

Supplementary materials for

Valorization of hemp hurds as bio-sourced additives in PLA-based biocomposites

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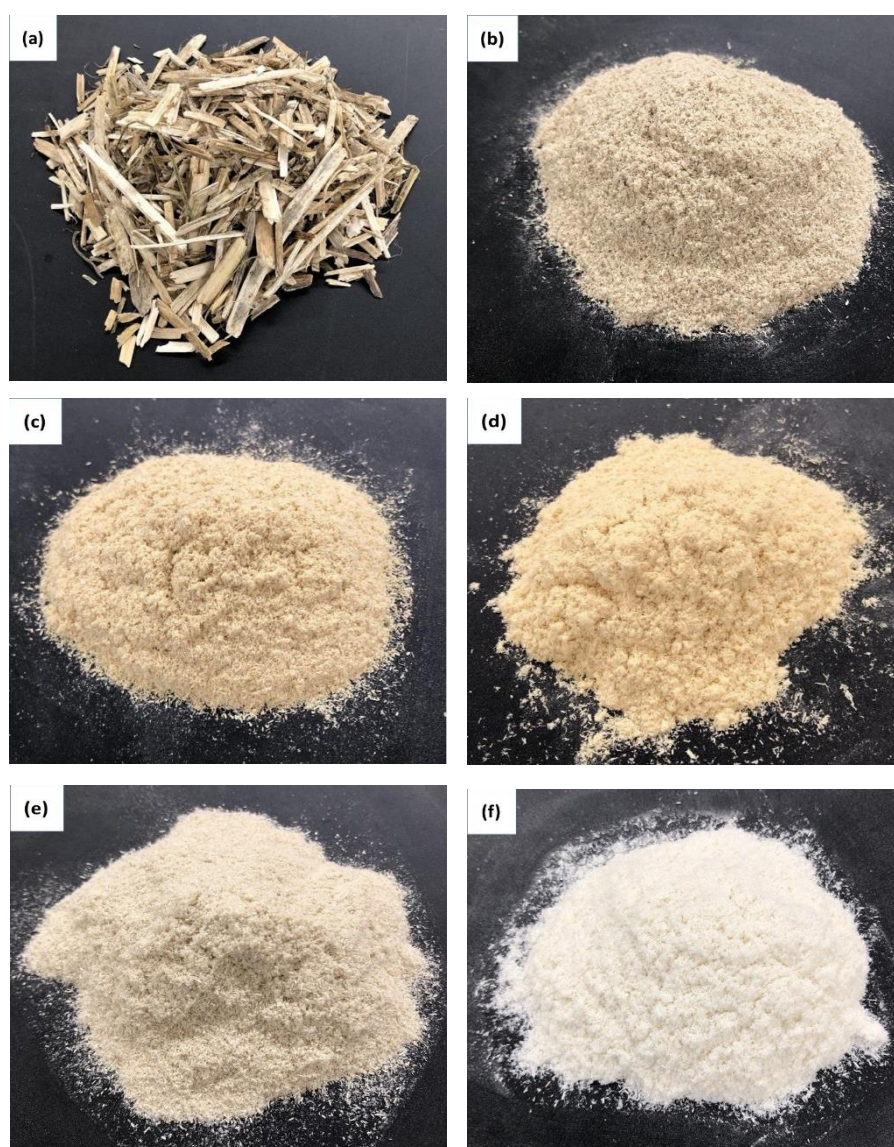


Figure S1. Received hemp hurds (a), untreated hemp hurds powder (UHH) (b), treated hemp hurds powders including AHH1(c), AHH3 (d), APHH1 (e), and APHH3 (f)

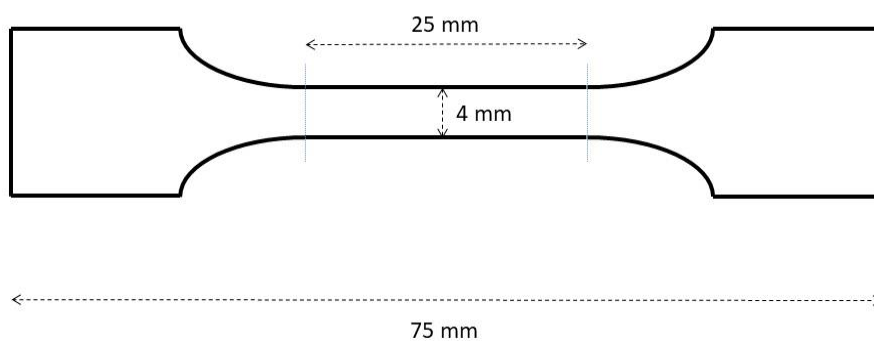


Figure S2. The schematic of dumbbell-shaped specimen for tensile test

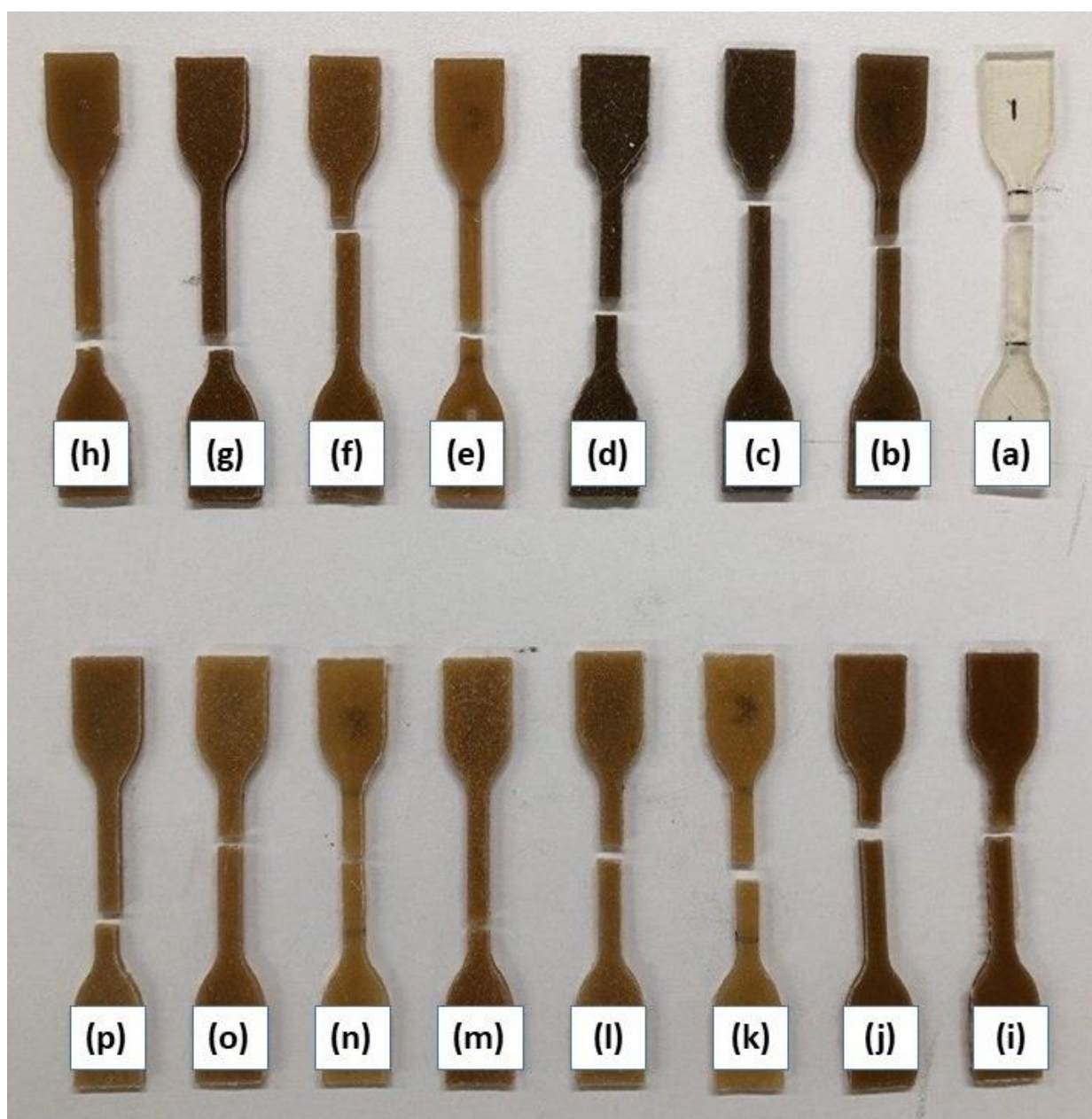


Figure S3. Tensile testing specimens after test; PLA (a), PLA/5UHH (b), PLA/10UHH (c), PLA/15UHH (d), PLA/5AHH1 (e), PLA/10AHH1 (f), PLA/15AHH1 (g), PLA/5AHH3 (h), PLA/10AHH3 (i), PLA/15AHH3 (j), PLA/5APHH1 (k), PLA/10APHH1 (l), PLA/15APHH1 (m), PLA/5APHH3 (n), PLA/10APHH3 (o), and PLA/15APHH3 (p)

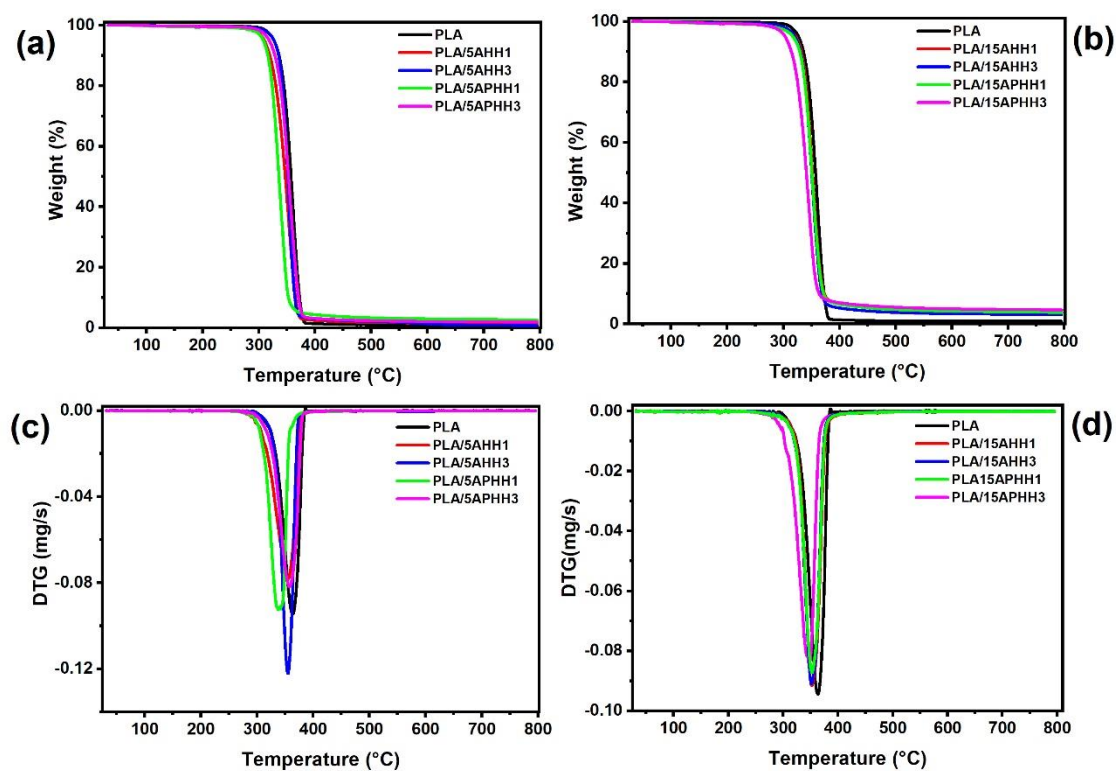


Figure S4. TGA thermograms of PLA and its biocomposites for 5 wt % (a) and 15 wt % (b) filler loading; DTG thermograms corresponding to PLA and its biocomposites for 5 wt % (c) and 15 wt % (d) filler content

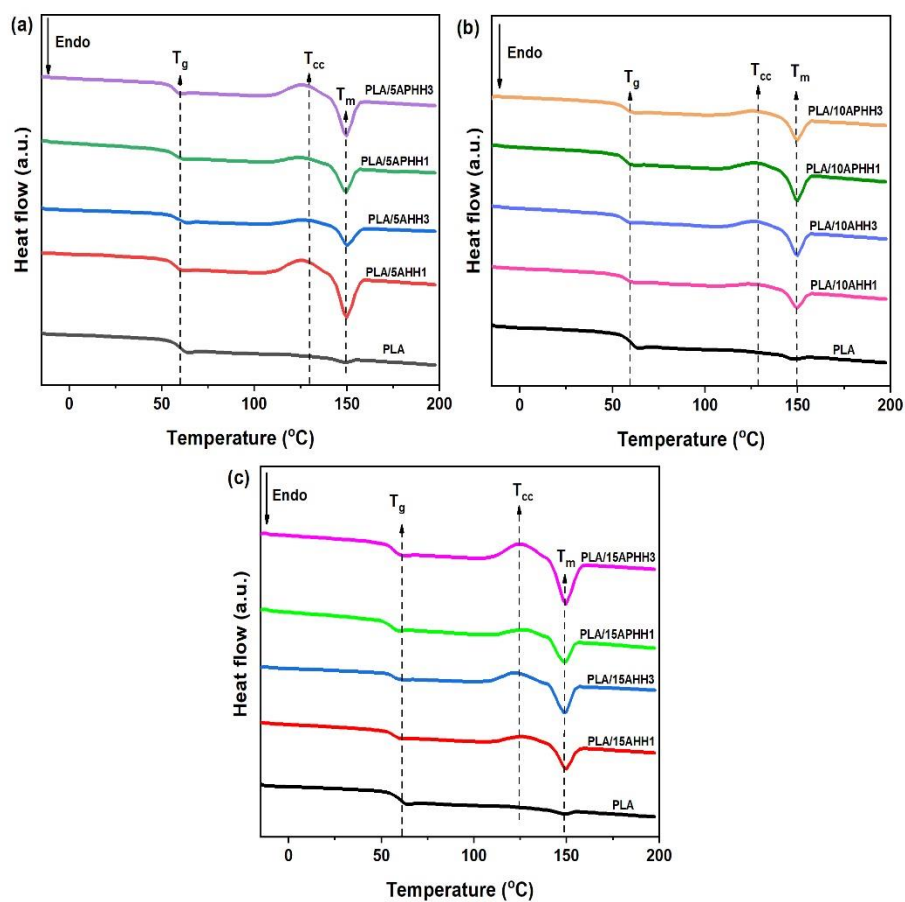


Figure S5. DSC thermograms of PLA and its biocomposites for (a) 5 wt %, (b) 10 wt %, and (c) 15 wt % filler content