

Supplementary Materials: Variable Number Tandem Repeats in the Mitochondrial DNA of *Lentinula edodes*

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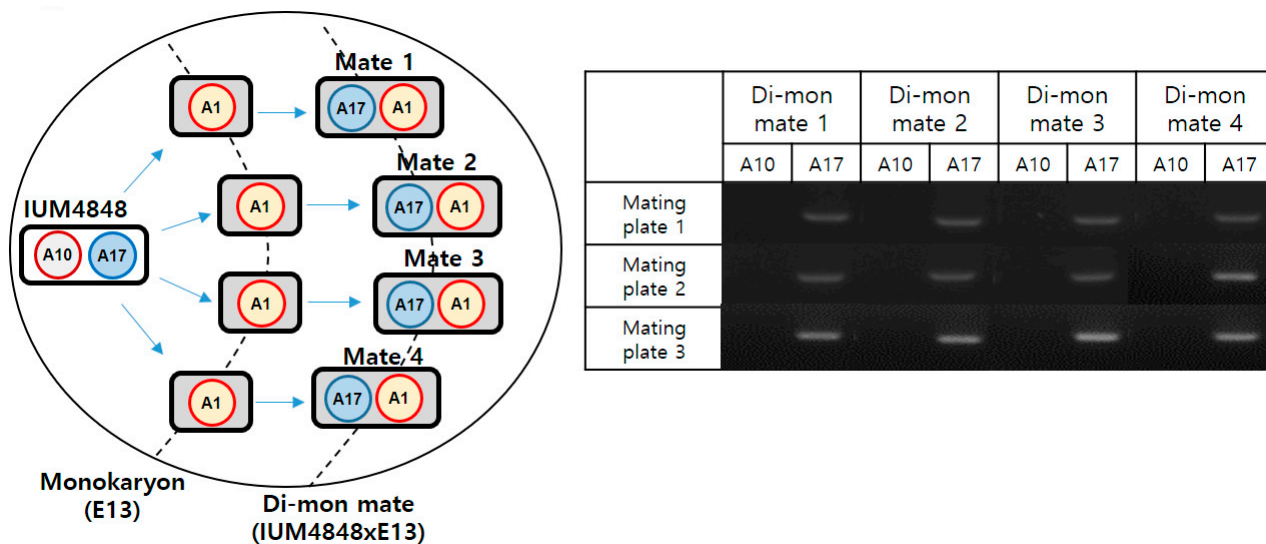


Figure S2. Analysis of nuclear types of Di-Mon mates of IUM4848xE13 from three independent matings.

Fig. S3

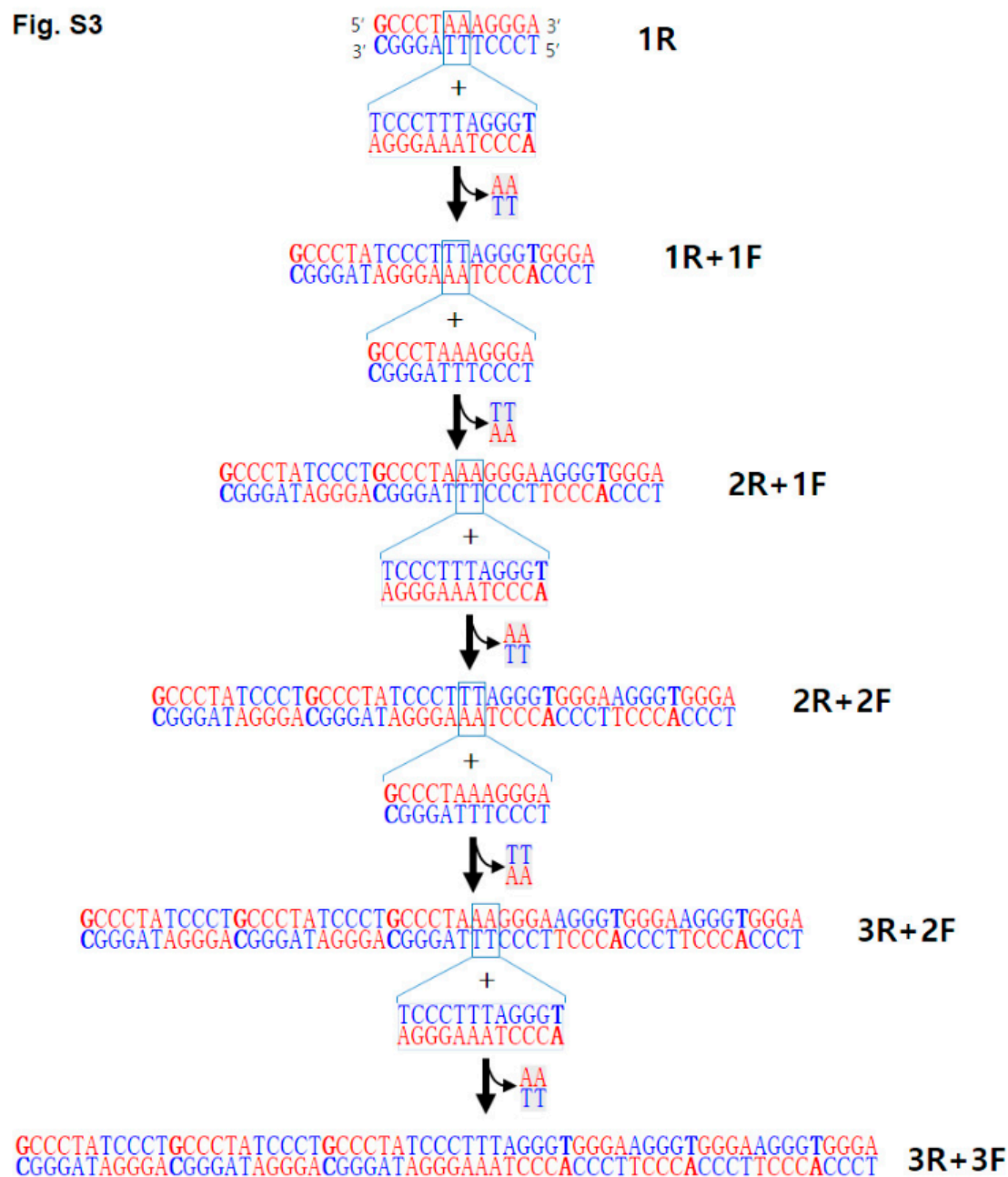


Figure S3. Elongation of Type I VNTR through reciprocal incorporation of repeating units.

Table S1. Strains used in this study.

	Strain number	Mating types		Collection		VNTR25 repeat number*
		A mating type	B mating type	Site	Year	
Wild strains	IUM3182	A9/A11	B7/B9	Mt. Seorak		11
	IUM3179	A11/A19	B7/B9	Mt. Seorak		11
	KFRI3010	A47/A54	B1/B15 or B3/B13	Mt. Hwaak	2015	10
	IUM3178	A14/A18	B3/B11	Mt. Seorak		10
	KFRI665	A38/A61	B8/B15 or B9/B14	Mt. Gyebang	2004	7
	KFRI956	A41/A65	B6/ND	Mt. Jumbong	2007	6
	KFRI39	A33/A57	B1/B15 or B3/B13	Mt. Jiri	1983	6
	KFRI957	A32/A42	B2/B15 or B3/B14	Mt. Jumbong	2007	6
	KFRI664	A37/A60	B4/ND	Mt. Gyebang	2004	6
	KFRI1520	A43/A52	B3/B6	Mt. Jumbong	2011	6
	KFRI2290	A45/A56	B13/B15	Mt. Kariwang	2013	6
	KFRI2521	A46/A53	B7/B9	Mt. Seorak	2013	6
	IUM5054	A12/A13	B4/ND	Mt Deogyu		6
	NAAS6640	A12/A49	B10/B11	Mt. Jumbong	2013	6
	NAAS4255	A19/A63	B4/B5	Mt. Odae	1994	5
	NAAS5735	A27/A48	B1/B3	Mt. Seorak	2010	5
	NAAS6833	A50/A55	B4/B15 or B6/B13	Mt. Seorak	2014	5
	KFRI955	A1/A36	B7/B13	Mt. Jumbong	2007	5
	KFRI57	A34/A58	B1/B3	Mt. Jiri	1984	4
	KFRI411	A36/A59	B8/B12 or B9/B11	Mt. Seorak	1999	4
	KFRI673	A40/A51	B1/B8 or B2/B7	Mt. Gyebang	2004	4
	KFRI2101	A44/A64	B8/B15 or B9/B14	Mt. Odae	2013	4
	IUM4848	A10/A17	B14/B15	Mt. Halla		4
	KFRI666	A39/A62	B8/B15 or B9/B14	Mt. Gyebang	2004	3
	KFRI58	A17/A35	B8/B14/or B9/B13	Mt. Jiri	1984	3
	IUM4841	A1/A16	B7/B14 or B8/B13	Mt. Jiri		2
	NAAS6686	A1/A30	B1/B8 or B2/B7	Mt. Jumbong	2013	2
Cultivated strains	CHAM	A1/A5	B11/B12			8
	SJ701	A1/A5	B4/B12			5
	KFRI1478	A1/A8	B2/B9			6
	KFRI976	A1/A4	B8/B13			6

Pungnyung	A1/A7	B2/B12	6
SJ707	A5/A7	B4/B12	5
KFRI619	A3/A7	B4/B12	5
Suhyanggo	A1/A7	B2/B12	5

*The repeat number in the VNTR25 are summarized based on the sequence analyses shown in Figures 3(B) and 3(C).

Table S2. Primers for VNTR analysis used in this study.

	Forward	Reverse
VNTR3	GAGACTACACATGGAGCTAGATTTAATC	CACCCTCAGCCTAGCCACTATC
VNTR7	CTCCTGCAGTTGCCCTCCCCTAT	AATGGAGGCGAGTCGAACACC
VNTR13	CCTCGCCTTTGTAAAAGTA	GAACAGCCGCAGGTTTTTGC
VNTR18	GCGTCTCCTACGCGTCTCCTAC	CACCCTCAGCCTAGCCACTATC
VNTR20	GGAAAGGCACTGCACCCTAGC	CCTGACTTTCTTTTTTCCAAGTG
VNTR22	GGTAATAACCTGCAACCTTCC	CTTAAACCACTCAGCCATAGAAC
VNTR23	GGAGGCTAGGTATCACTTCCCCGTG	ACTGCACTTAGTTTTGGCGAGCTG
VNTR25	GAGGTAAGGTCGTTCTTC	CAAATAGGCCTAAAGGAG

Table S3. Analysis of VNTR length polymorphism in different VNTRs.

Strain number	Mitochondrial repeat length polymorphism (bp)						
	VNTR3	VNTR7	VNTR18	VNTR20	VNTR23	VNTR13	VNTR25*
IUM4841	300	192	350	275	350	256	2
KFRI956	320	192	306	285	350	263	6
IUM3182	300	192	383	275	340	249	11
IUM4848	300	202	306	285	350	256	4
IUM3179	320	232	350	285	370	235	11
IUM5054	300	232	350	295	340	263	6
NAAS6640	200	232	360	285	350	270	6
IUM3178	320	242	360	295	350	263	10
KFRI58	320	232	360	275	350	256	3
NAAS5735	340	202	360	275	350	263	5
NAAS4255	320	192	350	ND	350	270	5
KFRI39	360	202	383	285	340	270	6
KFRI57	320	202	350	275	370	249	4
KFRI411	320	202	306	275	370	277	4
KFRI664	340	232	350	285	350	277	6

*Numbers in this column represent the numbers of GCTCCGC repeats in the mtDNA.



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