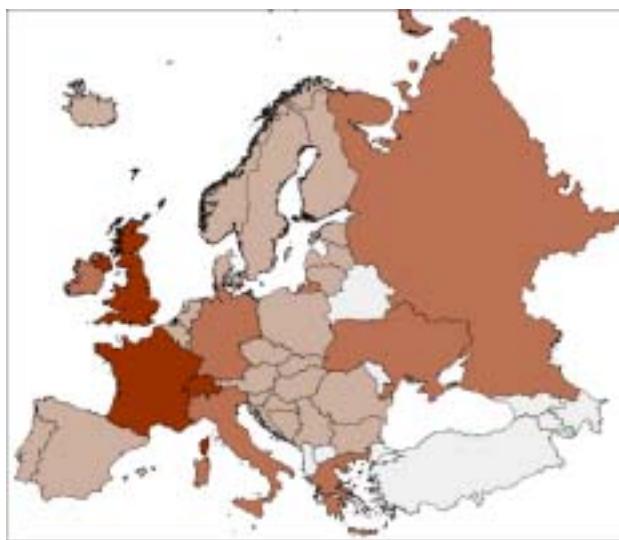
# STATUS IN EUROPE

**LYOPHYLLUM FAVREI**  
 NUMBER OF LOCALITIES

■ 6 to 15  
 ■ 1 to 5  
 ■ NOT PRESENT  
 ■ NO DATA


**LYOPHYLLUM FAVREI**  
 RED LIST STATUS

■ REDLISTED  
 ■ NOT REDLISTED  
 ■ NOT PRESENT  
 ■ NO DATA



Country	No of localities in				Country	No of localities in				protected areas	Natura2000 areas
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic					
Denmark						Estonia					
Finland						Hungary					
France	4	4	EN	1	1	Iceland					
Germany	1	1				Latvia					
Greece	1	1			0	Lithuania					
Italy	2	2				Malta					
Luxemburg						Moldavia					
Netherlands						Norway					
Portugal						Poland					
Republic of Ireland	1	1		1	1	Romania					
Spain						Slovakia					
Sweden						Slovenia					
United Kingdom	1	1	EN	1		Switzerland - PbL	15	15	CR		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine	p				

# ***Myriostoma coliforme* (WITH.: PERS.) CORDA**



Recorded from 20 countries

155 localities in Europe;  
world-wide distribution

Red-listed in 12 countries

Major habitat: Riparian mixed forests  
along the great rivers (91FO), *Salix alba*  
and *Populus alba* galleries (92AO)

46 % of localities in protected / Natura  
2000 areas

Popular name	
Dutch	peperbus
English	pepper pot
Finnish	seulamaatähти
French	myriostome criblé
German	sieb-erdstern
Swedish	sälljordstjärna

## Brief description

A distinctive earthstar, closely related to puffballs. It is easily recognised by the central spore-sac, which has numerous small pores like a pepper pot and is supported by several tiny stalks.

## Habitat

A thermophilous, saprotrophic species preferring nitrogen-rich sites on well-drained, basic soils in deciduous and mixed forests, gardens, along hedges and grassy road banks as well as in grazed grasslands.

## Uses

None.

## Threat

Changes in land use, i.e. clear felling of thermophilous forests, decreased grazing.

## NATURA 2000 HABITATS

Code	Habitat type	Austria	Croatia	France	Italy	Portugal	Romania	Sweden	Switzerland	United Kingdom
2130	Fixed coastal dunes with herbaceous vegetation									x
2150	Atlantic decalcified fixed dunes									x
2170	Dunes with <i>Salix repens</i>									x
2250	Coastal dune with <i>Juniperus</i> spp.	x				x				x
2330	Inland dunes with open <i>Corynephorus</i> and <i>Agrostis</i> grasslands						x			
4040	Dry Atlantic coastal heath						x			
6260	Pannonic sand steppes									x
8120	Calcareous and calcshist scree of the montane to alpine levels	x								
8210	Calcareous rocky slopes with chasmophytic vegetation	x						x		
8220	Siliceous rocky slopes with chasmophytic vegetation						x	x	x	
9110	Luzulo-Fagetum beech forests	x								
9170	Galio-carpinetum oak-hornbeam forests	x								
9260	<i>Castanea sativa</i> woods			x						
9340	<i>Quercus ilex</i> and <i>Q. rotundifolia</i> forests		x		x					
91FO	Riparian mixed forests along the great rivers		x		x					
92AO	<i>Salix alba</i> and <i>Populus alba</i> galleries			x	x					

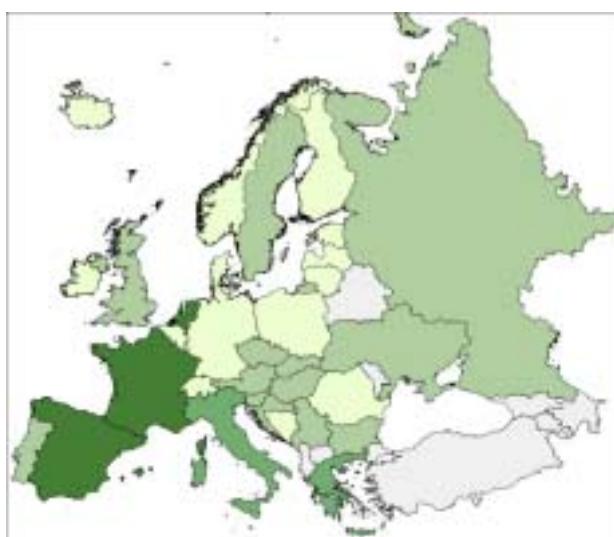
## References

- Jalink, L.M. 1995. De Aardsterren van Nederland en België. Coolia 38 suppl.: 60-61, pl.14
- Larsson, K.H. (ed.). 1997. Rödlistade svampar I Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 387. ArtDatabanken, SLU, Uppsala
- Pegler, D. N. , Laessoe, T. & Spooner, B. 1995. British Puffballs, Earthstars and Stinkhorns: 112-113, fig. 84. Royal Botanic Gardens, Kew
- Sunhede, S. 1990. Geastraceae (Basidiomycotina), morphology, ecology and systematics with special emphasis on the North European species. Fungiflora, Oslo.

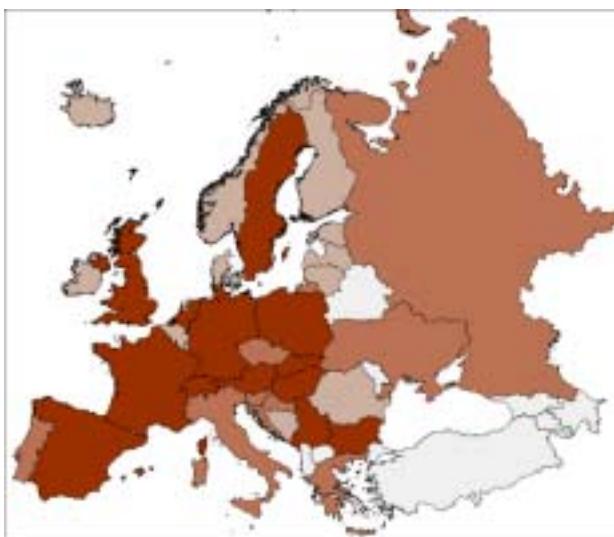
# STATUS IN EUROPE

**MYRIOSTOMA COLIFORME**  
 NUMBER OF LOCALITIES

- 16 to 50
- 6 to 15
- 1 to 5
- NOT PRESENT
- NO DATA


**MYRIOSTOMA COLIFORME**  
 RED LIST STATUS

- REDLISTED
- NOT REDLISTED
- NOT PRESENT
- NO DATA



Country	No of localities in					Country	No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
<i>= no reports n.d. = no recent data p = present PbL = protected by law</i>											
EU15 countries						Croatia - PbL	2	1		1	
Austria	3	3	V	0	3	Cyprus					
Belgium						Czech Republic	2	n.d.			
Denmark						Estonia					
Finland						Hungary	5	5	R		
France	50	40	VU		10	Iceland					
Germany	7	0	NT			Latvia					
Greece	7	7			4	Lithuania					
Italy	12	7				Malta					
Luxemburg						Moldavia					
Netherlands	56	49	V	25	48	Norway					
Portugal	2	1		0	0	Poland	3	0	E		
Republic of Ireland						Romania	8	0		1	
Spain	41	36	EN	0	16	Slovakia - PbL	10	n.d.	VU		
Sweden	2	2	EN		1	Slovenia	1	1			
United Kingdom	16	2	CR	1		Switzerland	2	0	Ex		
EU13 and remaining European Bern Convention countries											
Bulgaria	5	1	E			Turkey					
						Ukraine	p				

# *Phylloporus pelletieri* (LÉV.) QUEL.



Recorded from 24 countries

926 localities in Europe;  
also known from Asia

Red-listed in 12 countries

Major habitat: *Luzulo-Fagetum* (9110), *Carpinion betuli*(9160)

38 % of localities in protected /  
Natura 2000 areas

## Brief description

This medium sized species is a link between boletes and gilled fungi. It has a velvety brown cap and is characterised by its thick, strongly dividing (anastomosing), golden-yellow pore-like lamellae.

## Habitat

Mycorrhizal with broad-leaved trees (*Quercus*, *Fagus*, *Castanea*) in old deciduous forests and mixed forests on well-drained, acidic, sandy and loamy soils.

## Uses

Edible and occasionally collected by mushroom pickers as a side-harvest together with boletes. No commercial value.

## Threat

Loss and degradation of habitat due to cutting and forest management, coniferous plantations, possibly nitrogen deposition.

Popular name	
Danish	lamelrørhat
Dutch	goudplaatzwam
English	golden gilled bolete
Finnish	helttatait
French	Phyllopoore d'Europe
German	goldblatt
Swedish	skivsopp

## NATURA 2000 HABITATS

Code	Habitat type	Austria	Croatia	Czech Republic	Denmark	France	Germany	Luxembourg	Romania	Slovenia	Sweden	Switzerland	United Kingdom
9010	Western taiga									x	x		
9020	Fennoscandian hemiboreal natural old broad-leaved deciduous forests									x	x		
9110	Luzulo-Fagetum beech forests		x		x	x	x			x		x	
9120	Atlantic acidophilous beech forest with <i>Ilex</i>				x								
9130	Asperulo-Fagetum beech forests	x		x		x	x	x			x	x	
9150	Medio-European limestone beech			x									
9160	Medio-european oak or oak-hornbeam forests of the <i>Carpinion betulae</i>				x	x	x	x	x	x	x	x	x
9170	Galio-cerpinetum oak-hornbeam forests		x										
9190	Old acidophilous oakwoods with <i>Quercus robur</i> on sandy plains		x			x							
9260	<i>Castanea sativa</i> woods		x										
9530	Submediterranean pine forest with endemic black <i>Pinus</i>	x					x						
91EO	Alluvial forests with <i>Alnus</i> and <i>Fraxinus</i>						x						
91GO	Pannonic woods with <i>Quercus petraea</i> and <i>Carpinus betulus</i>		x										

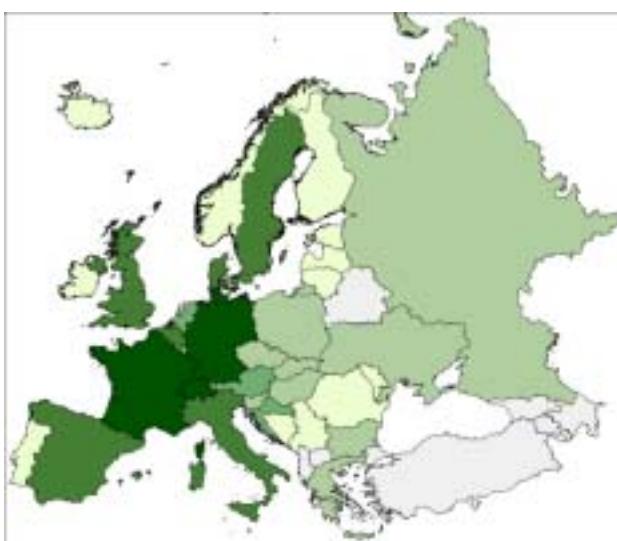
## References

- Breitenbach, J. & Kränzlin, F. 1991. Pilze der Schweiz 3: 74, pl.39. Mykologia, Luzern  
 Engel, H. 1996. Schmier- und Filzröhrlinge s.l. in Europa: 152-154, pl. 44. H. Engel, Weidhausen  
 Galli, R. 1998. I Boleti. Edinatura, Milano  
 Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. (Swedish Red Data Book of Fungi 1997): 426.  
 ArtDatabanken, SLU, Uppsala  
 Marchand, A. 1973. Champignons du nord et du midi 2 : pl. 166. Hachette, Perpignan.

# STATUS IN EUROPE

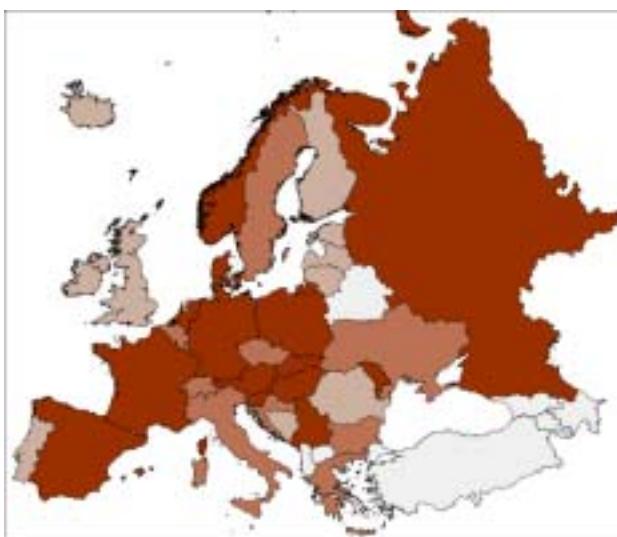
**PHYLLOPORUS PELLETIERI**  
NUMBER OF LOCALITIES

■ 51 to 1 500  
■ 16 to 50  
■ 6 to 15  
■ 1 to 5  
■ NOT PRESENT  
■ NO DATA



**PHYLLOPORUS PELLETIERI**  
RED LIST STATUS

■ RELISTED  
■ NOT RELISTED  
■ NOT PRESENT  
■ NO DATA



Country	No of localities in				Country	No of localities in			
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas
<p>= no reports        n.d. = no recent data        p = present        PbL = protected by law</p>									
EU15 countries					Croatia - PbL	11	7		7
Austria	17	15	V	0	Cyprus				
Belgium	34	25		0	Czech Republic	70	n.d.		
Denmark	32	17	R		Estonia				
Finland					Hungary	4	4	V	
France	>500	500	VU	75	Iceland				
Germany	200	170	VU	50	Latvia				
Greece	2	2			Lithuania				
Italy	34	21			Malta				
Luxemburg	4	4			Moldavia	p		yes	
Netherlands	17	9	V	1	Norway	1	0	E	
Portugal					Poland	21	5	R	4
Republic of Ireland					Romania	3	0		0
Spain	45	40	VU	2	Slovakia - PbL	20	n.d.	NT	
Sweden	28	16	EN		Slovenia	5	5		
United Kingdom	33	22		2	Switzerland	61	61		
EU13 and remaining European Bern Convention countries									
Bulgaria	3	3			Turkey				
					Ukraine	p			

# *Podoscypha multizonata* (BERK. & BR.) PAT.



Recorded from 9 countries

116 localities in Europe;  
also in Asia, (far east Russia and  
Azerbaijan)

Red-listed in 2 countries

Major habitat: *Asperulo-Fagetum*  
beech forests (9130)

29 % of localities in protected /  
Natura 2000 areas

## Brief description

The fruitbodies of this fungus are remarkable; large rosettes of numerous, concentrically arranged, erect, brownish, zoned lobes with smooth surface and underside.

## Habitat

Saprotrophic or possibly a weak parasite on roots, growing at the basis of old oak trees (*Quercus*) in deciduous, sometimes ancient forests and parkland on rich soils.

## Uses

None.

## Threat

Exploitation of relicts of deciduous old-growth forests; cutting of old oaks, often for safety reasons in parks.

Popular name	
English	zoned Podoschypa
French	Théléphore zoné
German	gezonter büschelwärzling

## NATURA 2000 HABITATS

Code	Habitat type	France	Germany	Slovenia	Switzerland	United Kingdom
9110	Luzulo-Fagetum beech forests					
9120	Atlantic acidophilous beech forest with <i>Ilex</i>					
9130	<b>Asperulo-Fagetum beech forests</b>	x			x	x
9160	Medio-european oak or oak-hornbeam forests of the <i>Carpinion betulae</i>		x			x
9190	Old acidophilous oakwoods with <i>Quercus robur</i> on sandy plains					x

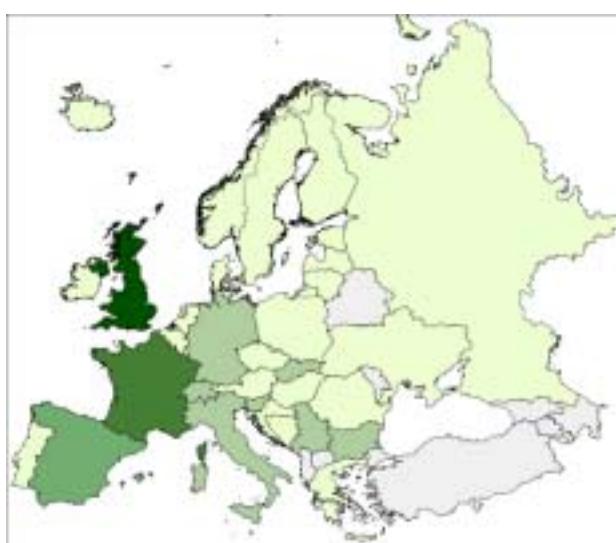
## References

- Jülich, W. Die Nichtblätterpilze, Gallertpilze und Bauchpilze: 209-210. 1984  
 Phillips, R. 1981. Mushrooms and other fungi of Great Britain and Europe: 222 (photograph). Pan Books, London  
 Reid, D.A. 1965. A monograph of the stipitate stereoid fungi. Beih. Nova Hedwigia 18: 150-290.

## STATUS IN EUROPE

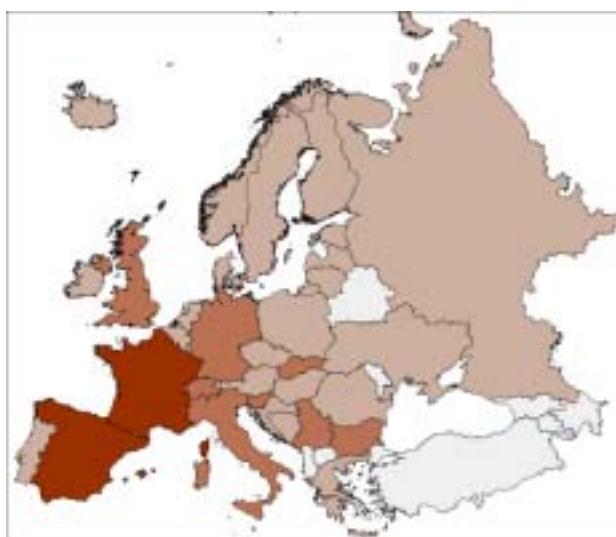
**PODOSCYPHA MULTIZONATA**  
NUMBER OF LOCALITIES

■ 51 to 1 500  
■ 16 to 50  
■ 6 to 15  
■ 1 to 5  
■ NOT PRESENT  
■ NO DATA



**PODOSCYPHA MULTIZONATA**  
RED LIST STATUS

■ REDLISTED  
■ NOT REDLISTED  
■ NOT PRESENT  
■ NO DATA



Country	No of localities in				No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas	Total no of localities known	No of localities known after 1980	Red List Category	protected areas
<i>= no reports n.d. = no recent data p = present PbL = protected by law</i>									
EU15 countries									
Austria									
Belgium									
Denmark									
Finland									
France	<50	40	EN		6				
Germany	6	4		2					
Greece									
Italy	1	1							
Luxemburg									
Netherlands									
Portugal									
Republic of Ireland									
Spain	14	14	VU	0	12				
Sweden									
United Kingdom	81	53		20					
EU13 and remaining European Bern Convention countries									
Bulgaria	1	1		1					

# ***Pycnoporellus alboluteus* (ELLIS & EVERHART) KOTL. & POUZAR**



Recorded from 6 countries

11 localities in Europe;  
more common in North America

Red-listed in 5 countries

Major habitat: Fennoscandian herb-rich forests with *Picea abies* (9050)

82 % of localities in protected /  
Natura 2000 areas

## Brief description

A medium sized to large, annual, soft polypore, with remarkably large, orange pores, forming long, crust-like strips on dead logs.

## Habitat

Saprotrophic on very old logs and trunks that are already decayed by *Fomitopsis pinicola*, in luxuriant virgin coniferous forests, mostly on spruces (*Picea* spp.), but also on aspen trees (*Populus tremula*).

## Uses

None.

## Threat

Deforestation and loss of old growth forest habitats rich in thick logs, i.e. exploitation by forestry.

Popular name	
Finnish	röyhelökääpä
French	Polypore blanc et jaune
German	weissgelber weichporling
Swedish	storporig brandticka

## NATURA 2000 HABITATS

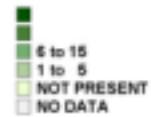
Code	Habitat type	Finland	Sweden
9010	Western taiga	x	x
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>	x	x

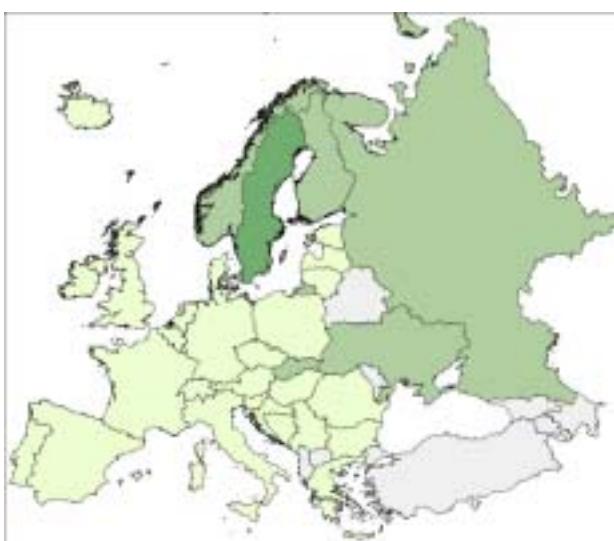
## References

- Kotiranta, H. & Niemelä, T. 1996. Uhanalaiset kävävät Suomessa (Threatened polypores in Finland). Oy Edita Ab, Helsinki  
 Larsson, K.H. (ed.). 1997. Rödlistade svampar I Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 451.  
 ArtDatabanken, SLU, Uppsala.

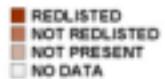
# STATUS IN EUROPE

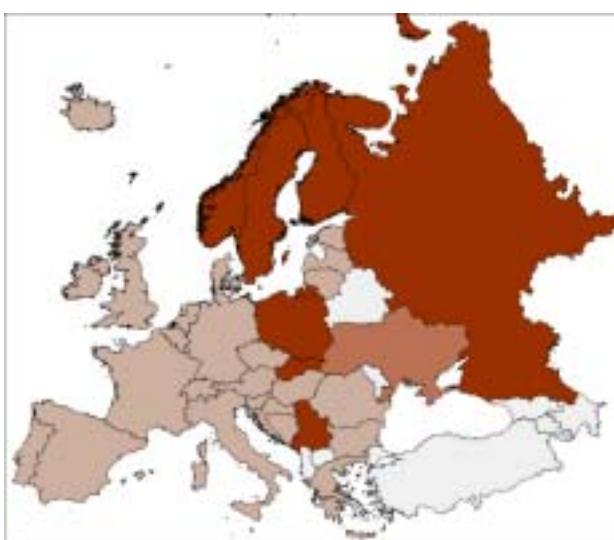
**PYCNOPORELLUS ALBOLUTEUS**  
NUMBER OF LOCALITIES


  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA



**PYCNOPORELLUS ALBOLUTEUS**  
RED LIST STATUS


  
 REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in				Country	No of localities in				protected areas	Natura2000 areas
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic					
Denmark						Estonia					
Finland	5	4	EN	4	4	Hungary					
France						Iceland					
Germany						Latvia					
Greece						Lithuania					
Italy						Malta					
Luxemburg						Moldavia					
Netherlands						Norway	1	1	Ex		
Portugal						Poland	1	0	E		
Republic of Ireland						Romania					
Spain						Slovakia - PbL	1	n.d.	EN	1	
Sweden - PbL	7	6	CR		5	Slovenia					
United Kingdom						Switzerland					
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine	p				

# ***Sarcodon fuligineoviolaceus* (KALCHBR.: FR.) PAT.**



Recorded from 12 countries

46 localities in Europe;  
also Sakhalin island and North America

Red-listed in 6 countries

Major habitat: Western taiga (9010)

32 % of localities in protected / Natura 2000 areas

Popular name	
English	burnt Spine-cap
French	hydne gris violacé
German	brennender braunsporstacheling
Swedish	lilaköttig taggsvamp

## Brief description

A medium sized to large tooth fungus with a violaceous brown pileus, purple-brown spines, characterised by the dark blue-grey to violaceous contents of the pileus and its acrid taste.

## Habitat

Mycorrhizal with coniferous trees (*Abies*, *Picea*, *Pinus*) in coniferous forests on calcareous ground, otherwise poor in nutrients.

## Uses

None.

## Threat

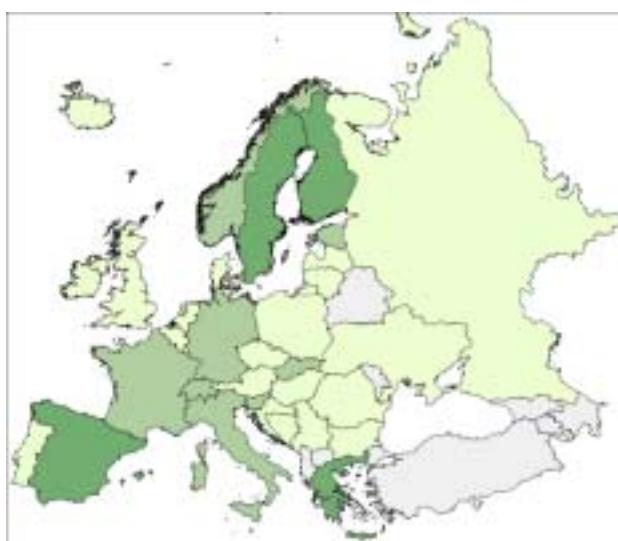
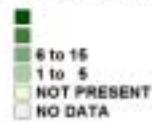
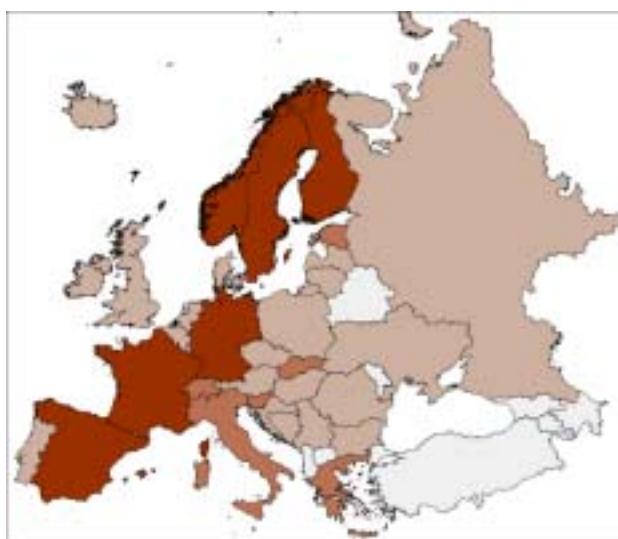
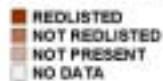
Clear felling and habitat loss of remaining sites, i.e. exploitation by forestry. Possibly nitrogen deposition and use of fertilisers.

NATURA 2000 HABITATS							
Code	Habitat type	Estonia	Finland	France	Slovenia	Sweden	Switzerland
9010	Western taiga	x	x			x	
9060	Coniferous forests on, or connected to, glaciofluvial eskers					x	
9130	Asperulo-fegetum beech forests			x			
9430	Subalpine and montane <i>Pinus uncinata</i> forests			x			x
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>	x			x		
9410	Acidophilous <i>Picea</i> forests of the montane to alpine levels				x		

## References

- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 473. ArtDatabanken, SLU, Uppsala
- Maas Geesteranus, R.A. 1975. Die terrestrischen Stachelpilze Europas: 77-78, fig. 56, pl. 38, 39a. North-Holland publ. comp., Amsterdam, London
- Pegler, D.N., Roberts, P.J. & Spooner, B.M. 1997. British chanterelles and tooth fungi: 94-95, figs. 72-73. Royal Botanic Gardens, Kew.

# STATUS IN EUROPE

**SARCODON FULIGINEOVIOLACEUS**  
 NUMBER OF LOCALITIES

**SARCODON FULIGINEOVIOLACEUS**  
 RED LIST STATUS


Country	No of localities in				Country	No of localities in				protected areas	Natura2000 areas
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic					
Denmark						Estonia	2	2		2	
Finland	8	6	VU	5	5	Hungary					
France	<10	5	CR			Iceland					
Germany	9	1	CR			Latvia					
Greece	6	6			3	Lithuania					
Italy	2	2?			1	Malta					
Luxemburg						Moldavia					
Netherlands						Norway	2	1	E		
Portugal						Poland					
Republic of Ireland						Romania					
Spain	12	11	VU	0	2	Slovakia	1	n.d.			
Sweden	17	14	VU		2	Slovenia	1	1			
United Kingdom						Switzerland	1	1			
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# ***Sarcosoma globosum* (SCHMIDEL: FR.) CASP.**



Recorded from 11 countries

135 localities in Europe;  
also known from North America

Red-listed in 10 countries

Major habitat: Western taiga (9010)

22 % of localities in protected /  
Natura 2000 areas

## Brief description

A remarkable, fairly large cup fungus with a thickset stipe, filled with a watery, gelatinous substance.

## Habitat

Probably saprotrophic, terrestrial in old spruce forests, preference for undisturbed pristine forests.

## Uses

None.

## Threat

Loss and degradation of habitats due to clear felling and management by forestry.

Popular name	
Finnish	hytykevätmjakas
French	pézize globuleuse
German	dunkle gallertkugel
Swedish	bombmurkla

## NATURA 2000 HABITATS

Code	Habitat type	Czech	Estonia	Finland	Sweden
9010	Western taiga		x	x	x
9410	Acidophilous <i>Picea</i> forests of the montane to alpine levels	x			
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>		x	x	
9070	Fennoscandian wooded pastures			x	

## References

- Larsson, K.H. (ed.) 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 480. ArtDatabanken, SLU, Uppsala  
 Martinsson, K. & Nitare, J. 1986. Bombmurklan, *Sarcosoma globosum*, en hotad svamp. Svensk Bot. Tidskr. 80: 169-184.

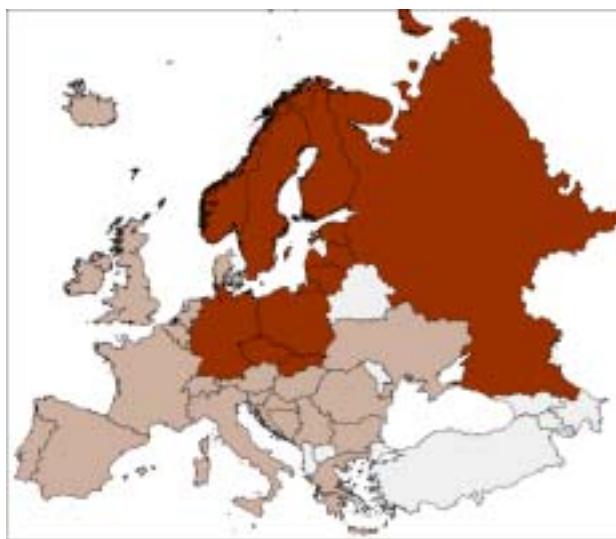
# STATUS IN EUROPE

**SARCOSOMA GLOBOSUM**  
 NUMBER OF LOCALITIES

- 51 to 1 500
- 6 to 15
- 1 to 5
- NOT PRESENT
- NO DATA


**SARCOSOMA GLOBOSUM**  
 RED LIST STATUS

- RELISTED
- NOT RELISTED
- NOT PRESENT
- NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic - PbL	4				
Denmark						Estonia	21				
Finland	22	5	NT	1	1	Hungary					
France						Iceland					
Germany	2	0	EX			Latvia - PbL	1				
Greece						Lithuania	3				
Italy						Malta					
Luxemburg						Moldavia					
Netherlands						Norway	2				
Portugal						Poland	3				
Republic of Ireland						Romania					
Spain						Slovakia - PbL	1				
Sweden - PbL	233	122	VU		25	Slovenia					
United Kingdom						Switzerland					
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine	p				

# *Sarcosphaera coronaria* (Jacq.) Boud.



## Brief description

A fairly large, vernal cup-fungus with violaceous to lilac tones, closed and hypogeous at first, later when unfurled star-shaped with 5-10 lobes.

## Habitat

Probably saprotrophic, associated with coniferous trees and *Quercus ilex*, preference for calcareous ground but also on acidic bedrock, sometimes along roads and in parks.

## Uses

Cooked fruitbodies are edible (in raw condition poisonous), but the species is rarely collected by mushroom pickers and of no commercial value.

## Threat

Loss and degradation of habitats due to clear felling and soil disturbance.

Recorded from 23 countries

691 localities in Europe; also known from North America and North Africa

Red-listed in 14 countries

Major habitat: Asperulo-fagetum beech forests (9130), Medio-European limestone beech (9150)

31 % of localities in protected / Natura 2000 areas

Popular name													
Catalan	cassoleta violàcia	cassoleta blava	cassoleta coronada										
Danish	stjernebæge												
English	violet Crown-cup												
Finnish	kruunumaljakas												
French	pézize couronnée												
German	kronenbecherling												
Greek	ἄσπερη/μαραζός -/έπειρος, οὐράνια, ηλιοφάνη, ηλιοφάνη												
Spanish	Peziza estrellada												
Swedish	kronskål												

## NATURA 2000 HABITATS

### Code Habitat type

	Austria	Croatia	Czech Republic	Denmark	Estonia	Finland	France	Germany	Italy	Malta	Poland	Romania	Sweden	Switzerland	United Kingdom
5130	<i>Juniperus communis</i> formations on heaths or calcareous grasslands			x											
6210	Seminatural dry grassland and scrublands facies on calcareous substrates				x	x		x				x			
9010	Western taiga				x	x									
9060	Coniferous forests on, or connected to, glaciofluvial eskers				x										
9070	Fennoscandian wooded pastures											x			
9130	Asperulo-fagetum beech forests			x			x	x							x
9150	Medio-European limestone beech						x	x				x	x		
9180	Tilio-Acerion forests of slopes, screens and ravines						x								
9260	<i>Castanea sativa</i> woods								x						
9340	<i>Quercus ilex</i> forests							x							
9410	Acidophilous <i>Picea</i> forest of the montane to the alpine levels	x	x							x			x	x	
9420	Alpine <i>Larix decidua</i> and/or <i>Pinus cembra</i> forests						x				x				
9530	Submediterranean pine forest with endemic black <i>Pinus</i>	x					x		x	x					
9540	<i>Quercus ilex</i> and <i>Quercus rotundifolia</i> forests								x	x					

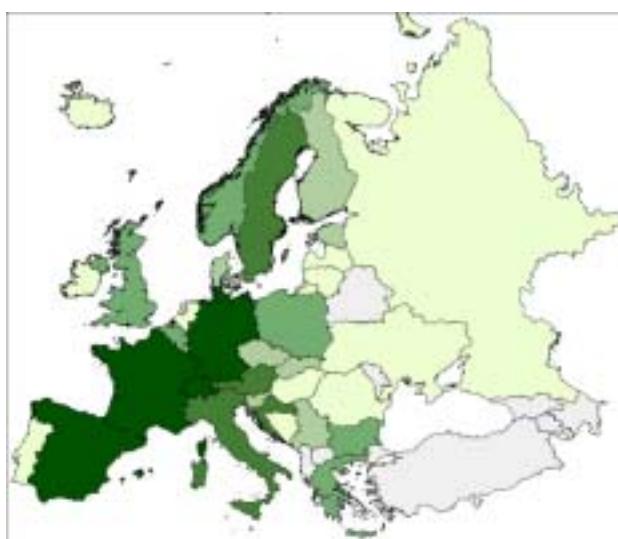
## References

- Breitenbach, J. & Kränzlin, F. 1984. Pilze der Schweiz 1: 66, pl. 34. Mykologia, Luzern  
Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 481.  
ArtDatabanken, SLU, Uppsala.

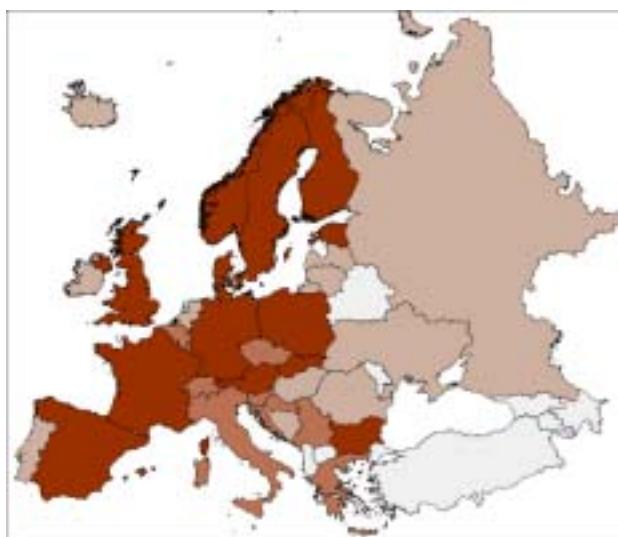
# STATUS IN EUROPE

**SARCOSPHAERA CORONARIA**  
 NUMBER OF LOCALITIES

- 51 to 1 500
- 16 to 60
- 6 to 15
- 1 to 5
- NOT PRESENT
- NO DATA


**SARCOSPHAERA CORONARIA**  
 RED LIST STATUS

- REDLISTED
- NOT REDLISTED
- NOT PRESENT
- NO DATA



Country				No of localities in		Country				No of localities in	
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
<i>= no reports</i> <i>n.d. = no recent data</i> <i>p = present</i> <i>PbL = protected by law</i>						<i>= no reports</i> <i>n.d. = no recent data</i> <i>p = present</i> <i>PbL = protected by law</i>					
EU15 countries						Croatia	41	30		8	
Austria	18	16	R	0	8	Cyprus					
Belgium	22	12		0	10	Czech Republic	20	n.d.			
Denmark	4	4	V			Estonia	5	3	CR	1	
Finland	1	1	EN			Hungary					
France	100	100	VU			Iceland					
Germany	150	120	VU	50		Latvia					
Greece	15	15			3	Lithuania					
Italy	31	23			3	Malta	1	1	R	1	
Luxemburg	6	5				Moldavia					
Netherlands						Norway	10	10	V		
Portugal						Poland	25	11	R	11	
Republic of Ireland						Romania	18	0		4	
Spain	211	198	VU	12	86	Slovakia - PbL	<10	n.d.	VU		
Sweden	38	23	NT		5	Slovenia	4	4			
United Kingdom	18	8	VU	3		Switzerland	>100	>100			
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria	8	7	V	1?		Ukraine					

# *Skeletocutis odora* (SACC.) GINNS



Recorded from 11 countries

654 localities in Europe;  
circumboreal (Siberia and North America)

Red-listed in 5 countries

Major habitat: Fennoscandian herb-rich forests with *Picea abies* (9050)

33 % of localities in protected / Natura 2000 areas

## Brief description

A rather large, annual, resupinate polypore with thick, white, gelatinous fruitbodies with a characteristic sweetish smell.

## Habitat

Saprotrophic on large, fallen trunks of mainly coniferous trees, in particular spruce (*Picea* spp.), also on aspen (*Populus tremula*) in virgin coniferous forests.

## Uses

None.

## Threat

Deforestation and loss of old growth forest habitats rich in thick logs.

Popular name	
Finnish	korpiludekääpä
French	polypore parfumé
German	sibirischer knorpelporling
Swedish	ostticka

## NATURA 2000 HABITATS

Code	Habitat type	Estonia	Finland	France	Sweden
9010	Western taiga	x	x		x
9050	Fennoscandian herb-rich forests with <i>Picea abies</i>	x	x		x
9410	Acidophilous Picea forests of the montane to alpine levels			x	

## References

- Kotiranta, H. & Niemelä, T. 1996. Uhanalaiset kävät Suomessa (Threatened polypores in Finland): 33. Oy Edita Ab, Helsinki
- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 490. ArtDatabanken, SLU, Uppsala.

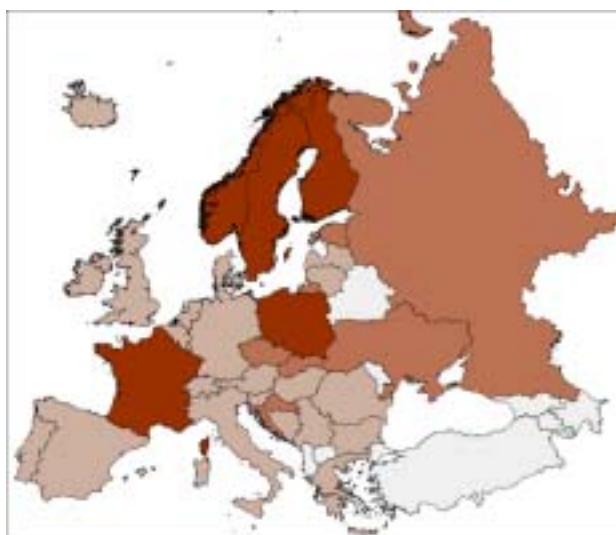
# STATUS IN EUROPE

**SKELETOCUTIS ODORA  
NUMBER OF LOCALITIES**

51 to 1 500  
 16 to 50  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA


**SKELETOCUTIS ODORA  
RED LIST STATUS**

REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in				Country				No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas		Natura2000 areas			Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports													
n.d. = no recent data													
p = present													
PbL = protected by law													
EU15 countries													
Austria													
Belgium													
Denmark													
Finland	130	117	NT	89		90			Croatia	1		1	
France	5	5	CR						Cyprus				
Germany									Czech Republic	3		n.d.	
Greece									Estonia	36		13	
Italy	>3	n.d.							Hungary				
Luxemburg									Iceland				
Netherlands									Latvia				
Portugal									Lithuania				
Republic of Ireland									Malta				
Spain									Moldavia				
Sweden	546	497	VU			120			Norway	27		21	V
United Kingdom									Poland	1		0	V
EU13 and remaining European Bern Convention countries									Romania				
Bulgaria									Slovakia	3		n.d.	
									Slovenia				3
									Switzerland				
									Turkey				
									Ukraine	p			

# ***Suillus sibiricus* SING. SSP. *HELVETICUS* SING.**



Recorded from 9 countries

63 localities in Europe;  
not recorded outside Europe

Red-listed in 7 countries

Major habitat: Alpine *Larix decidua*-  
*Pinus cembra* forests (9420)

38 % of localities in protected /  
Natura 2000 areas

## Brief description

A medium sized bolete with pale yellow pileus prinkled with darker spots. Margin fringed with veil, stipe with woolly, white ring; restricted to five-needled pines.

## Habitat

Mycorrhizal with *Pinus cembra* in subalpine forests in the Alps and with *Pinus peuce* in Macedonia; in Switzerland scattered in autochthonous stands of *Pinus cembra*, often with scattered trees in extensively pastured areas.

## Uses

The fruitbodies are edible but not much appreciated by mushroom pickers. No commercial value.

## Threat

Deforestation of its occurrences. Loss of habitat by constructing ski runs and other infrastructure for winter sport; intensification of agriculture and forestry in subalpine regions.

Popular name	
French	bolet de sibérie
German	beringter zirbenröhrling schweizerischer

## NATURA 2000 HABITATS

Code	Habitat type	France	Germany	Italy	Poland	Switzerland
9420	Alpine <i>Larix decidua</i> - <i>Pinus cembra</i> forests	x	x	x	x	x

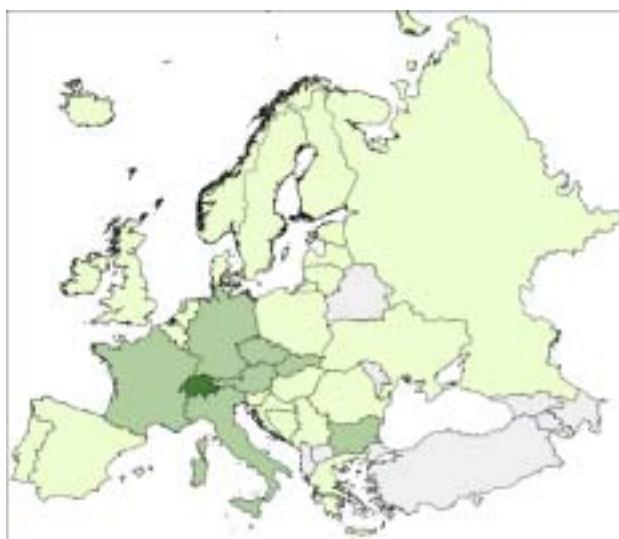
## References

- Breitenbach, J. & Kränzlin, F. 1991. Pilze der Schweiz 3: 82, pl. 50. Mykologia, Luzern  
Engel, H. 1996. Schmier- und Filzröhrlinge s.l. in Europa: 88-90, pl. 24, 25. H. Engel, Weidhausen.

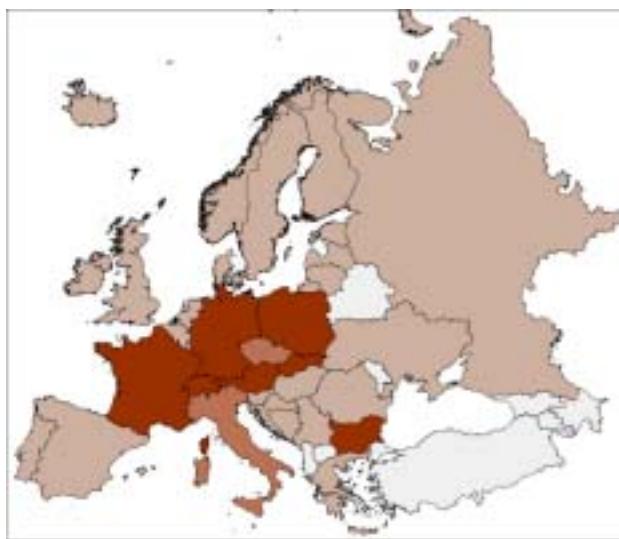
# STATUS IN EUROPE

**SUILLUS SIBIRICUS  
NUMBER OF LOCALITIES**

■ 16 to 50  
■ 1 to 5  
■ NOT PRESENT  
■ NO DATA


**SUILLUS SIBIRICUS  
RED LIST STATUS**

■ RELISTED  
■ NOT RELISTED  
■ NOT PRESENT  
■ NO DATA



Country					No of localities in		Country					
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas	Total no of localities known		No of localities known after 1980	Red List Category	protected areas	Natura2000 areas	
EU15 countries												
Austria	3	3	V	0	2	Croatia						
Belgium						Cyprus						
Denmark						Czech Republic	1	n.d.				
Finland						Estonia						
France	5	4	VU	2		Hungary						
Germany	5	4	EN	4		Iceland						
Greece						Latvia						
Italy	5	3				Lithuania						
Luxemburg						Malta						
Netherlands						Moldavia						
Portugal						Norway						
Republic of Ireland						Poland	2	0	E			
Spain						Romania						
Sweden						Slovakia - PbL	1	n.d.	VU	1		
United Kingdom						Slovenia						
EU13 and remaining European Bern Convention countries						Switzerland	45	45	VU			
Bulgaria	4	4	V	1?		Turkey						
						Ukraine						

# **Torrendia pulchella BRES.**



Recorded from 4 countries

110 localities in Europe;  
also in North Africa

Red-listed in 3 countries

Major habitat: *Q suber*forests (9330),  
Galicio-Portuguese oak woods with  
*Quercus robur* and *Quercus*  
*pyrenaica*(9230)

55 % of localities in protected /  
Natura 2000 areas

## Brief description

A peculiar, small, stipitate, whitish fungus with a basal sack (volva), similar to a young *Amanita* but pileus not expanding and underside without lamellae.

## Habitat

Mycorrhizal with *Quercus suber*, among grass, maccia, garigue.

## Uses

None.

## Threat

Destruction of sites by overgrazing or fires.

Popular name	
French	torrentie délicate
German	weisser scheidenstäubling

## NATURA 2000 HABITATS

Code	Habitat type	France	Portugal	Spain
2180	Wooded dunes of the atlantic, continental and boreal region	x		
2270	Wooded dunes with <i>Pinus pinea</i> and/or <i>Pinus pinaster</i>		x	
9330	<i>Quercus suber</i> forest	x		x
9230	Galicio-Portuguese oak woods with <i>Quercus robur</i> and <i>Quercus pyrenaica</i>			x
9540	Mediterranean pine forests with endemic Mesogean pines			x
9340	<i>Quercus ilex</i> and <i>Quercus rotundifolia</i> forests			x
9260	<i>Castanea sativa</i> woods			x

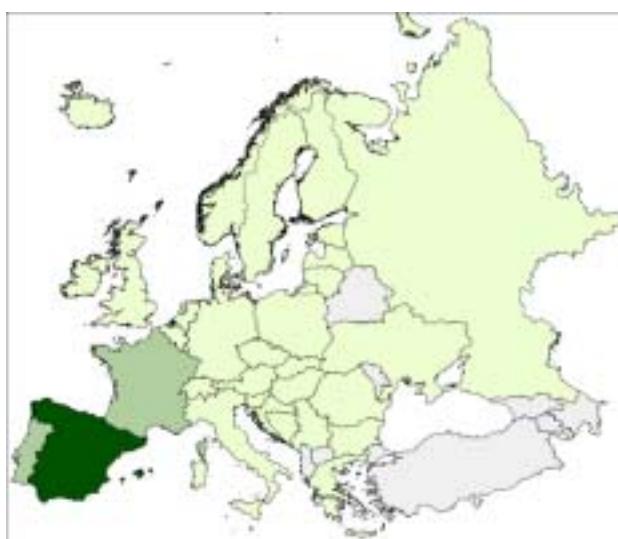
## References

- Bas, C. 1975. A comparison of *Torrendia* (Gasteromycetes) with *Amanita* (Agaricales). Beih. Nova Hedwigia 51: 53-61, pl. 11
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# STATUS IN EUROPE

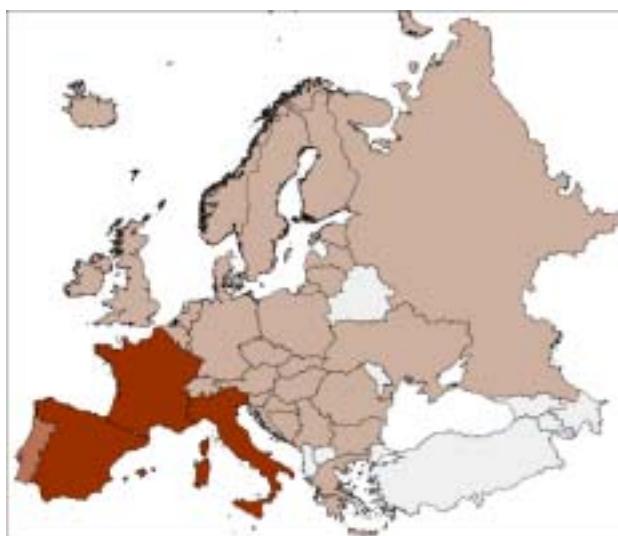
**TORRENDIA PULCHELLA**  
NUMBER OF LOCALITIES

■ 51 to 1 500  
■ 1 to 5  
■ NOT PRESENT  
■ NO DATA



**TORRENDIA PULCHELLA**  
RED LIST STATUS

■ REDLISTED  
■ NOT REDLISTED  
■ NOT PRESENT  
■ NO DATA



Country	No of localities in				Country	No of localities in				protected areas	Natura2000 areas
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic					
Denmark						Estonia					
Finland						Hungary					
France	5	5	CR			Iceland					
Germany						Latvia					
Greece						Lithuania					
Italy	>1	n.d.	yes			Malta					
Luxemburg						Moldavia					
Netherlands						Norway					
Portugal	3	3		0	0	Poland					
Republic of Ireland						Romania					
Spain	120	102	VU	0	61	Slovakia					
Sweden						Slovenia					
United Kingdom						Switzerland					
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

# ***Tricholoma colossus* (Fr.) QUÉL.**



Recorded from 21 countries

218 localities in Europe

Red-listed in 13 countries

Major habitat: Mediterranean pine forests with endemic mesogean pines (9540), Coniferous forests on, or connected to, glaciofluvial eskers (9060)

52 % of localities in protected / Natura 2000 areas

## Brief description

A very large, robust agaric with red brown pileus, white lamellae and a stipe with fugacious, fibrillose annulus.

## Habitat

Myorrhizal symbiont of *Pinus* in wood land on very oligotrophic, acidic soils, in particular in *Cladonio-Pinetum*.

## Uses

The fruitbodies are edible but not much appreciated. Occasionally collected by mushroom pickers but without commercial value.

## Threat

Deforestation and loss of old growth forest habitats, i.e. exploitation by forestry. Possibly nitrogen deposition, use of fertilisers and application of lime in forestry.

Popular name	
Dutch	reuzenridderzwam
English	giant tricholoma
Finnish	jättivalmuska
French	tricholome colosse
German	riesen-ritterling
Swedish	jättemusseron

## NATURA 2000 HABITATS

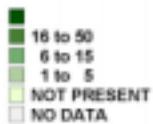
Code	Habitat type	Estonia	Finland	France	Italy	Latvia	Lithuania	Portugal	Slovenia	Sweden	Switzerland	United Kingdom
2270	Wooded dunes with <i>Pinus pinea</i> and/or <i>Pinus pinaster</i>							x				
9010	Western taiga	x	x			x	x			x		
9060	Coniferous forests on, or connected to, glaciofluvial eskers		x			x	x		x	x		
9430	Subalpine and montane <i>Pinus uncinata</i> forests			x							x	
9530	Submediterranean pine forest with endemic black <i>Pinus</i>			x	x							x
9540	Mediterranean pine forest with endemic mesogean <i>Pinus</i>			x	x							x
91C0	Caledonian forest										x	

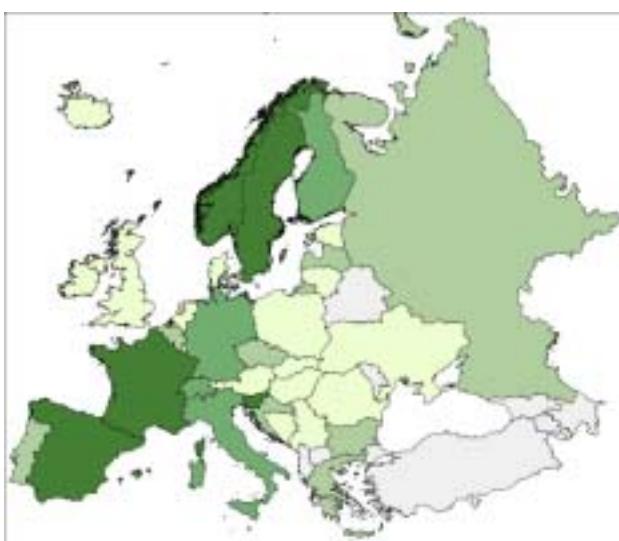
## References

- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. [Swedish Red Data Book of Fungi 1997]: 515. ArtDatabanken, SLU, Uppsala
- Noordeloos, M.E. in Bas, C. et al. 1999. Flora Agaricina Nederlandica 4: 131-132, fig. 102. A.A. Balkema, Rotterdam, Brookfield
- Riva, A. 1988. *Tricholoma*, Fungi Europaei 3: 396-399, pl. 67. Giovanna Biella, Saronno.

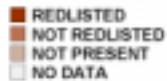
# STATUS IN EUROPE

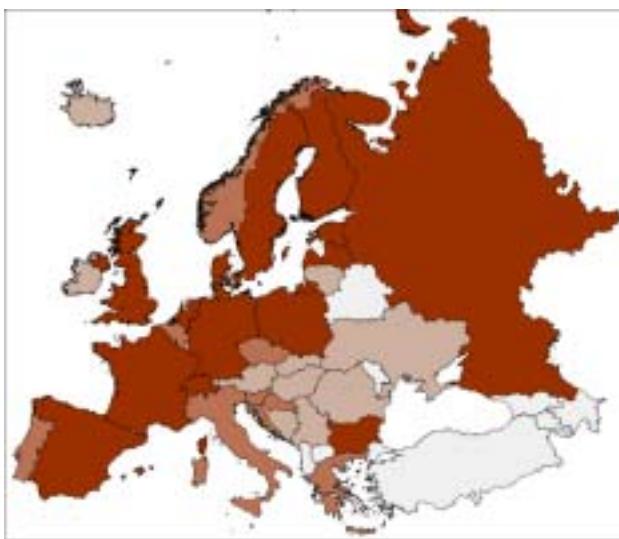
**TRICHOLOMA COLOSSUS**  
NUMBER OF LOCALITIES


  
 16 to 50  
 6 to 15  
 1 to 5  
 NOT PRESENT  
 NO DATA



**TRICHOLOMA COLOSSUS**  
RED LIST STATUS


  
 REEDLISTED  
 NOT REEDLISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in				Country	No of localities in				protected areas	Natura2000 areas
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
= no reports						= no reports					
n.d. = no recent data						n.d. = no recent data					
p = present						p = present					
PbL = protected by law						PbL = protected by law					
EU15 countries						Croatia	1	1			
Austria						Cyprus					
Belgium	1?	1?		0	0	Czech Republic	10	n.d.			
Denmark	1	0	R			Estonia	2	0	EN		
Finland	15	12	NT	1,6	2,4	Hungary					
France	40	35	EN	3	8	Iceland					
Germany	35	10	EN	3		Latvia	3	3	Ex		
Greece	2	1			1	Lithuania	5	n.d.			
Italy	16	9		1	4	Malta					
Luxemburg						Moldavia					
Netherlands	2	0	Ex			Norway	>50	27			
Portugal	3	2		0	0	Poland	2	0	V		
Republic of Ireland						Romania					
Spain	54	50	VU	0	38	Slovakia					
Sweden	65	34	NT		20	Slovenia - PbL	20	20			
United Kingdom	6	0	EN	2		Switzerland - PbL	9	9	EN		
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria	5	5	E	1?		Ukraine					

# *Tulostoma niveum* KERS



Recorded from 3 countries

9 localities in Europe;  
not known outside Europe

Red-listed in 3 countries

Major habitat: Rupicolosus  
calcareous or basphilic grasslands  
of the alyso-sedionalbi (6110),  
Nordic alvar and precambrian  
calcareous flatrocks (6280)

56 % of localities in protected /  
Natura 2000 areas

## Brief description

A rather small, stipitate, entirely white puffball characterised by its unusual choice of habitat.

## Habitat

*Tulostoma niveum* grows solitary or gregariously in dense moss tussocks on limestone cliffs and boulders.

## Uses

None.

## Threat

Exploitation (buildings, road constructions etc.) of localities from which *Tulostoma niveum* is on record. In localities where it grows on cliffs, trampling by man is a possible threat.

Popular name		
English	white stalk puffball	
Finnish	sammaljalkakuukunen	
French	tulostome blanc de neige	
German	weisser stielbovist	
Swedish	vit stjälkröksvamp	

## NATURA 2000 HABITATS

### Code Habitat type

		Sweden	Finland	Great Britain
4060	Alpine and boreal heath			x
6110	Rupicolosus calcareous or basphilic grasslands of the alyso-sedionalbi	x		
6270	Fennoscandian lowland species-rich dry to mesic grasslands		x	
6280	Nordic alvar and precambrian calcareous flatrocks	x		
8120	Calcareous and calcshist screes of montane to alpine levels			x
8210	Calcareous rockyslopes with chasmophytic vegetation		x	
8240	Limestone pavements	x		

## References

- Fleming, L.V., Ing, B. & Scouller, S.E.K. 1998. Current Status and Phenology of Fruiting in Scotland of the Endangered Fungus *Tulostoma niveum*. Mycologist 12(3):126-131
- Kers, L.E. 1978. *Tulostoma niveum* sp. nov. (Gasteromycetes), described from Sweden. Botaniska Notiser 131: 411-417
- Larsson, K.H. (ed.). 1997. Rödlistade svampar i Sverige – Artfakta. (Swedish Red Data Book of Fungi 1997): 527.
- ArtDatabanken, SLU, Uppsala
- Pegler, D. N., Laessoe, T. & Spooner, B. 1995. British Puffballs, Earthstars and Stinkhorns: 44-45, figs 22-23. Royal Botanic Gardens, Kew.

## STATUS IN EUROPE

**TULOSTOMA NIVEUM**  
NUMBER OF LOCALITIES

 1 to 5  
 NOT PRESENT  
 NO DATA

**TULOSTOMA NIVEUM**  
RED LIST STATUS

 REDLISTED  
 NOT REDLISTED  
 NOT PRESENT  
 NO DATA



Country	No of localities in					Country	No of localities in				
	Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas		Total no of localities known	No of localities known after 1980	Red List Category	protected areas	Natura2000 areas
EU15 countries						Croatia					
Austria						Cyprus					
Belgium						Czech Republic					
Denmark						Estonia					
Finland	2	1	EN	1	1	Hungary					
France						Iceland					
Germany						Latvia					
Greece						Lithuania					
Italy						Malta					
Luxemburg						Moldavia					
Netherlands						Norway					
Portugal						Poland					
Republic of Ireland						Romania					
Spain						Slovakia					
Sweden	36	5	EN		3	Slovenia					
United Kingdom	3	3	VU	1		Switzerland					
EU13 and remaining European Bern Convention countries						Turkey					
Bulgaria						Ukraine					

## Additional data

Country				Country			
= no reports		= no reports		= no reports		= no reports	
Total no of localities known	No of localities known after 1980	Red List Category	No of localities in protected areas	No of localities in Natura2000 areas	Total no of localities known	No of localities known after 1980	Red List Category
<b>Russia</b>					<b>Armenia</b>		
<i>Tricholoma colossus</i>	p				<i>Myriostoma coliforme</i>	p	
<i>Boletopsis grisea</i>	p						
<i>Tricholoma colossus</i>	p						
<i>Geoglossum atropurpureum</i>	p						
<i>Gomphus clavatus</i>	p						
<i>Hapalopilus croceus</i>	p						
<i>Haplorporus odorus</i>	p						
<i>Hericium erinaceum</i>	p						
<i>Hygrocybe calyptiformis</i>	p						
<i>Hygrophorus purpurascens</i>	p						
<i>Laricifomes officinalis</i>	p						
<i>Leucopaxillus compactus</i>	p						
<i>Lyophyllum favrei</i>	p						
<i>Myriostoma coliforme</i>	p						
<i>Phylloporus pelletieri</i>	p						
<i>Pycnoporellus alboluteus</i>	p						
<i>Sarcosoma globosum</i>	p						
<i>Skeletocutis odora</i>	p						
<i>Tricholoma colossus</i>	p						



*Tricholoma colossus*