

Supporting Information

Development of Organic-Inorganic Hybrid Coatings with Silica Nanoparticles, Biopolymer, and Clay for Onion Seeds: Multifunctional Strategy for Controlling White Rot

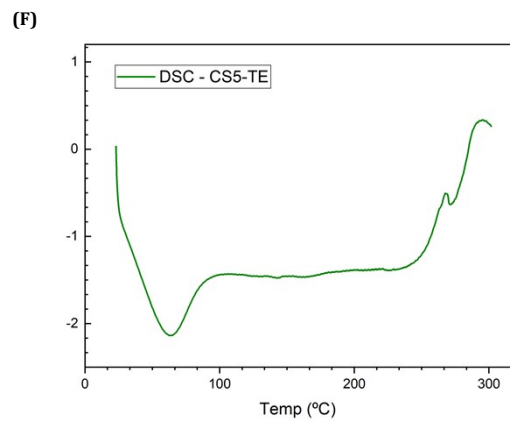
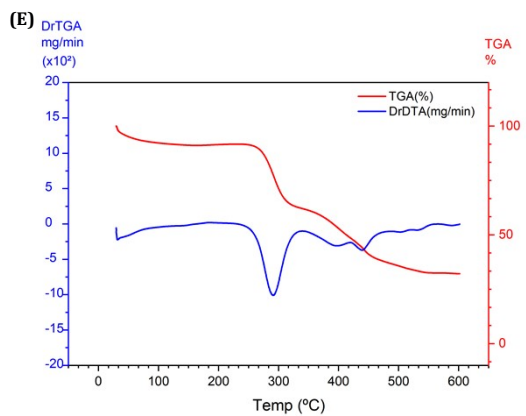
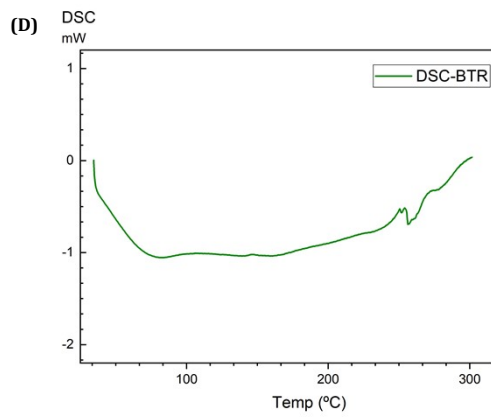
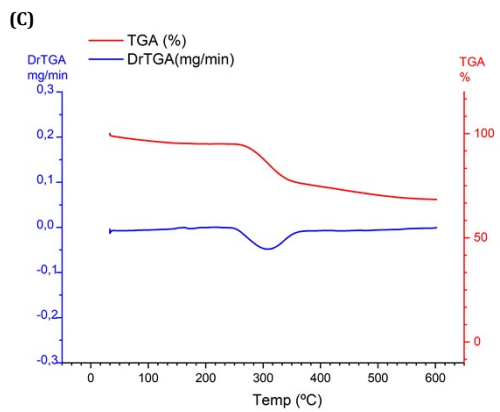
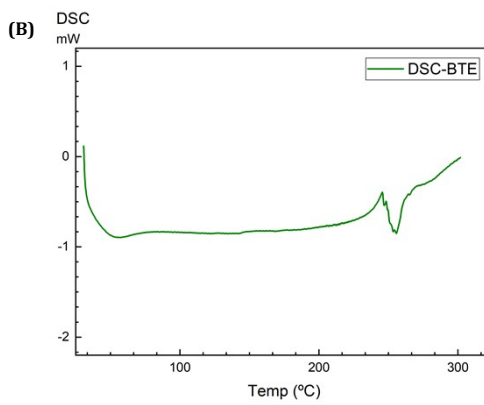
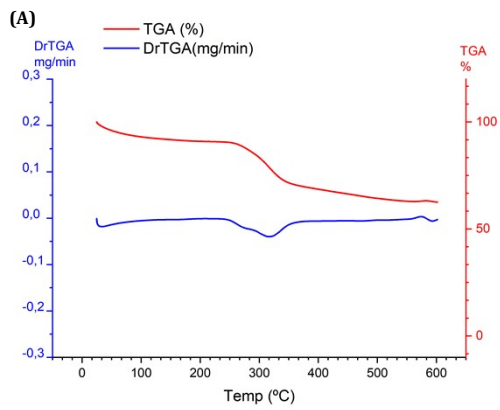
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(G)

(H)

Figure S1: (A) TG-DTG – BTE; **(B)** DSC – BTE; **(C)** TG-DTG – BTR; **(D)** DSC – BTR; **(E)** TG-DTG – CS5-TE; **(F)** DSC – CS5-TE; **(G)** TG-DTG – CS5-TR; **(H)** DSC – CS5-TR.

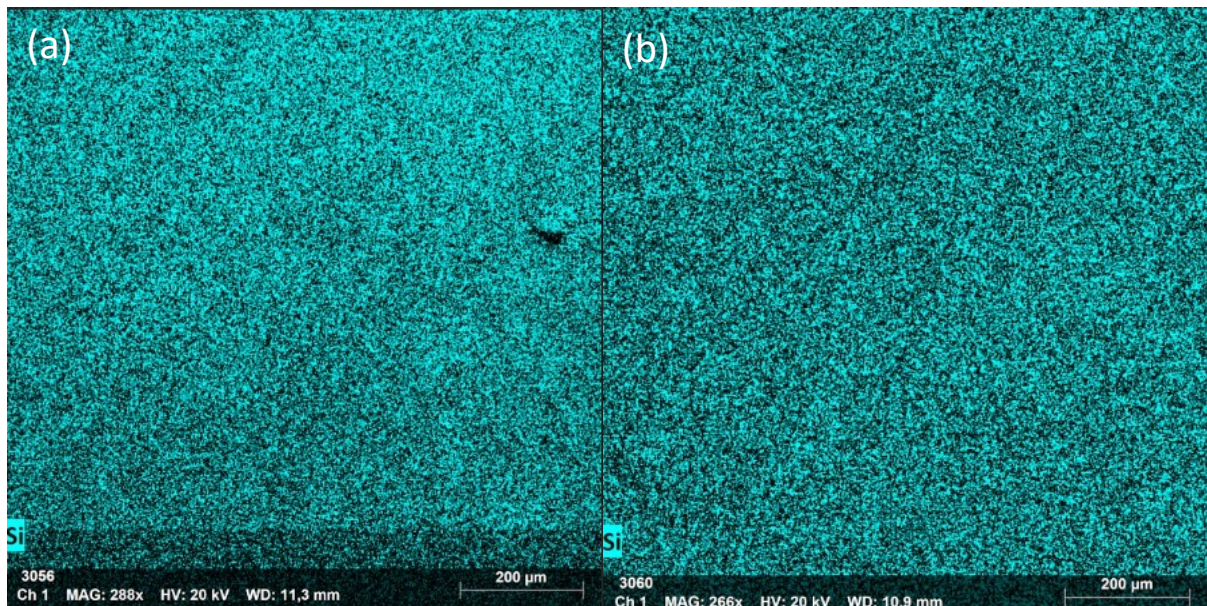
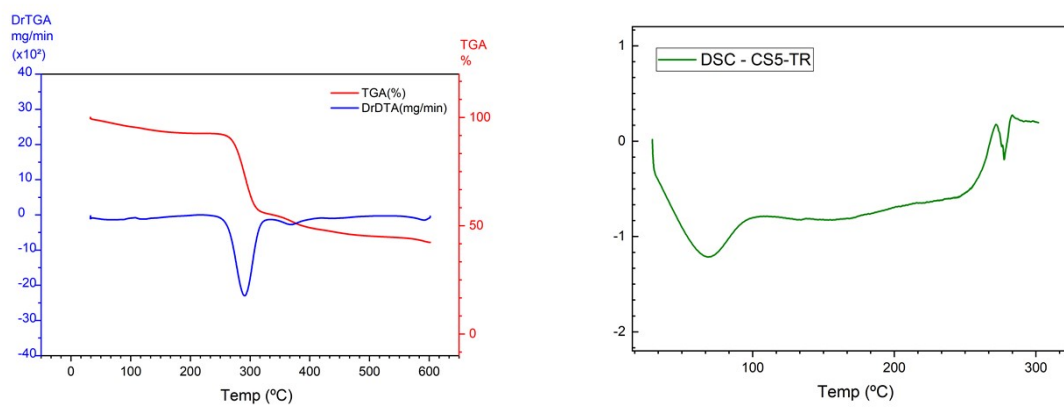


Figure S2: Silicon elemental maps of (a) - BTE (b) - BTR.

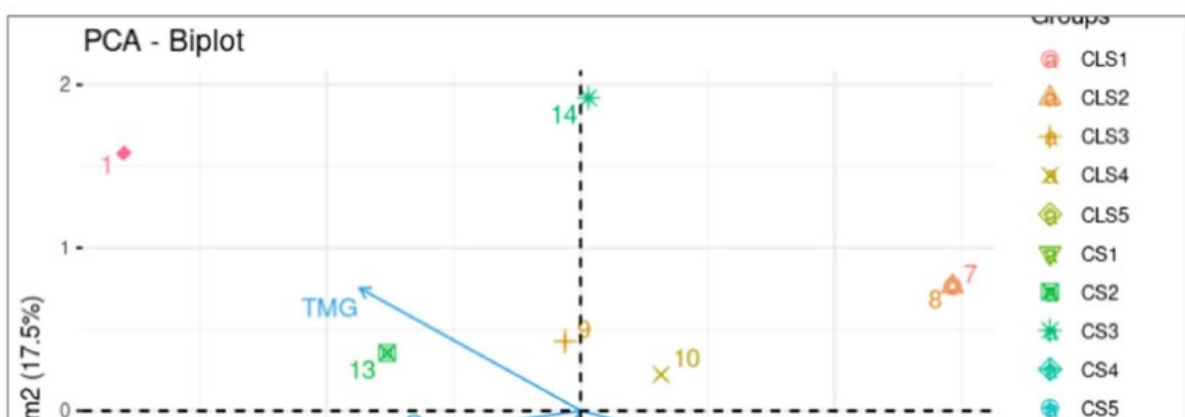


Figure S3: Multivariate principal component analysis (PCA) of the parameters of germination percentage (G), mean germination speed (VMG), germination speed index (IVG), and mean germination time (TMG) for the seed coatings of onion *Allium cepa* L.

Table S1 Descriptive statistical analysis of germination parameters.

Germination parameters	G (%)	IVG (day ⁻¹)	TMG (days)	VMG
Control	85.0	2.83	10.2	0.098
LS1	80.0	2.67	9.6	0.104
LS2	85.0	2.67	10.2	0.098
LS3	85.0	2.83	10.2	0.098
LS4	75.0	2.33	9.0	0.111
LS5	90.0	3.00	10.8	0.093
CLS1	75.0	1.83	9.0	0.111
CLS2	75.0	1.83	9.0	0.111
CLS3	90.0	2.33	10.8	0.093
CLS4	85.0	2.33	10.2	0.098
CLS5	85.0	2.50	10.2	0.098
CS1	95.0	2.67	11.4	0.088
CS2	100.0	2.50	12.0	0.083
CS3	95.0	1.67	11.4	0.088
CS4	95.0	3.00	11.4	0.088
CS5	95.0	2.83	11.4	0.088
L1 - LAP	90.0	2.83	10.8	0.093
L1-CMC	95.0	2.67	11.4	0.088

Medium	87.7	2.50	10.5	0.096
Standard deviation	7.9	0.95	0.4	0.009
CV (%)	9.1	9.05	16.2	9.290

Figure S4: Plates containing *S. cepivora* mycelial discs and dried films CS5-TE and CS5-TR after 135 of experimentation.

