

Supplementary Table S3. Size of basidiospores and basidia

Species	Specimen	Country*	Basidiospores									Basidia								
			N	Length (µm)			Width (µm)			L/W ratio			N	Length (µm)			Width (µm)			
				Min	Av	Max	Min	Av	Max	Min	Av	Max		Min	Av	Max	Min	Av	Max	
<i>T. matsutake</i>	AY-2200915-001	Ukraine (A/E)	160/214	6.63	7.16	9.0	4.4	5.31	6.1	1.17	1.32	1.57	30 >							
	Ishida F-0315	Sweden (A/E)	156/165	6.54	7.37	9.4	5.5	5.64	6.3	1.18	1.31	1.51	30 >							
	AY-2040800-001	Finland (A/E)	75/100	6.27	6.69	7.8	4.7	5.47	6.2	1.07	1.23	1.50	50	30.6	36.5	43.4	5.76	7.34	9.03	
	AY-2070925-001	Finland (A/E)	95/100	5.97	7.19	9.9	4.6	5.56	8.3	1.04	1.30	1.83	100	31.1	41.1	50.3	4.42	7.42	11.76	
	AY-1981000-003	North Korea (A/E)	75/100	6.30	6.84	8.8	4.8	5.61	7.1	1.06	1.22	1.45	100	25.8	37.6	59.7	5.59	7.94	12.30	
	AY-1981000-001	Japan (A/E)	75/100	6.12	6.51	7.7	4.6	5.51	6.5	1.04	1.19	1.35	100	25.9	32.9	42.6	6.30	7.39	10.51	
	AY-2051104-001	Japan (A/E)	95/100	6.15	7.04	8.4	4.6	5.27	6.2	1.06	1.34	1.48	50	22.8	33.0	44.8	5.16	7.02	9.64	
	AY-2051104-002	Japan (A/E)	95/100	6.13	6.81	7.8	4.3	5.22	6.7	1.02	1.32	1.64	100	24.5	35.1	49.1	5.59	7.61	11.93	
	AY-2051104-003	Japan (A/E)	75/100	6.13	6.89	9.3	4.1	5.29	6.3	1.09	1.31	1.63	75	24.6	37.2	51.1	4.79	6.94	9.34	
	AY-2071023-002	Japan (A/E)	95/100	5.76	6.59	7.7	4.3	5.08	6.0	1.08	1.30	1.51	100	32.3	39.5	49.5	5.49	7.14	9.17	
	AY-2131013-001	Japan (A/E)	152/161	6.98	7.73	9.3	5.32	5.94	7.0	1.16	1.30	1.59	30 >							
	AY-2041007-002	Japan (A/E)	95/100	6.33	6.96	7.9	4.7	5.34	5.9	1.16	1.31	1.52	100	31.8	42.2	52.2	6.74	7.83	9.10	
	AY-2041007-001	Japan (A/E)	95/100	5.93	6.73	8.9	4.2	5.14	6.6	1.18	1.31	1.53	100	31.5	39.7	49.6	7.14	8.02	9.47	
	AY-2021027-001	Japan (A/E)	95/100	7.06	7.87	9.8	5.1	5.76	6.8	1.20	1.37	1.56	100	32.1	40.2	47.5	6.84	7.80	9.57	
	AY-2071101-001	Japan (A/E)	95/100	6.22	6.83	7.7	4.9	5.49	6.1	1.09	1.24	1.39	100	36.1	42.2	47.7	5.76	7.27	8.66	
	AY-2040400-001	Bhutan (B/C)	95/100	6.30	7.27	9.9	4.7	5.52	7.1	1.13	1.32	1.59	100	27.9	35.5	45.4	5.73	6.94	8.86	
	AY-1981000-002	Bhutan (B/C)	30 >										30 >							
	AY-1980831-001	China (B/C)	75/100	6.40	7.26	9.5	5.0	5.90	7.6	1.08	1.24	1.64	50	26.1	37.8	45.7	5.29	7.43	9.74	
AY-1981000-001	China (B/C)	95/100	6.07	7.43	10.3	4.8	6.05	9.6	1.02	1.23	1.54	100	27.4	41.0	51.6	5.66	7.50	10.08		
<i>T. bakamatsutake</i>	AY-2041007-003	Japan	95/100	4.65	5.32	6.7	3.44	4.10	5.0	1.07	1.30	1.58	100	21.6	31.2	41.2	6.13	7.11	8.73	
	AY-2071001-002	Japan	168/177	5.34	5.83	6.7	4.13	4.64	5.5	1.13	1.26	1.44	30 >							
	AY-2080800-001	China	95/100	5.14	5.90	6.6	3.9	4.57	5.3	1.10	1.29	1.48	30 >							
<i>T. fulvocastaneum</i>	AY-2091112-001	Japan	170/179	6.31	6.91	8.2	4.68	5.31	6.3	1.15	1.30	1.54	30 >							
<i>T. magnivelare</i>	AY-2080307-001	Canada	152/160	6.84	7.55	9.1	4.79	5.49	6.7	1.20	1.38	1.57	30 >							
<i>T. murrillianum</i>	AY-2080100-001	Canada	75/100	5.90	6.55	7.7	4.35	5.03	5.7	1.16	1.30	1.58	100	36.5	46.4	58.7	5.97	7.12	8.63	
	AY-2071018-001	Canada	75/100	6.00	6.81	10.1	4.31	5.18	6.94	1.08	1.32	1.63	100	25.4	40.3	10.1	5.19	6.92	6.94	
<i>T. mesoamericanum</i>	AY-1981000-004	Mexico	95/127	5.76	6.48	9.27	4.18	5.22	7.41	1.05	1.25	1.56	100	30.1	39.8	50.7	5.49	7.27	9.64	
<i>T. anaticum</i>	AY-2061109-001	Turkey	95/100	5.93	6.94	9.3	4.18	5.41	7.35	1.02	1.29	1.64	100	17.1	31.4	49.5	4.85	6.69	9.71	
	AY-2061108-004	Turkey	75/100	6.03	6.70	7.68	4.21	5.47	7.14	1.01	1.23	1.59	100	24.9	35.4	48.9	4.08	8.11	12.44	
	AY-2061109-002	Turkey	95/100	5.76	6.75	8.22	4.21	5.20	6.47	1.12	1.30	1.53	30 >							
	AY-1981000-005	Morocco	95/100	6.46	7.29	8.8	4.27	5.09	6.23	1.23	1.44	1.74	100	24.7	36.9	52.9	4.08	6.39	8.76	
	AY-1981000-006	Morocco	95/100	6.54	7.31	8.46	4.19	5.01	5.73	1.27	1.47	1.75	75	27.0	36.5	50.7	5.43	6.72	10.85	

\*A/C and B/C in parenthesis mean phylogenetic clades as shown in Figs 4 and 5.