

## Supplemental Materials

# Comparative GC-MS Metabolite Profiling and Physicochemical Characterization of *Eichhornia crassipes* Biomass Fractions across Diverse Aquatic Habitats

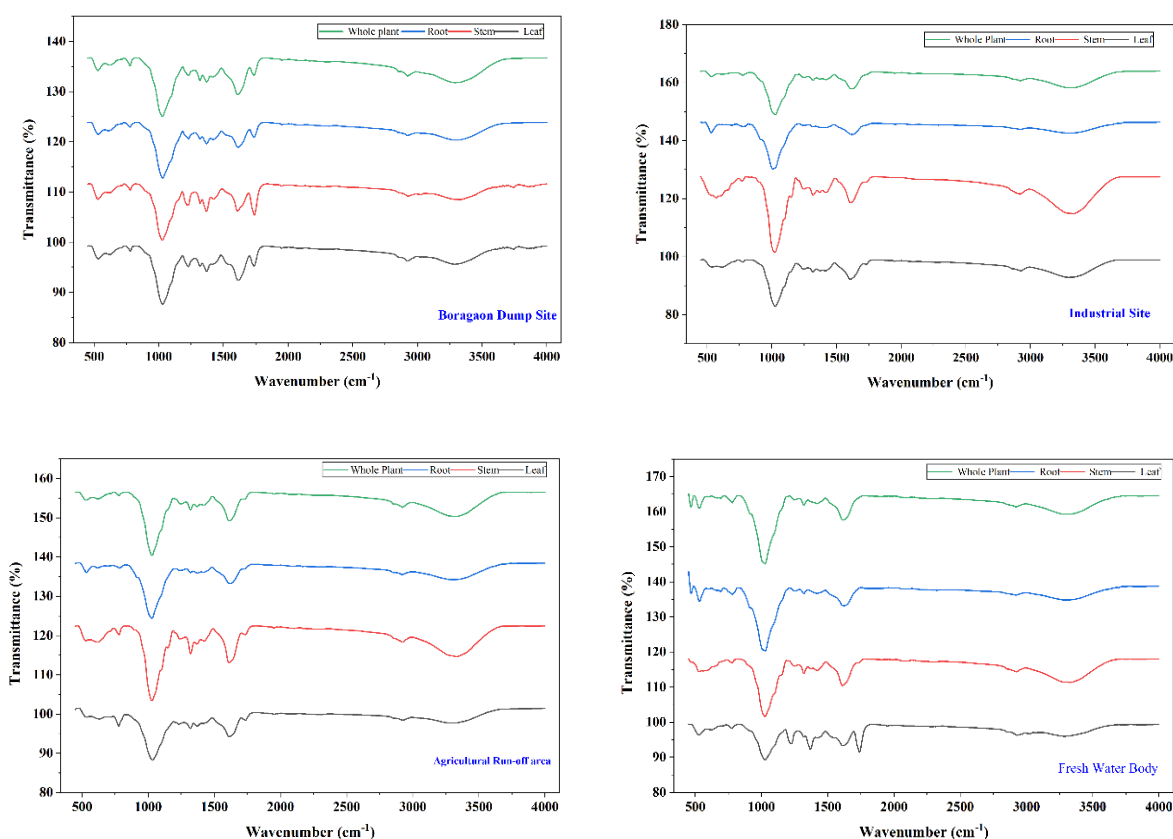
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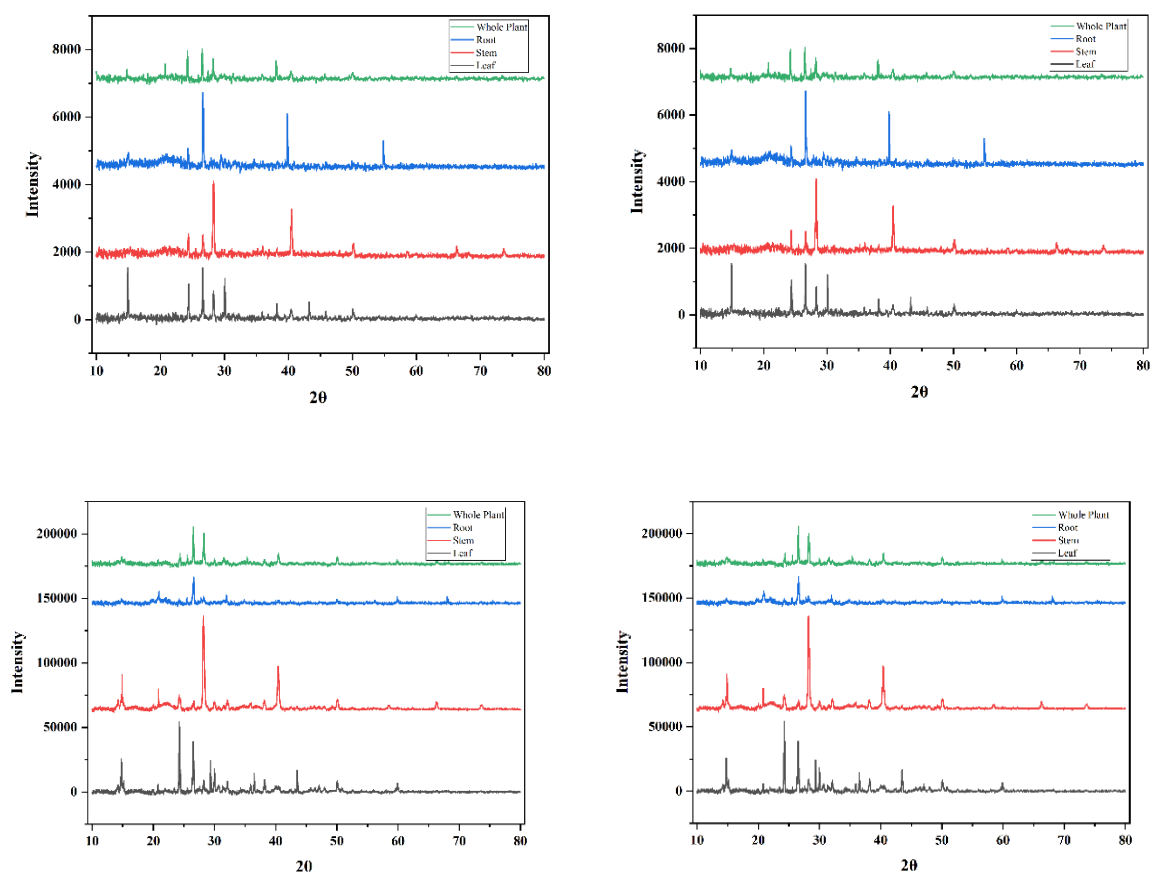
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### FTIR



**Figure S1.** Fourier-transform infrared (FTIR) spectra of water hyacinth were collected from different locations at the Boragaon dump site, agricultural run-off, industrial area, and freshwater bodies.

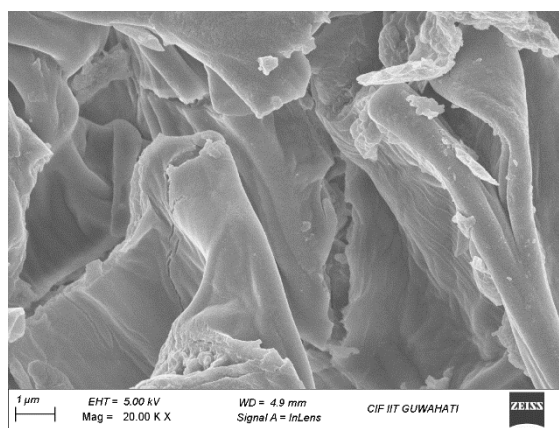
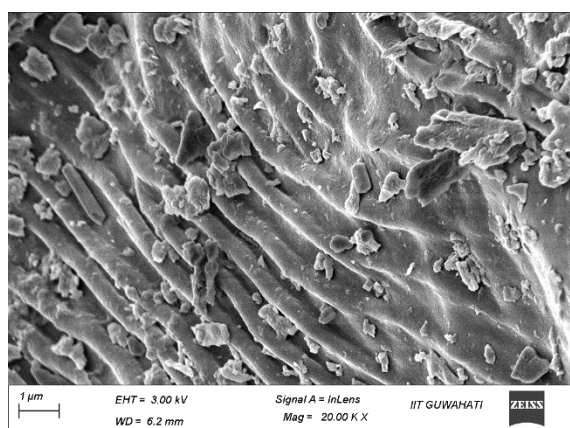
## XRD

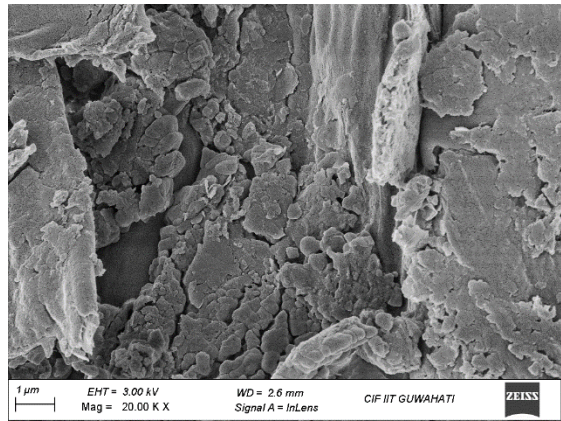
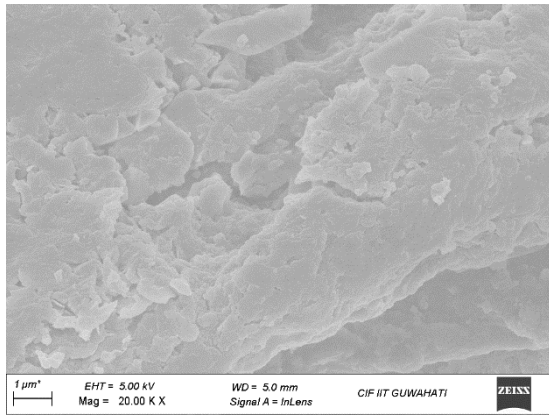


**Figure S2.** X-ray diffraction (XRD) patterns of water hyacinth were collected from different locations at the Boragaon dump site, agricultural runoff, industrial areas, and freshwater bodies.

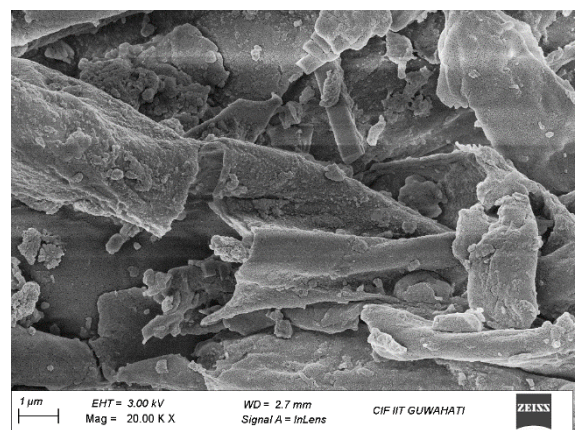
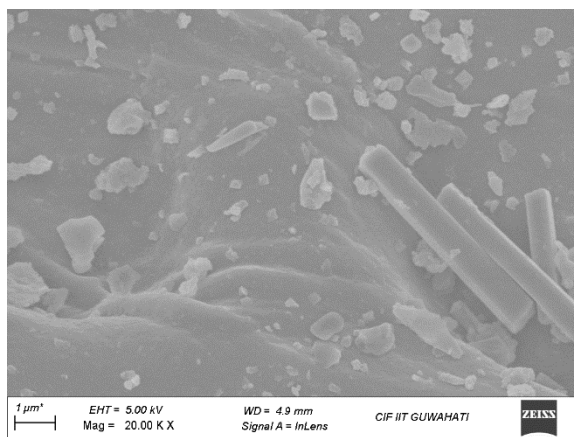
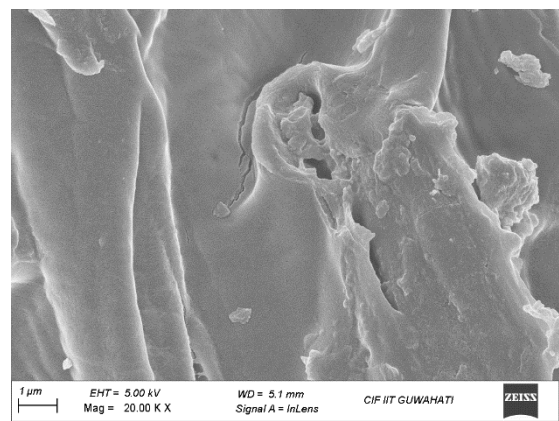
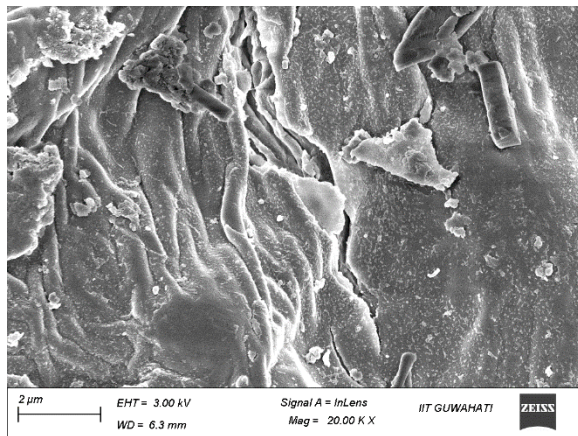
## FESEM

### LEAF

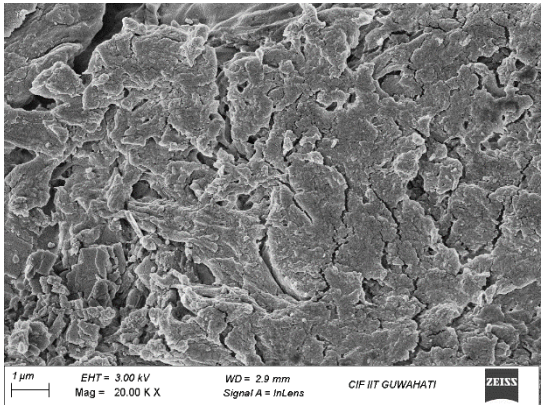
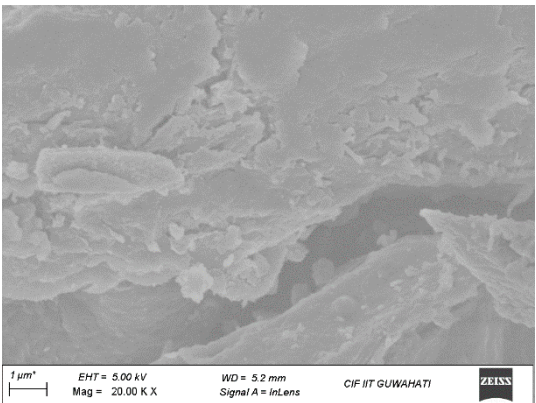
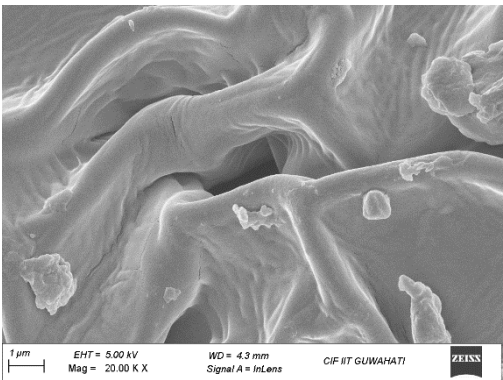
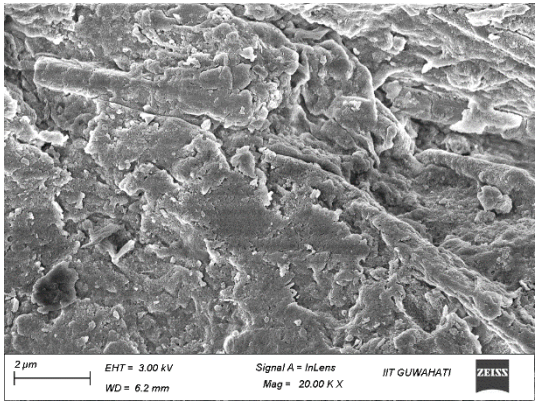




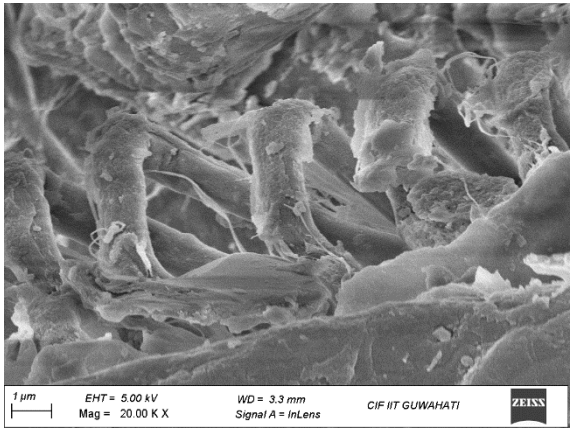
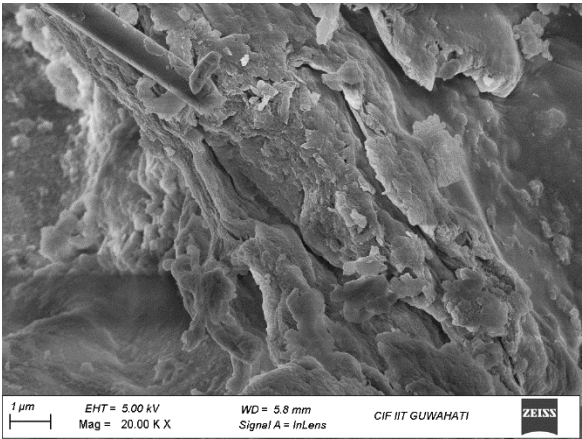
## STEM

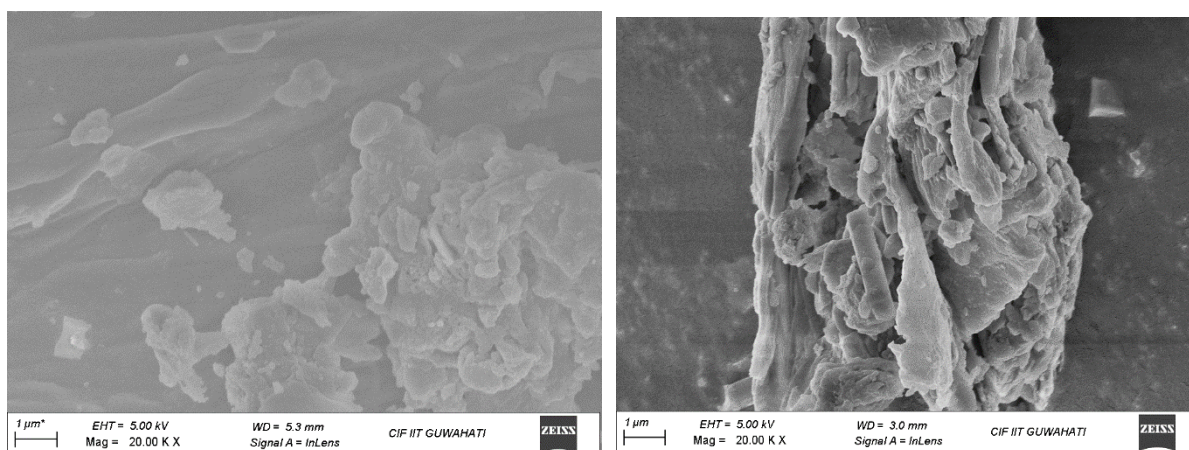


Root



WHOLE PLANT





**Figure S3.** Field-emission scanning electron microscopy (FESEM) images of water hyacinth were collected from different locations at the Boragaon dump site, agricultural runoff, industrial areas, and freshwater bodies.