

SUPPLEMENTAL MATERIAL

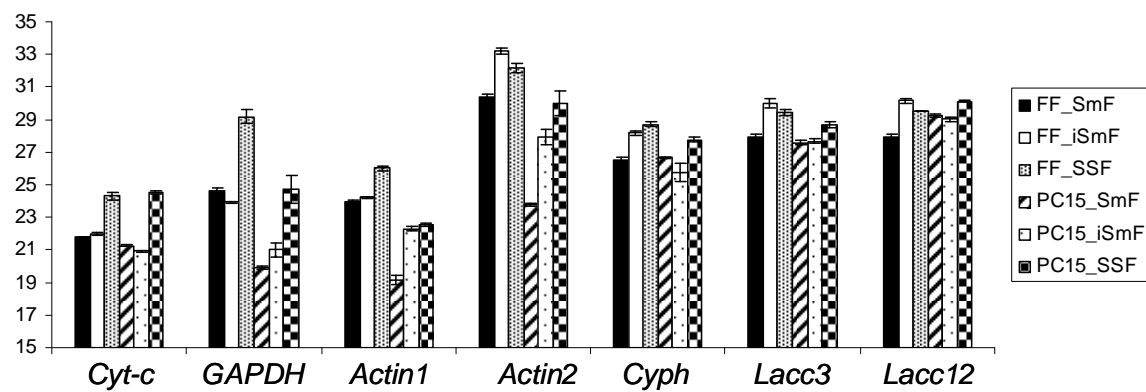


FIG S1 Cp values for the seven reference gene candidates measured in strains FF and PC15 in SmF, iSmF and SSF cultures.

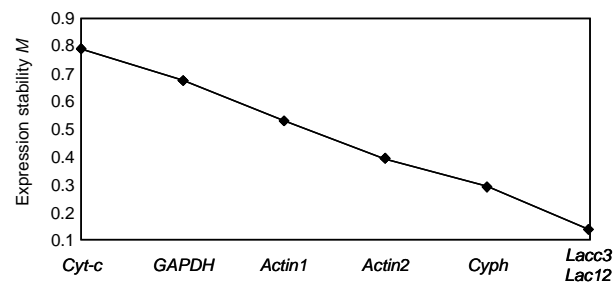


FIG S2 Average expression stability values (M) of remaining control genes during stepwise exclusion of the least stable gene under the conditions tested. The least stable gene is on the left side, and two most stable on the right.

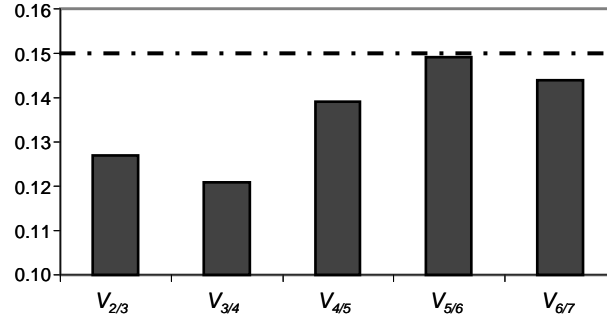


FIG. S3. Pairwise variation ($V_{n/n+1}$) between two sequential normalization factors (NF) containing an increasing number of reference genes. The dotted line indicates the 0.15 threshold proposed by Vandesompele *et al.* [74].

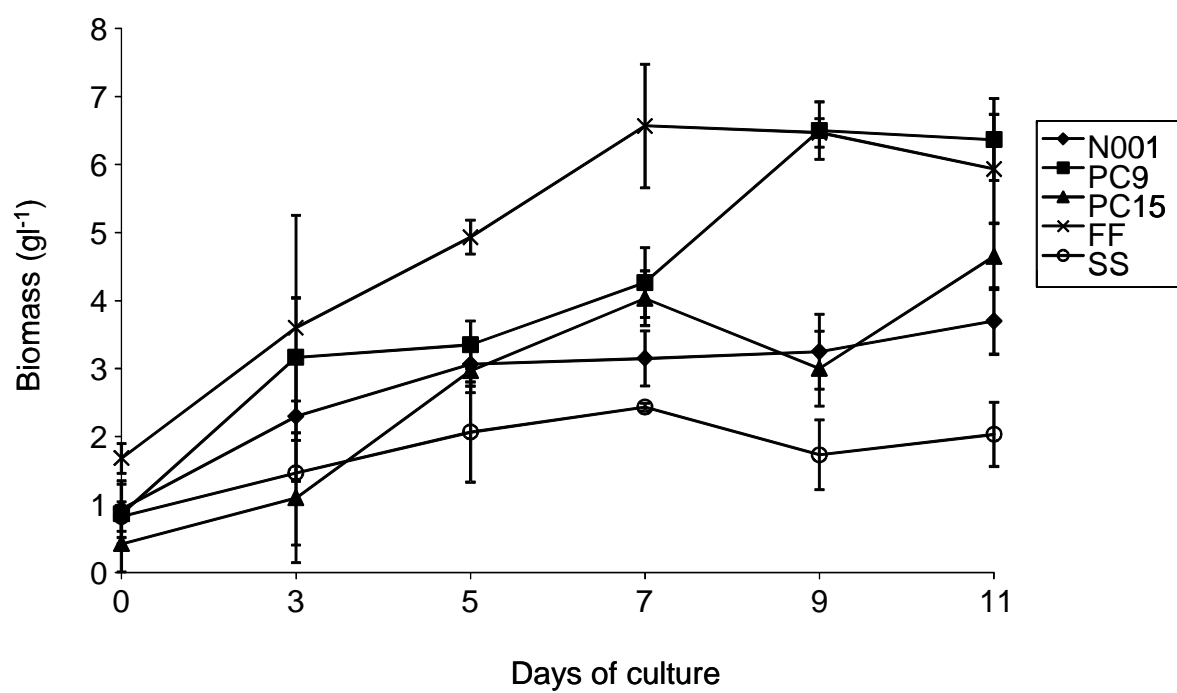


FIG S4 Biomass time course of the five strains in SmF cultures.

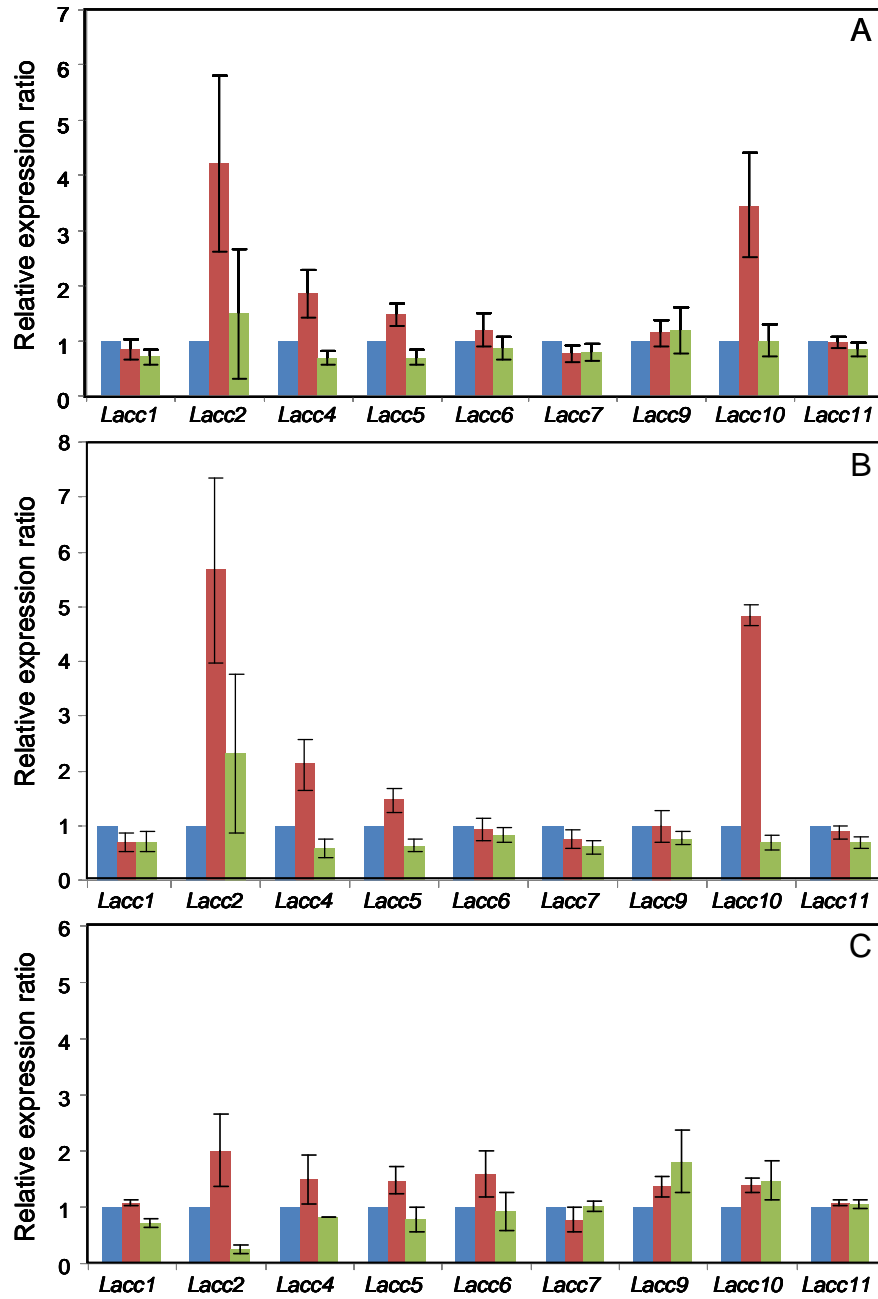


FIG. S5. Comparison of the average expression ratios of the laccase genes in iSmF (red bars) and SSF (green bars) cultures compared with that in the control conditions (SmF, blue bars). Panel A indicates the global average values, B the average in the fast growing (FG) and C in the slow growing (SG) group of strains.

TABLE S1 Background DNA contamination expressed as percentage of relative quantities of the reference gene *Lacc3*

Sample	Background DNA*
N001 SmF	0.40
N001 iSmF	2.75
N001 SSF	7.51
PC9 SmF	0.01
PC9 iSmF	0.29
PC9 SSF	0.30
PC15 SmF	0.14
PC15 iSmF	1.16
PC15 SSF	2.15
FF SmF	0.45
FF iSmF	4.61
FF SSF	0.23
SS SmF	5.36
SS iSmF	0.48
SS SSF	3.19

TABLE S2 Expression data of the laccase genes in cultures induced with wheat straw extract (iSmF) relative to the control (SmF) condition.

	Gene	Efficiency	Expression	SE	95% C.I.	p value
N001	<i>Lacc1</i>	0.718	1.098	0.284	0.914 - 1.272	0.357
	<i>Lacc2</i>	0.743	1.773	0.380	1.575 - 2.063	0.035
	<i>Lacc4</i>	0.821	1.099	0.204	1.002 - 1.277	0.022
	<i>Lacc5</i>	0.658	1.750	0.349	1.488 - 2.089	0.037
	<i>Lacc6</i>	0.703	1.244	0.132	1.173 - 1.363	0.093
	<i>Lacc7</i>	0.727	1.112	0.405	0.839 - 1.385	0.400
	<i>Lacc8</i>	0.568	0.873	0.382	0.582 - 1.217	0.387
	<i>Lacc9</i>	0.777	1.639	0.591	1.247 - 2.061	0.035
	<i>Lacc10</i>	0.744	5.199	0.689	4.856 - 5.690	0.035
	<i>Lacc11</i>	0.758	0.904	0.194	0.788 - 1.071	0.256
PC9	<i>Lacc1</i>	0.735	0.546	0.186	0.414 - 0.751	0.03
	<i>Lacc2</i>	0.706	7.719	4.484	4.766 - 11.326	0
	<i>Lacc4</i>	0.798	2.290	0.888	1.634 - 3.092	0.031
	<i>Lacc5</i>	0.687	1.684	0.567	1.325 - 2.088	0.031
	<i>Lacc6</i>	0.700	0.487	0.077	0.432 - 0.544	0.03
	<i>Lacc7</i>	0.741	0.649	0.383	0.400 - 0.986	0.023
	<i>Lacc9</i>	0.880	0.646	0.172	0.539 - 0.778	0.030
	<i>Lacc10</i>	0.893	4.803	1.301	3.776 - 5.641	0.031
	<i>Lacc11</i>	0.998	0.631	0.189	0.507 - 0.748	0
PC15	<i>Lacc1</i>	0.756	1.163	0.178	1.066 - 1.306	0.012
	<i>Lacc2</i>	0.744	2.923	0.912	2.229 - 3.657	0.055
	<i>Lacc4</i>	0.720	2.098	0.369	1.909 - 2.394	0.012
	<i>Lacc5</i>	0.649	1.820	0.618	1.539 - 2.286	0.012
	<i>Lacc6</i>	0.662	2.184	1.132	1.579 - 2.951	0.048
	<i>Lacc7</i>	0.738	1.076	0.281	0.891 - 1.324	0.500
	<i>Lacc8</i>	0.560	2.117	1.679	1.402 - 3.642	0.034
	<i>Lacc9</i>	0.868	1.619	0.469	1.258 - 1.912	0.012
	<i>Lacc10</i>	0.870	1.218	0.322	1.015 - 1.541	0.012
	<i>Lacc11</i>	0.888	1.012	0.441	0.715 - 1.322	0.821
FF	<i>Lacc1</i>	0.711	0.396	0.126	0.304 - 0.491	0.034
	<i>Lacc2</i>	0.741	7.526	1.293	6.590 - 8.730	0.033
	<i>Lacc4</i>	0.799	2.924	0.686	2.410 - 3.544	0.031
	<i>Lacc5</i>	0.705	0.933	0.071	0.877 - 0.996	0.155
	<i>Lacc6</i>	0.666	1.042	0.881	0.614 - 1.814	0.766
	<i>Lacc7</i>	0.712	0.479	0.076	0.425 - 0.532	0.021
	<i>Lacc9</i>	0.736	0.661	0.148	0.574 - 0.747	0.034
	<i>Lacc10</i>	0.672	4.504	0.615	4.016 - 5.068	0.033
	<i>Lacc11</i>	0.795	1.112	0.119	1.047 - 1.195	0.045
SS	<i>Lacc1</i>	0.800	0.999	0.312	0.803 - 1.218	0.946
	<i>Lacc2</i>	0.750	1.092	0.128	1.001 - 1.197	0.148
	<i>Lacc4</i>	0.834	0.877	0.206	0.710 - 1.045	0.223
	<i>Lacc5</i>	0.636	1.136	0.132	1.043 - 1.204	0.013
	<i>Lacc6</i>	0.679	1.017	0.554	0.632 - 1.480	0.971
	<i>Lacc7</i>	0.695	0.487	0.045	0.449 - 0.522	0.025
	<i>Lacc8</i>	0.645	1.394	0.652	0.963 - 2.092	0.187
	<i>Lacc9</i>	0.766	1.098	0.36	0.890 - 1.396	0.455
	<i>Lacc10</i>	0.784	1.563	0.109	1.492 - 1.648	0.057
	<i>Lacc11</i>	0.777	1.152	0.116	1.086 - 1.255	0.041

TABLE S3 Expression data of the laccase genes on wheat straw solid state fermentation (SSF) cultures relative to the control (SmF) condition.

	Gene	Efficiency	Expression	SE	95% C.I.	p value
N001	<i>Lacc1</i>	0.718	0.981	0.407	0.774 - 1.253	0.700
	<i>Lacc2</i>	0.743	0.278	0.028	0.258 - 0.302	0
	<i>Lacc4</i>	0.821	0.635	0.212	0.499 - 0.795	0
	<i>Lacc5</i>	0.658	0.773	0.283	0.575 - 0.959	0
	<i>Lacc6</i>	0.703	0.850	0.170	0.755 - 0.979	0.063
	<i>Lacc7</i>	0.727	0.835	0.298	0.627 - 1.028	0.138
	<i>Lacc8</i>	0.568	1.725	0.845	1.130 - 2.344	0.068
	<i>Lacc9</i>	0.777	1.044	0.414	0.775 - 1.374	0.449
	<i>Lacc10</i>	0.744	0.897	0.338	0.685 - 1.042	0.931
	<i>Lacc11</i>	0.758	0.924	0.236	0.752 - 1.161	0.413
PC9	<i>Lacc1</i>	0.735	0.250	0.074	0.199 - 0.316	0.079
	<i>Lacc2</i>	0.711	1.009	0.730	0.663 - 1.742	0.865
	<i>Lacc4</i>	0.826	0.234	0.173	0.141 - 0.408	0.019
	<i>Lacc5</i>	0.687	0.350	0.161	0.247 - 0.519	0
	<i>Lacc6</i>	0.700	0.525	0.067	0.477 - 0.559	0
	<i>Lacc7</i>	0.741	0.360	0.158	0.263 - 0.469	0.033
	<i>Lacc9</i>	0.880	0.517	0.047	0.479 - 0.546	0
	<i>Lacc10</i>	0.893	0.661	0.259	0.527 - 0.870	0
	<i>Lacc11</i>	0.998	0.376	0.151	0.269 - 0.501	0
PC15	<i>Lacc1</i>	0.756	0.815	0.103	0.732 - 0.904	0.044
	<i>Lacc2</i>	0.744	0.356	0.331	0.226 - 0.596	0.033
	<i>Lacc4</i>	0.803	0.834	0.493	0.556 - 1.285	0.481
	<i>Lacc5</i>	0.649	0.493	0.195	0.385 - 0.704	0.056
	<i>Lacc6</i>	0.662	1.412	0.865	0.859 - 2.031	0.284
	<i>Lacc7</i>	0.738	0.895	0.203	0.755 - 1.000	0.167
	<i>Lacc8</i>	1.520	0.943	0.832	0.475 - 1.970	0.881
	<i>Lacc9</i>	0.868	2.590	0.518	2.235 - 2.892	0.029
	<i>Lacc10</i>	0.870	0.997	0.249	0.878 - 1.163	0.963
	<i>Lacc11</i>	0.888	1.172	0.374	0.879 - 1.449	0.237
FF	<i>Lacc1</i>	0.711	0.839	0.224	0.679 - 1.033	0.217
	<i>Lacc2</i>	0.741	5.636	0.527	5.368 - 5.994	0.034
	<i>Lacc4</i>	0.799	0.904	1.012	0.514 - 1.794	0.782
	<i>Lacc5</i>	0.705	0.755	0.262	0.639 - 0.946	0.029
	<i>Lacc6</i>	0.666	1.084	0.846	0.729 - 1.746	0.740
	<i>Lacc7</i>	0.712	0.639	0.180	0.523 - 0.798	0.064
	<i>Lacc9</i>	0.736	0.583	0.197	0.460 - 0.766	0.029
	<i>Lacc10</i>	0.672	0.741	0.106	0.650 - 0.831	0
	<i>Lacc11</i>	0.795	0.636	0.107	0.584 - 0.711	0.062
SS	<i>Lacc1</i>	0.800	0.620	0.159	0.508 - 0.754	0.009
	<i>Lacc2</i>	0.750	0.140	0.023	0.129 - 0.156	0
	<i>Lacc4</i>	0.834	0.830	0.413	0.687 - 1.160	0.304
	<i>Lacc5</i>	0.636	1.089	0.346	0.936 - 1.322	0.590
	<i>Lacc6</i>	0.679	0.457	0.203	0.305 - 0.629	0.009
	<i>Lacc7</i>	0.695	1.154	1.232	0.759 - 2.240	0.984
	<i>Lacc8</i>	0.645	1.057	0.363	0.833 - 1.355	0.803
	<i>Lacc9</i>	0.766	1.025	0.269	0.831 - 1.190	0.829
	<i>Lacc10</i>	0.784	1.963	0.264	1.776 - 2.196	0.084
	<i>Lacc11</i>	0.777	0.951	0.091	0.863 - 1.011	0.514