

Supplementary Table S2 Voucher information of the samples used in the next-generation sequencing of Tricholomataceae (Dataset II)

Subgenus-clades	Section-clades	Taxon	Voucher	Locality
Subgen. <i>Tricholoma</i>	Sect. <i>Fucata</i>	<i>T. brunneiceps</i>	KUN-HKAS 134966	Yunnan, China
		<i>T. brunneiceps</i>	KUN-HKAS 138820	Yunnan, China
		<i>T. cheilocystidiatum</i>	KUN-HKAS 97051	Yunnan, China
	Sect. <i>Muscaria</i>	<i>T. muscarioides</i>	KUN-HKAS 93512	Yunnan, China
		<i>T. olivaceiceps</i>	KUN-HKAS 101280	Yunnan, China
		<i>T. sinense</i>	KUN-HKAS 69669	Yunnan, China
	Sect. <i>Matsutake</i>	<i>T. bakamatsutake</i>	KUN-HKAS 107573	Yunnan, China
		<i>T. xizangense</i>	KUN-HKAS 91028	Xizang, China
		<i>T. matsutake</i>	945 v3.0 (JGI)	
		<i>T. matsutake</i>	KUN-HKAS 57470	Yunnan, China
		<i>T. tianshanense</i>	HMUT1112	Xinjiang, China
	Sect. <i>Rigida</i>	<i>T. asiaticum</i>	KUN-HKAS 81826	Yunnan, China
		<i>T. ellipsosporum</i>	KUN-HKAS 134998	Yunnan, China
		<i>T. forteflavescens</i>	KUN-HKAS 93511	Yunnan, China
		<i>T. sichuanense</i>	KUN-HKAS 138817	Yunnan, China
	Sect. <i>Tricholoma</i>	<i>T. citrinum</i>	KUN-HKAS 39071	Yunnan, China
		<i>T. qiaomianjun</i>	KUN-HKAS 101303	Yunnan, China
		<i>T. olivaceifolium</i>	KUN-HKAS 107574	Xizang, China
		<i>T. orienticum</i>	KUN-HKAS 78949	Yunnan, China
	Sect. <i>Goniina</i>	<i>T. albobrunneum</i>	KUN-HKAS 69909	Yunnan, China
		<i>T. rubrocastaneum</i>	KUN-HKAS 97827	Sichuan, China

Subgen. <i>Terra</i>	Clade C	<i>T. rubiginosum</i>	KUN-HKAS 134980	Yunnan, China
		<i>T. rufobrunneum</i>	KUN-HKAS 49069	Sichuan, China
		<i>T. aurantiophyllum</i>	KUN-HKAS 74948	Yunnan, China
	Sect. <i>Terrea</i>	<i>T. argyraceum</i>	HMAS37341	Heilongjiang, China
		<i>T. scalpturatum</i>	KUN-HKAS 106916	North Macedonia
		<i>T. terreum</i>	HMAS61725	Shaanxi, China
		<i>T. triste</i>	KUN-HKAS 138834	Xizang, China
	Clade B	<i>T. griseofulvum</i>	KUN-HKAS 106653	Sichuan, China
	Sect. <i>Atrosquamosa</i>	<i>T. atrosquamosum</i>	KUN-HKAS 97910	Sichuan, China
		<i>T. olivaceotinctum</i>	KUN-HKAS 107586	Sichuan, China
Clade A	<i>T. macrosporum</i>	KUN-HKAS 107577	Sichuan, China	
Subgen. <i>Sericeicutis</i>	Sect. <i>Lasciva</i>	<i>T. lishanense</i>	KUN-HKAS 105390	Liaoning, China
		<i>T. stiparophyllum</i>	MB-002925	Germany
	Sect. <i>Sericella</i>	<i>T. sulphureum</i> type II	KUN-HKAS 138808	Yunnan, China
		<i>T. tangerinum</i>	KUN-HKAS 45602	Xizang, China
Melleum Clade	Melleum Clade	<i>T. melleum</i>	KUN-HKAS 103101	Sichuan, China
Subgen. <i>Pardinicutis</i>	Sect. <i>Pardinicutis</i>	<i>T. highlandense</i>	HMAS96585	Yunnan, China
		<i>T. pardinum</i>	MB-006381	Germany
		<i>T. nigrosquamosum</i>	KUN-HKAS 46041	Xizang, China
Outgroups				
<i>Leucopaxillus</i>		<i>Leucopaxillus laterarius</i>	KUN-HKAS 124334	Xinjiang, China
<i>Leucopaxillus</i>		<i>Leucopaxillus verrucosus</i>	KUN-HKAS 134957	Xinjiang, China
<i>Pseudobaeospora</i>		<i>Pseudobaeospora lilacina</i>	KUN-HKAS 134961	Yunnan, China

<i>Albomagister</i>	<i>Albomagister albus</i>	KUN-HKAS 134955	Anhui, China
<i>Pseudotricholoma</i>	<i>Pseudotricholoma metapodium</i>	MB-002938	Germany