Screening of Novel Laccase Producers—Isolation and Characterization of Cold-Adapted Laccase from *Kabatiella bupleuri* G3 Capable of Synthetic Dye Decolorization

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SUPPLEMENTARY MATERIALS

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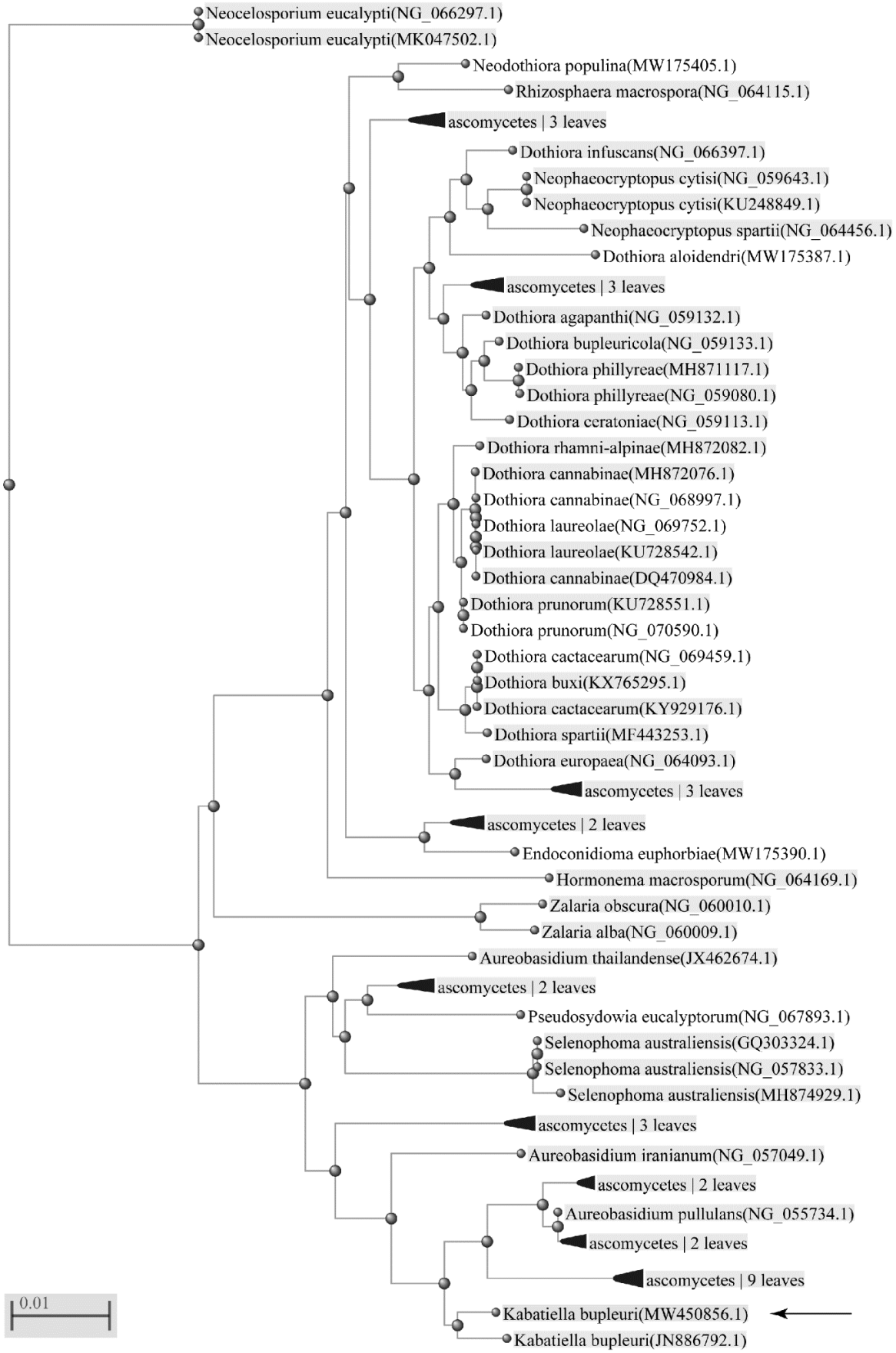


Figure S1. Phylogenetic similarity of strain G3 IBMiPto other yeast strains based on the analysis of D1/D2 sequences. Black arrow indicates the sequences from G3 IBMiP; the remaining sequences are described by species name and GenBank accession number.

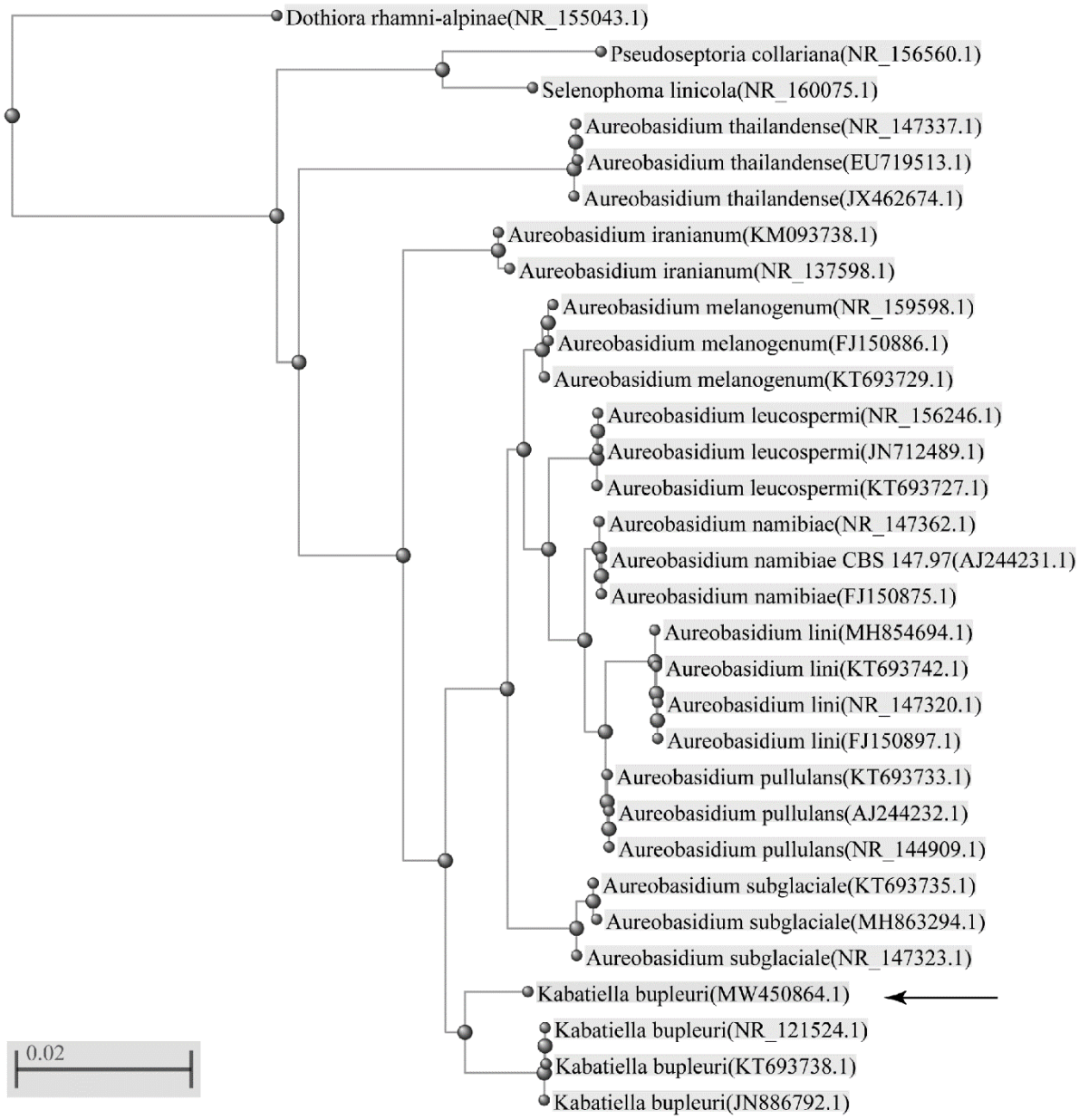


Figure S2. Phylogenetic similarity of strain G3 IBMiP to other yeast strains based on the analysis of ITS1&ITS2 sequences. Black arrow indicates the sequences from G3 IBMiP; the remaining sequences are described by species name and GenBank accession number

Table S1. Influence of inducers (at the optimal concentration) on extracellular laccase activity (U/L) during 30 days culture.

	10 days	**15 days**	**20 days**	**25 days**	**30 days**
control	9.74 ± 0.99	19.59 ± 0.95	50.71 ± 2.03	44.48 ± 2.04	34.80 ± 1.67
30 µM 2,5-xylidine	9.95 ± 1.06	15.99 ± 0.44	38.31± 0.39	33.94 ± 0.84	26.91 ± 0.89
1 mM veratryl alcohol	11.41 ± 0.82	14.84 ± 0.94	51.11 ± 1.07	49.47 ± 0.84	37.61 ± 0.84
1 mM vanillin	9.43 ± 0.82	16.92 ± 0.98	46.33 ± 0.07	43.81 ± 0.54	34.65 ± 0.88
0.26 µM guaiacol	4.68 ± 0.71	20.08 ± 0.57	40.09 ± 0.54	35.46 ± 0.94	25.72 ± 0.99
0.11 µM syringaldazine	7.46 ± 0.79	14.89 ± 0.96	56.41 ± 1.14	51.06 ± 0.67	40.11 ± 0.74
1.8 µg/ml ethidium bromide	9.25 ± 0.77	20.52 ± 0.80	60.05 ± 1.55	53.53 ± 0.47	40.51 ± 1.32
1 mM catechol	9.61 ± 0.76	15.36 ± 0.97	58.40 ± 1.57	46.78 ± 0.70	36.98 ± 0.43
1 mM Tween 20	0.00 ± 0.00	0.09 ± 0.04	4.67 ± 0.39	5.36 ± 0.40	5.88 ± 0.47
1 mM Tween 80	2.25 ± 0.71	30.61 ± 1.71	70.72 ± 1.00	64.63 ± 0.81	49.29 ± 1.38
1 mM ABTS	3.02 ± 0.71	3.17 ± 0.30	4.13 ± 0.38	5.84 ± 0.86	7.96 ± 0.63