

## Supplementary Information

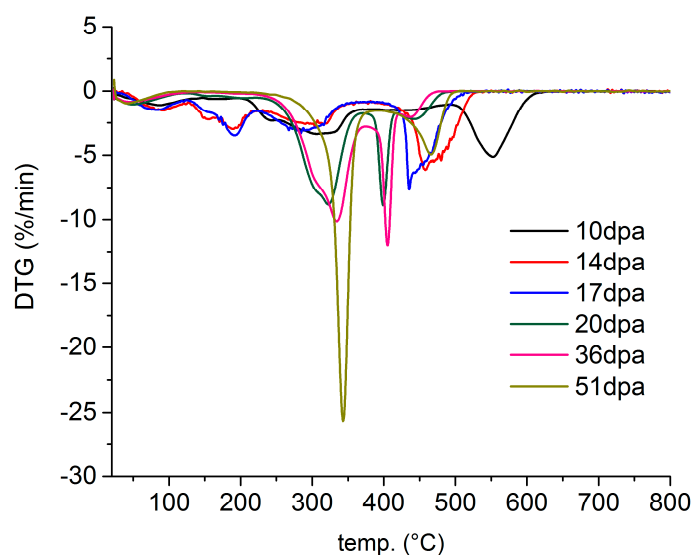
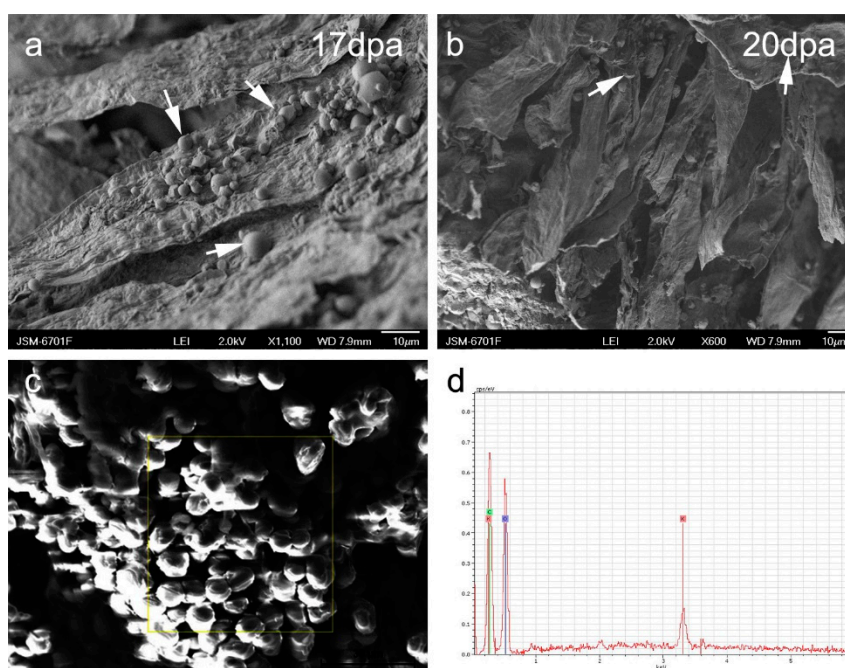


Figure S1. First derivative of the thermal profiles of raw/washed *G. hirsutum* fibers harvested at different stages of development (10, 14, 17, 20, 36 and 51 dpa) obtained from Fig. 4a.



**Figure S2.** Representative scanning electron microscope images of fibers taken at (a) 17dpa and (b) 20 dpa (days post-anthesis) showing a spherical features; (c) higher magnification of spherical features. The electron accumulation suggests an organic nature. The square represents the area where the chemical analysis was carried out; (d) representative spectra obtained for the chemical elemental analysis of the spherical features showing the presence of high concentration of potassium and confirming the organic nature of these features.