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# Deciphering the Physicochemical and Microscopical Changes in *Ganoderma boninense*-infected Oil Palm Woodblocks under the Influence of Phenolic Compounds

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**Table S1: Lower Order Index (LOI) of oil palm wood (with and without treatment) degraded by *G. boninense* at various time intervals**

Phenolic compounds (mM)	Biodegradation (days)			
	10	30	45	120
<b>Control</b>	0.97	0.97	0.93	0.86
<b>BA 1</b>	0.97	0.97	0.98	0.97
<b>SA 1</b>	0.98	0.98	0.93	0.89
<b>SA 5</b>	0.98	0.97	0.95	0.90
<b>SY 1</b>	0.97	0.99	0.93	0.87
<b>SY 5</b>	0.98	0.98	0.99	0.94
<b>VA 1</b>	0.99	0.95	0.90	0.83
<b>VA 5</b>	0.98	0.96	0.90	0.86
<b>VA 10</b>	0.98	0.98	0.95	0.89

BA - benzoic acid, SA - salicylic acid, SY- syringic acid, VA -vanilllic acid

**Table S2: Total Crystallinity Index (TCI) of oil palm wood (with and without treatment) degraded by *G. boninense* at various time intervals**

Phenolic compounds (mM)	Biodegradation (days)			
	10	30	45	120
<b>Control</b>	1.1	1.2	1	0.98
<b>BA 1</b>	1.01	0.97	0.95	0.93
<b>SA 1</b>	1.04	1.02	1.04	0.99
<b>SA 5</b>	1.01	1.01	1	0.98
<b>SY 1</b>	1.02	1.02	1.01	1
<b>SY 5</b>	1.02	1.02	1.02	1
<b>VA 1</b>	1.01	1	1.04	0.96
<b>VA 5</b>	1.01	1	1.01	0.98
<b>VA 10</b>	1.00	1	1	0.98

BA - benzoic acid, SA - salicylic acid, SY- syringic acid, VA -vanilllic acid

**Table S3: S/G ratio of oil palm wood (with and without treatment) degraded by *G. boninense* at various time intervals**

Phenolic compounds (mM)	Biodegradation (days)			
	10	30	45	120
<b>Control</b>	0.99	0.99	0.98	0.94
<b>BA 1</b>	0.99	0.99	0.96	0.92
<b>SA 1</b>	1	1	0.99	0.94
<b>SA 5</b>	1	1	1.08	0.94
<b>SY 1</b>	1	1.1	1	0.94
<b>SY 5</b>	1	1.1	1	0.94
<b>VA 1</b>	1	1.3	1.2	0.9
<b>VA 5</b>	1	1.2	1.1	0.91
<b>VA 10</b>	1	1	1	0.93

BA - benzoic acid, SA - salicylic acid, SY- syringic acid, VA -vanillic acid.

**Table S4: Percentage of chemical composition of healthy oil palm wood**

Chemical Composition	Percentage (%)
Lignin	13.3 ± 0.8
Cellulose	29.9 ± 0.5
Hemicellulose	29.9 ± 0.7