

Table S1. *Cortinarius* sequences from public databases used in this study.

Species name	Country	GenBank Acc. No.
<i>C. albertii</i>	Hungary	DQ323958
<i>C. alboviolaceus</i>	Sweden	MT934857
<i>C. alcalinophilus</i>	United Kingdom	MK010932
<i>C. anfractoides</i>	France	NR132060
<i>C. anomalus</i>	Denmark	AJ889940
<i>C. anomalus</i>	Switzerland	KX302231
<i>C. aureopulverulentus</i>	Austria	AF503541
<i>C. aureopulverulentus</i>	Sweden	DQ663231
<i>C. balteatocumatilis</i>	Germany	KJ421190
<i>C. balteatocumatilis</i>	Russia	MK402161
<i>C. balteatus</i>	Sweden	NR130194
<i>C. bergeronii</i>	Czech Republic	LT629335
<i>C. brunneus</i>	Sweden	DQ117927
<i>C. bulliardii</i>	Sweden	JX114942
<i>C. caesiophylloides</i>	Finland	NR130303
<i>C. calochrous</i>	Denmark	DQ323960
<i>C. camphoratus</i>	Spain	MT775573
<i>C. caninus</i>	Russia	MN308205
<i>C. caninus</i>	Switzerland	KX302252
<i>C. caperatus</i>	Germany	KJ421160
<i>C. caperatus</i>	Canada	FJ157020
<i>C. catharinae</i>	Spain	EU057065
<i>C. catharinae</i>	Italy	KY490534
<i>C. cinereobrunneolus</i>	France	MT934961
<i>C. cinnamomeus</i>	Sweden	NR131816
<i>C. claricolor</i>	Sweden	NR130209
<i>C. collinitus</i>	Austria	AF325573
<i>C. collinitus</i>	Germany	AY669588
<i>C. collocandoides</i>	France	NR130210
<i>C. colymbadinus</i>	Sweden	NR131819
<i>C. corrosus</i>	Spain	EU057057
<i>C. corrosus</i>	Germany	KJ421199
<i>C. croceus</i>	Finland	NR131863
<i>C. cumatilis</i>	Germany	AY174812
<i>C. daulnoyae</i>	France	KX228458
<i>C. daulnoyae</i>	France	NR158402
<i>C. decolorans</i>	Germany	AY174792
<i>C. delibutus</i> 2 ' <i>citrinellus</i> '	USA	U56025
<i>C. dionysae</i>	Germany	KJ421135
<i>C. duracinus</i>	Sweden	MT935027
<i>C. elatior</i> s.l.	Denmark	AM113951
<i>C. elegantior</i>	Spain	JX219779
<i>C. elegantior</i>	Switzerland	GU363464
<i>C. elegantissimus</i>	Germany	EU057037
<i>C. elegantissimus</i>	Norway	AY669565

<i>C. eliae</i>	France	NR130216
<i>C. epipurrus</i>	France	MT935029
<i>C. exsularis</i>	Spain	KX234735
<i>C. fraudulosus</i>	Germany	NR130292
<i>C. fulminoides</i>	Germany	KJ421200
<i>C. fulminoides</i>	Italy	MK965087
<i>C. gallurae</i>	Spain	KU953934
<i>C. geniculatus</i>	France	MH784786
<i>C. gentilis</i>	Norway	EU266692
<i>C. glaucopus</i>	Sweden	NR130222
<i>C. aff. glaucopus</i>	Germany	KJ421207
<i>C. haasii</i>	France	KY290697
<i>C. hadrocroceus</i>	Canada	NR131854
<i>C. hallingii</i>	USA	KJ421159
<i>C. herculeus</i>		KJ421098
<i>C. hillieri</i>	France	NR171338
<i>C. hinnuleus</i>	Sweden	DQ117926
<i>C. holoxanthus</i>	Italy	MT002309
<i>C. holoxanthus</i>	Italy	MT002310
<i>C. huronensis</i>	Canada	MN751292
<i>C. huronensis</i>	Canada	MN992343
<i>C. hydrotelamonoides</i>	France	MT935145
<i>C. incognitus</i>	Canada	MN 751325
<i>C. infractus</i>	Sweden	NR130225
<i>C. kompsos</i>	France	MW367679
<i>C. lacustris</i>	France	NR171344
<i>C. largus</i>	Finland	NR130180
<i>C. leproleptopus</i>	France	MW009226
<i>C. lilacinovelatus</i>	Spain	EU057055
<i>C. luridus</i>	France	MT935201
<i>C. luridus</i>	Sweden	MT935202
<i>C. magicus</i>	Denmark	DQ083794
<i>C. aff. magicus</i>	Germany	KJ421187
<i>C. masseei</i>	Estonia	UDB0383516
<i>C. mitwok</i>	USA	NR157883
<i>C. multiformis</i>	Sweden	NR130232
<i>C. napus</i>	Germany	EU057067
<i>C. napus</i>	Pacific USA	GU363493
<i>C. neofurvolaeus</i>	Sweden	NR131789
<i>C. norrlandicus</i>	Sweden	NR130181
<i>C. obtusus</i>	Norway	KC842421
<i>C. ochraceopallescens</i>	Germany	EU057077
<i>C. ochraceopallescens</i>	France	DQ663354
<i>C. odoratus</i>	Denmark	DQ663358
<i>C. odoratus</i>	Germany	AY174836
<i>C. olearioides</i>	Sweden	DQ083803
<i>C. olidoamarus</i>	Germany	KJ421042
<i>C. olidoamarus</i>	Hungary	MK358099

<i>C. olivaceodionysae</i>	Germany	AY669523
<i>C. ominosus</i>	Hungary	UDB021551
<i>C. pallidostriatus</i>	USA	MT935271
<i>C. paracephalixus</i>	Netherlands	AY669516
<i>C. persoonianus</i>	Germany	KJ421118
<i>C. persoonianus</i>	France	KF732382
<i>C. piceae</i>	Sweden	DQ663378
<i>C. pilatii</i>	Czech Republic	MT935305
<i>C. pluviorum</i>	Canada	HQ604684
<i>C. praestans</i>	Germany	AY174802
<i>C. pseudocisticola</i>	Germany	EU057075
<i>C. pseudodaulnoyae</i>	France	KX228455
<i>C. pseudodaulnoyae</i>	France	KX228456
<i>C. pseudofervidus</i>	Sweden	NR131817
<i>C. pseudonaevosus</i>	France	NR130249
<i>C. purpurascens</i>	Sweden	NR130252
<i>C. putorius</i>	USA	NR153038
<i>C. radicosissimus</i>	Spain	MT935371
<i>C. radicosissimus</i>	Sweden	MT935372
<i>C. renidens</i>	Germany	AY669652
<i>C. reverendissimus</i>	Russia	MT739806
<i>C. rubellus</i>	Germany	JF907883
<i>C. rubricosus</i>	France	NR171148
<i>C. rubrophyllus</i>	France	NR153036
<i>C. rufoallutus</i>	France	NR130258
<i>C. saginus</i>	Germany	AY174800
<i>C. saginus</i>	Norway	KC842448
<i>C. salor</i>	Estonia	UDB034759
<i>C. saporatus</i>	Denmark	DQ083811
<i>C. saporatus</i>	Germany	AY669570
<i>C. scaurocaninus</i>	Germany	KX520673
<i>C. scaurocaninus</i>	Spain	MK816384
<i>C. semiodoratus</i>	Germany	AY669665
<i>C. semisanguineus</i>	Sweden	JN114090
<i>C. semivelatus</i>	France	MT935428
<i>C. sodagnitus</i>	Italy	EU057076
<i>C. sodagnitus</i>	France	KY290696
<i>C. sp.</i>	Canada	MN751619
<i>C. spadicellus</i>	Germany	KJ421092
<i>C. spadicellus</i>	Norway	AY669539
<i>C. spilomeus</i>	Sweden	NR153075
<i>C. squalidus</i>	USA	MT935450
<i>C. subargyronotus</i>	Sweden	NR131871
<i>C. subdecolorans</i>	France	NR130266
<i>C. subfoetens</i>	China	MH295817
<i>C. subfoetens</i>	USA	NR130267
<i>C. sublilacinopes</i>	Czech Republic	DQ323977
<i>C. subparvannulatus</i>	France	NR171158

<i>C. subporphyropus</i>	Hungary	KT159228
<i>C. subpurpurascens</i>	Finland	NR130270
<i>C. subrubrovelatus</i>	France	NR153009
<i>C. subrugulosus</i>	Sweden	KJ421054
<i>C. subtortus</i>	Sweden	NR130273
<i>C. sulphurinus</i>	Austria	EU056995
<i>C. sulphurinus</i>	Germany	AY669572
<i>C. talimultiformis</i>	Sweden	NR130306
<i>C. testaceomicaceus</i>	France	MH784817
<i>C. tirolianus</i>	France	KF732460
<i>C. tirolianus</i>	France	NR130277
<i>C. torvus</i>	Germany	AY669668
<i>C. traganus</i>	Sweden	MT935361
<i>C. trivialis</i>	Russia	DQ295113
<i>C. trivialis</i>	Spain	AJ296300
<i>C. turgidus</i>	Germany	AY669689
<i>C. turmalis</i>	Sweden	NR130278
<i>C. ultrodistortus</i>	United Kingdom	MK010941
<i>C. uraceonemoralis</i>	Italy	NR131836
<i>C. uraceus</i>	Finland	NR131837
<i>C. urbicus</i>	Sweden	KP866158
<i>C. variicolor</i>	Sweden	NR130279
<i>C. varius</i>	Sweden	NR130281
<i>C. venetus</i>	Sweden	MW010189
<i>C. vibratilis</i>	Finland	MZ568649
<i>C. aff. vibratilis</i>	Canada	MN992358
<i>C. violaceus</i>	Germany	AY669579
<i>C. xanthochlorus</i>	Sweden	EU057047
<i>C. xanthoochraceus</i>	Germany	AY669558

Table S2. *Cortinarius* taxa published to date from Romania and identified with morphological methods.

Taxa	References	Confirmed by ITS Sequences in This Study
<i>Cortinarius acutus</i> (Pers.) Fr. 1838	[79]	no
<i>Cortinarius alboviolaceus</i> (Pers.) Fr. 1838	[79]	yes
<i>Cortinarius allutus</i> Fr. 1838	[79]	no
<i>Cortinarius alnetorum</i> (Velen.) M.M. Moser 1967	[79]	no
<i>Cortinarius amethystinus</i> Quél. 1886	[117]	no
<i>Cortinarius angelesianus</i> A.H. Sm. 1944	[79]	no
<i>Cortinarius anomalus</i> (Fr.) Fr. 1838	[79]	yes
<i>Cortinarius arcuatus</i> (Bull.) Quél. 1883	[117]	no
<i>Cortinarius argentatus</i> (Pers.) Fr. 1838	[118]	no
<i>Cortinarius armeniacus</i> (Schaeff.) Fr. 1838	[117]	no
<i>Cortinarius armillatus</i> (Fr.) Fr. 1838	[79]	no
<i>Cortinarius atrovirens</i> Kalchbr. 1874	[119]	no
<i>Cortinarius anfractus</i> Fr. 1838	[117]	no
<i>Cortinarius anserinus</i> (Velen.) Rob. Henry 1986	[79]	no
<i>Cortinarius balaustinus</i> Fr. 1838	[119]	no
<i>Cortinarius balteatus</i> Fr. 1838	[117]	yes
<i>Cortinarius bergeronii</i> (Melot) Melot 1992	[79]	yes
<i>Cortinarius betulinus</i> J. Favre 1948	[119]	no
<i>Cortinarius bivelus</i> (Fr.) Fr. 1838	[120]	no
<i>Cortinarius bovinus</i> Fr. 1838	[117]	no
<i>Cortinarius bulliardii</i> (Pers.) Fr. 1838	[117]	yes
<i>Cortinarius caerulescens</i> (Schaeff.) Fr. 1838	[117]	no
<i>Cortinarius cagei</i> Melot 1990	[79]	no
<i>Cortinarius callisteus</i> (Fr.) Fr. 1838	[121]	no
<i>Cortinarius calochrous</i> (Pers.) Gray 1821	[117]	yes
<i>Cortinarius camphoratus</i> (Fr.) Fr. 1838	[79]	yes
<i>Cortinarius caninus</i> (Fr.) Fr. 1838	[79]	yes
<i>Cortinarius caperatus</i> (Pers.) Fr. 1838	[79]	yes
<i>Cortinarius chrysolithus</i> Kauffman 1915	[79]	no
<i>Cortinarius cinnabarinus</i> Fr. 1838	[117]	no
<i>Cortinarius cinnamomeoluteus</i> P.D. Orton 1960	[122]	no
<i>Cortinarius cinnamomeus</i> (L.) Gray 1821	[117]	yes
<i>Cortinarius collinitus</i> (Sowerby) Gray 1821	[117]	yes
<i>Cortinarius collocandoides</i> Reumaux 2009	[79]	yes
<i>Cortinarius cotoneus</i> Fr. 1838	[123]	no
<i>Cortinarius croceus</i> (Schaeff.) Gray 1821	[79,117]	yes
<i>Cortinarius cumatilis</i> Fr. 1838	[79]	no
<i>Cortinarius cyanopus</i> Secr. ex Fr. 1838	[117]	no
<i>Cortinarius damascenus</i> Fr. 1838	[124]	no
<i>Cortinarius decoloratus</i> (Fr.) Fr. 1838	[117]	no
<i>Cortinarius decumbens</i> (Pers.) Fr. 1838	[117]	no
<i>Cortinarius delibutus</i> Fr. 1838	[79]	yes
<i>Cortinarius diasemospermus</i> var. <i>leptospermus</i> H. Lindstr. 1998	[79]	no
<i>Cortinarius dibaphus</i> Fr. 1838	[123]	no
<i>Cortinarius elatior</i> Fr. 1838	[125]	yes
<i>Cortinarius elegantior</i> (Fr.) Fr. 1838	[119]	yes
<i>Cortinarius elegantissimus</i> Rob. Henry 1943	[79]	yes

<i>Cortinarius erythrinus</i> (Fr.) Fr. 1838	[126]	no
<i>Cortinarius evernius</i> (Fr.) Fr. 1838	[117]	no
<i>Cortinarius flexipes</i> (Pers.) Fr. 1838	[79]	no
<i>Cortinarius fulgens</i> Fr. 1838	[117]	no
<i>Cortinarius fulvescens</i> Fr. 1838	[79]	no
<i>Cortinarius fulvoincarnatus</i> Joachim 1936	[127]	no
<i>Cortinarius fulvo-ochraceus</i> Rob. Henry 1943	[53]	no
<i>Cortinarius gentilis</i> (Fr.) Fr. 1838	[117]	yes
<i>Cortinarius glaucopus</i> (Schaeff.) Gray 1821	[117]	yes
<i>Cortinarius glaucopus</i> var. <i>olivaceus</i> (M.M. Moser) Quadr. 1985	[79]	no
<i>Cortinarius hemitrichus</i> (Pers.) Fr. 1838	[127]	no
<i>Cortinarius hinnuleus</i> Fr. 1838	[117]	yes
<i>Cortinarius humicola</i> (Quél.) Maire 1911	[117]	no
<i>Cortinarius iliopodius</i> (Bull.) Fr. 1838	[122]	no
<i>Cortinarius illuminus</i> Fr. 1838	[79]	no
<i>Cortinarius imbutus</i> Fr. 1838	[121]	no
<i>Cortinarius infractus</i> (Pers.) Fr. 1838	[117]	no
<i>Cortinarius inochlorus</i> Maire 1937	[128]	no
<i>Cortinarius inolens</i> (H. Lindstr.) Bidaud 2010	[79]	no
<i>Cortinarius kristinae</i> Brandrud 2017	[79]	no
<i>Cortinarius largus</i> Fr. 1838	[117]	yes
<i>Cortinarius lebretonii</i> Quél. 1880	[79]	no
<i>Cortinarius leucopus</i> (Bull.) Fr. 1838	[117]	no
<i>Cortinarius limonius</i> (Fr.) Fr. 1838	[117]	no
<i>Cortinarius lucorum</i> (Fr.) E. Berger 1846	[125]	no
<i>Cortinarius lustrabilis</i> Moënné-Locc. 2000	[79]	no
<i>Cortinarius magicus</i> Eichhorn 1967	[79]	yes
<i>Cortinarius malicorius</i> Fr. 1838	[79]	no
<i>Cortinarius mucosus</i> (Bull.) J. Kickx f. 1867	[79,117]	no
<i>Cortinarius multififormis</i> Fr. 1838	[117]	yes
<i>Cortinarius napus</i> Fr. 1838	[117]	yes
<i>Cortinarius ochroleucus</i> (Schaeff.) Fr. 1838	[117]	no
<i>Cortinarius olearioides</i> Rob. Henry 1987	[81]	yes
<i>Cortinarius orellanus</i> Fr. 1838	[85]	no
<i>Cortinarius orichalceus</i> (Batsch) Fr. 1838	[117]	no
<i>Cortinarius paleaceus</i> Fr. 1838	[127]	no
<i>Cortinarius percomis</i> Fr. 1838	[123]	no
<i>Cortinarius pholideus</i> (Lilj.) Fr. 1838	[79]	no
<i>Cortinarius praestans</i> (Cordier) Gillet 1876	[117]	no
<i>Cortinarius prasinus</i> (Schaeff.) Fr. 1838	[117]	no
<i>Cortinarius punctatus</i> (Pers.) Fr. 1838	[117]	no
<i>Cortinarius purpurascens</i> Fr. 1838	[117]	yes
<i>Cortinarius purpureus</i> (Bull.) Bidaud, Moënné-Locc. & Reumaux 1994	[79]	no
<i>Cortinarius quarcticus</i> H. Lindstr. 1994	[79]	no
<i>Cortinarius riederi</i> (Weinm.) Fr. 1838	[79]	no
<i>Cortinarius rigens</i> (Pers.) Fr. 1838	[124]	no
<i>Cortinarius rubellus</i> Cooke 1887	[129]	yes
<i>Cortinarius rufo-olivaceus</i> (Pers.) Fr. 1838	[117]	no
<i>Cortinarius salor</i> Fr. 1838	[117]	yes
<i>Cortinarius sanguineus</i> (Wulfen) Gray 1821	[79]	no

<i>Cortinarius scaurus</i> (Fr.) Fr. 1838	[117]	no
<i>Cortinarius semisanguineus</i> (Fr.) Gillet 1876	[79,117]	yes
<i>Cortinarius sphagnophilus</i> Peck 1878	[79]	no
<i>Cortinarius spilomeus</i> (Fr.) Fr. 1863	[79]	yes
<i>Cortinarius stillatitius</i> Fr. 1838	[121]	no
<i>Cortinarius suberi</i> Soop 1990	[79]	no
<i>Cortinarius subfulgens</i> P.D. Orton 1960	[87]	no
<i>Cortinarius subparvannulatus</i> Moënné-Locc. & Fillion 2010	[79]	yes
<i>Cortinarius subtortus</i> (Pers.) Fr. 1838	[79]	yes
<i>Cortinarius sulfurinus</i> Qué. 1884	[79]	yes
<i>Cortinarius tabularis</i> (Fr.) Fr. 1838	[125]	no
<i>Cortinarius talimultiformis</i> Kytöv., Liimat., Niskanen, A.F.S. Taylor & Seshi 2014	[79]	yes
<i>Cortinarius talus</i> Fr. 1838	[79]	no
<i>Cortinarius torvus</i> (Fr.) Fr. 1838	[117]	yes
<i>Cortinarius traganus</i> (Fr.) Fr. 1838	[117]	yes
<i>Cortinarius trivialis</i> J.E. Lange 1940	[121]	yes
<i>Cortinarius tubarius</i> Ammirati & A.H. Sm. 1972	[79]	no
<i>Cortinarius turbinatus</i> (Bull.) Fr. 1838	[117]	no
<i>Cortinarius turgidus</i> Fr. 1838	[79]	yes
<i>Cortinarius turmalis</i> Fr. 1838	[117]	yes
<i>Cortinarius variicolor</i> (Pers.) Fr. 1838	[117]	yes
<i>Cortinarius varius</i> (Schaeff.) Fr. 1838	[117]	yes
<i>Cortinarius venetus</i> (Fr.) Fr. 1838	[117]	yes
<i>Cortinarius vibratilis</i> (Fr.) Fr. 1838	[117]	no
<i>Cortinarius violaceus</i> (L.) Gray 1821	[117]	yes
<i>Cortinarius vulpinus</i> (Velen.) Rob. Henry 1947	[79]	no
<i>Cortinarius xanthochlorus</i> Rob. Henry 1966	[79]	yes