

A) Genetic characteristics of loci in dataset1**(Singh et al. 2015; Table 2)**

Locus	No. of seq	length of alignment	Best model
RPB1	142	696	012232+G
TSR1	196	756	HKY+I+G
MCM7	131	655	012212+I+G+F
nuLSU	212	1064	TIM1+I+G
mtSSU	185	834	012212+I+G+F
ITS	168	807	012030+I+G
Concatenated	233	4812	NA

B) Genetic characteristics of loci in dataset2**(Singh et al. 2017; Supplementary Table S3)**

Locus	No. of seq	length of alignment	Best model
Fungus			
<i>RPB1</i>	102	757	012234+I+G+F
<i>TSR1</i>	101	760	TPM2+G
<i>MCM7</i>	64	657	TrNef+G
nuLSU	156	875	TIM1+G
mtSSU	116	815	HKY+G
ITS	112	729	TrNef+G
Concatenated	174	4596	Partitioned