

Supplementary Table S1. List of DNA sequences obtained in the present study

Latin name	Sample ID	Country	ID of deposited DNA sequences in each following locus								
			nuc rDNA ITS	nuc rDNA IGS1	<i>rpb2</i>	β_2 tubulin gene	mt rDNA SSU	<i>atp6</i>	<i>gapdh</i>	<i>tef1</i>	<i>megB1</i>
<i>Tricholoma matsutake</i>	AY-2200915-001	Ukraine	LC684325	LC684350	LC684377	LC684437	LC684465	LC684507	LC684424	LC684389	LC684515
<i>T. matsutake</i>	Ishida F-0247	Sweden	LC684296	LC684329	LC684365	LC684446	LC684485	LC684488		LC684385	
<i>T. matsutake</i>	Ishida F-0315	Sweden	LC684310	LC684330	LC684371	LC684450	LC684483	LC684506	LC684422	LC684387	LC684514
<i>T. matsutake</i>	AT-0925	Sweden	LC684286								
<i>T. matsutake</i>	AY-2040800-001	Finland	LC684326	LC684349	LC684369	LC684448	LC684482	LC684492	LC684428	LC684390	
<i>T. matsutake</i>	AY-2070925-001 (=Tn-FIN1)	Finland	LC684306	LC684348	LC684384	LC684440	LC684481	LC684505	LC684433	LC684409	
<i>T. matsutake</i>	AY-2040400-001	Bhutan	LC684321	LC684347					LC684421		
<i>T. matsutake</i>	AY-1981000-002 (= BH1)	Bhutan	LC684309	LC684346	LC684368	LC684463	LC684480	LC684503	LC684427	LC684408	LC684512
<i>T. matsutake</i>	Narimatsu S-1	Bhutan	LC684322	LC684355		LC684457				LC684407	
<i>T. matsutake</i>	Narimatsu S-2	Bhutan	LC684317	LC684354		LC684460				LC684399	
<i>T. matsutake</i>	Narimatsu S-3-1	Bhutan	LC684324	LC684353		LC684456				LC684397	
<i>T. matsutake</i>	Narimatsu S-3-2	Bhutan	LC684308	LC684352		LC684458				LC684396	
<i>T. matsutake</i>	AY-1980831-001	China	LC684307	LC684345	LC684367	LC684444	LC684484	LC684493	LC684419	LC684392	
<i>T. matsutake</i>	AY-1981000-001 (= CH1)	China	LC684315	LC684344	LC684364	LC684438	LC684479	LC684504	LC684420	LC684395	
<i>T. matsutake</i>	Chi4 (= CH-HE)	China	LC684285								
<i>T. matsutake</i>	Chi6 (= CH-YU1)	China	LC684284								
<i>T. matsutake</i>	AY-1981000-003 (= NK1)	North Korea	LC684304	LC684343			LC684478		LC684417		
<i>T. matsutake</i>	AT-0924 (= KFRI 432)	South Korea	LC684311	LC684359	LC684376	LC684461	LC684477	LC684490	LC684436	LC684400	
<i>T. matsutake</i>	AY-2150919-001	Japan	LC684316	LC684342	LC684380	LC684439	LC684474	LC684496	LC684416	LC684394	LC684512
<i>T. matsutake</i>	AY-2101004-001	Japan	LC684323	LC684341	LC684363	LC684455	LC684486	LC684502	LC684423	LC684406	
<i>T. matsutake</i>	AY-1981023-003	Japan	LC684303								
<i>T. matsutake</i>	AY-2051104-002	Japan	LC684302								
<i>T. matsutake</i>	AY-2071023-002	Japan	LC684301	LC684357	LC684362	LC684459	LC684473	LC684501	LC684426	LC684402	
<i>T. matsutake</i>	Y1 (= NBRC 33136)	Japan	LC684281								
<i>T. matsutake</i>	TUA-84	Japan	LC574921*	LC684338	LC586870*	LC684454	LC636420*	LC636282*	LC636271*	LC636261*	
<i>T. matsutake</i>	TUA-115	Japan	LC684295	LC684337	LC636240*	LC684442	LC636415*	LC684494	LC684415	LC684403	LC684510
<i>T. matsutake</i>	AY-2131013-001	Japan	LC684294	LC684336	LC684370	LC684451	LC684469	LC684498	LC684414	LC684388	LC684509
<i>T. matsutake</i>	AT-0740	Japan	LC684290								
<i>T. matsutake</i>	AT-0748	Japan	LC684288								
<i>T. matsutake</i>	AY-2041007-002	Japan	LC684300								
<i>T. matsutake</i>	AY-2181005-001	Japan	LC684327	LC684340	LC684373	LC684453	LC684472	LC684500	LC684432	LC684393	LC684511
<i>T. matsutake</i>	AY-2021027-001	Japan	LC684299								
<i>T. matsutake</i>	AY-2071101-001	Japan	LC684297								
<i>T. matsutake</i>	AT-0742	Japan	LC684289								
<i>T. matsutake</i>	AY-2191104-001	Japan	LC684298	LC684339	LC684375	LC684449	LC684470	LC684499	LC684429	LC684398	
<i>T. magnivelare</i>	AY-2080307-001	Canada	LC684312	LC684333	LC684361	LC684445	LC684487	LC684495	LC684412	LC684386	LC684508
<i>T. mesoamericanum</i>	AY-1981000-004 (= MX1)	Mexico	LC684313		LC684383		LC685348				
<i>T. murrillianum</i>	AT-0913 (= Tp-C3)	Canada	LC684287								
<i>T. murrillianum</i>	AY-2080100-001	Canada	LC684292	LC684358	LC684379		LC684475		LC684425	LC684401	
<i>T. murrillianum</i>	AY-2071018-001	Canada	LC684332	LC684366	LC684452	LC684464	LC684491	LC684418	LC684418	LC684391	
<i>T. anatolicum</i>	AY-1981000-005 (= MC1)	Morocco	LC684318	LC684331	LC684382		LC685347		LC684434		
<i>T. anatolicum</i>	AY-2061109-001 (= S-3-2-1)	Turkey	LC684291								
<i>T. anatolicum</i>	AY-2061108-004 (= S-2-2-1)	Turkey	LC684320	LC684328	LC684374	LC684443	LC684471	LC684489	LC684411	LC684410	
<i>T. fulvocastaneum</i>	AY-2110606	Laos	LC684293	LC684356	LC684378	LC684462	LC684466		LC684435	LC684404	
<i>T. bakamatsutake</i>	AY-2080800-001	China	LC684319	LC684351	LC684372	LC684447	LC684468		LC684431		
<i>T. bakamatsutake</i>	AY-2050912-001	Japan	LC684314	LC684334	LC684381		LC684476		LC684430		
<i>T. bakamatsutake</i>	AT-0760	Japan	LC684282								
<i>T. bakamatsutake</i>	AY-2041007-003	Japan	LC684283								
<i>T. bakamatsutake</i>	AY-2071001-002	Japan	LC684305	LC684335	LC684360	LC684441	LC684467	LC684497	LC684413	LC684405	

Specimens of *T. matsutake* AY-2051104-001, AY-2051104-003, AY-2101020-001, AY-2041007-001, AY-2101021-002, *T. anatolicum* AY-1981000-006, AY-2061109-002, and *T. fulvocastaneum* AY-2091112-001 listed in Table 1 were only checked the restriction fragment patterns of their PCR amplicons of nuc rDNA ITS regions (data not shown).

*These sequences were already reported by Aoki et al. (2021, 2022).