

**Table S1.** Pearson's correlation coefficient (r) between physicochemical properties of cultivation substrate and agronomic performance of *Pleurotus ostreatus* mushroom.

Variable	Agronomic performance of <i>Pleurotus ostreatus</i> mushroom									
	Days taken for mycelia to fully colonize substrate	Days taken for primordia initiation from fully colonized substrate	Days taken to complete first flush growth	Stipe length	Pileus diameter	Fresh weight of fruiting bodies	Number of total fruiting bodies	Number of effective fruiting bodies	Biological efficiency	
Physicochemical properties of cultivation substrate	<b>Wet bulk density</b>	0.346	0.307	0.385	0.521	0.844**	0.286	-0.190	-0.109	0.137
	<b>Particle density</b>	0.205	0.380	0.502	0.295	0.710*	0.649	-0.396	-0.320	0.171
	<b>Porosity</b>	-0.086	-0.211	-0.135	-0.534	-0.228	0.274	-0.192	-0.178	0.089
	<b>pH</b>	-0.505	0.096	-0.167	0.124	-0.749*	-0.030	0.478	0.264	-0.039
	<b>Moisture content</b>	0.190	0.293	0.227	0.624	0.397	0.261	-0.234	-0.263	0.201
	<b>Ash content</b>	0.095	0.033	0.062	0.247	-0.051	-0.098	0.557	0.653	0.011
	<b>Volatile solids content</b>	-0.095	-0.033	-0.062	-0.247	0.051	0.098	-0.557	-0.653	-0.011
	<b>Nitrogen</b>	-0.101	0.218	0.201	0.246	-0.300	0.028	0.593	0.637	-0.142
	<b>Phosphorus</b>	0.011	0.072	0.049	0.416	-0.129	-0.161	0.455	0.497	0.112
	<b>Potassium</b>	0.112	-0.590	-0.580	-0.208	-0.492	-0.369	0.651	0.675*	0.220
	<b>Calcium</b>	-0.194	0.214	0.137	0.338	-0.320	-0.312	0.322	0.368	-0.092
	<b>Magnesium</b>	-0.203	0.079	-0.012	0.308	-0.345	-0.341	0.454	0.464	0.023
	<b>Iron</b>	0.731*	-0.470	-0.157	-0.211	0.059	-0.216	0.300	0.511	-0.140
	<b>Zinc</b>	0.333	-0.530	-0.453	-0.097	0.138	0.358	0.638	0.639	0.555
	<b>Carbon</b>	0.104	-0.262	-0.265	-0.212	0.359	0.631	-0.257	-0.323	0.569
	<b>Lignin</b>	0.280	0.307	0.520	-0.093	0.498	0.484	-0.474	-0.335	-0.240
	<b>Hemicellulose</b>	0.761*	-0.641	-0.281	-0.548	0.018	-0.160	0.087	0.315	-0.131
	<b>Cellulose</b>	-0.031	-0.309	-0.429	-0.131	0.168	0.507	0.021	-0.009	0.741*

Note:

\*\* Significantly correlated at  $p \leq 0.01$

\* Significantly correlated at  $p \leq 0.05$