

Comparative of Biofuel production technologies using solid-state and submerged fermentation for fungal cellulases

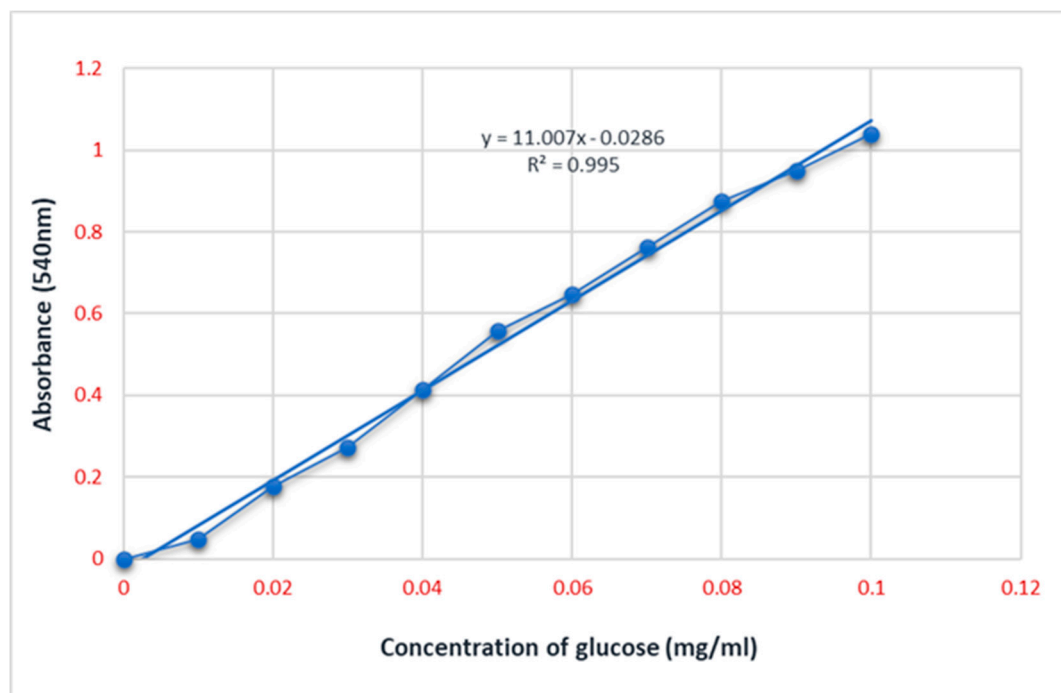


Figure S1. Standard curve of glucose.

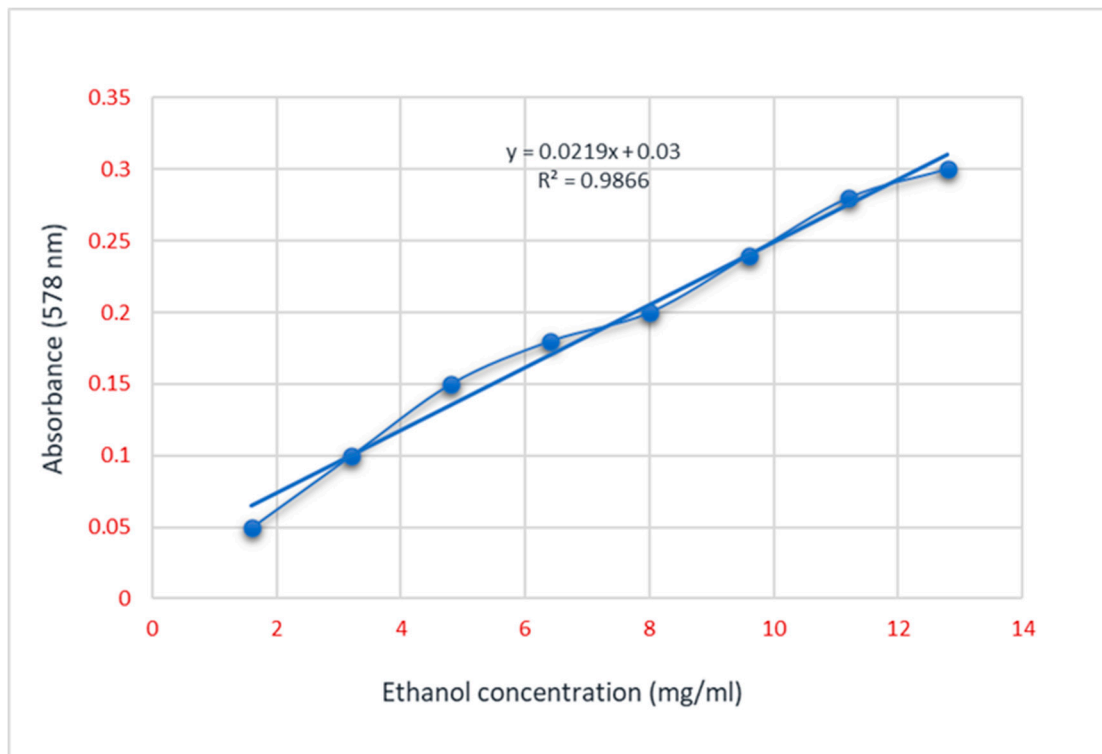


Figure S2. Standard curve of ethanol.

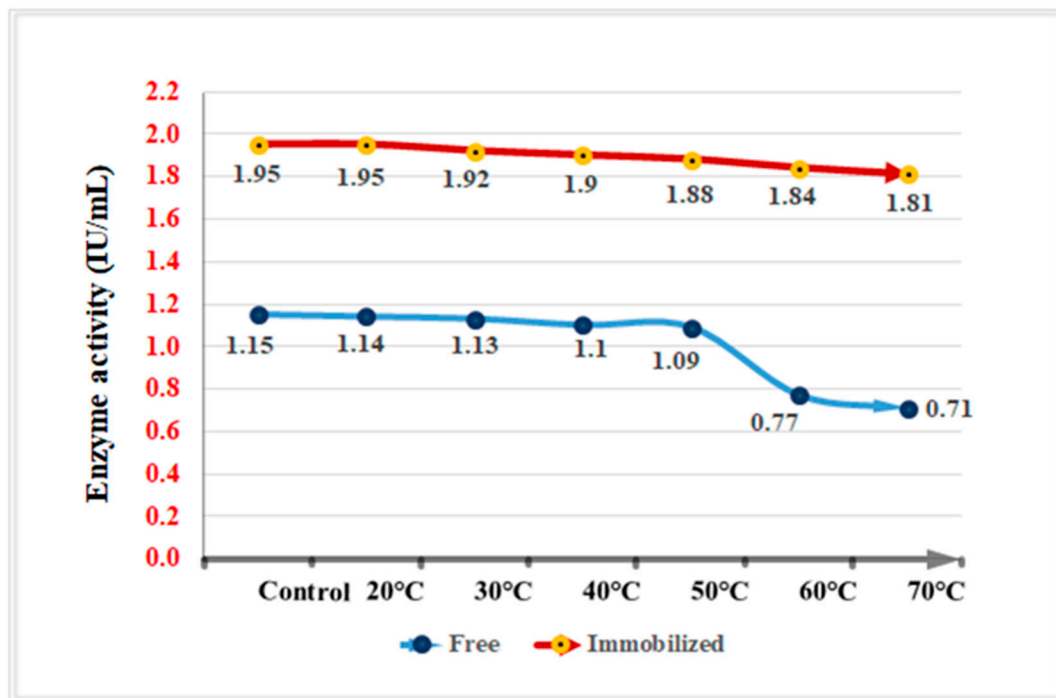


Figure S3. The Thermal Stability of Free and Immobilized CMC-ase Produced by *A.niger* MT328516 under SmF.

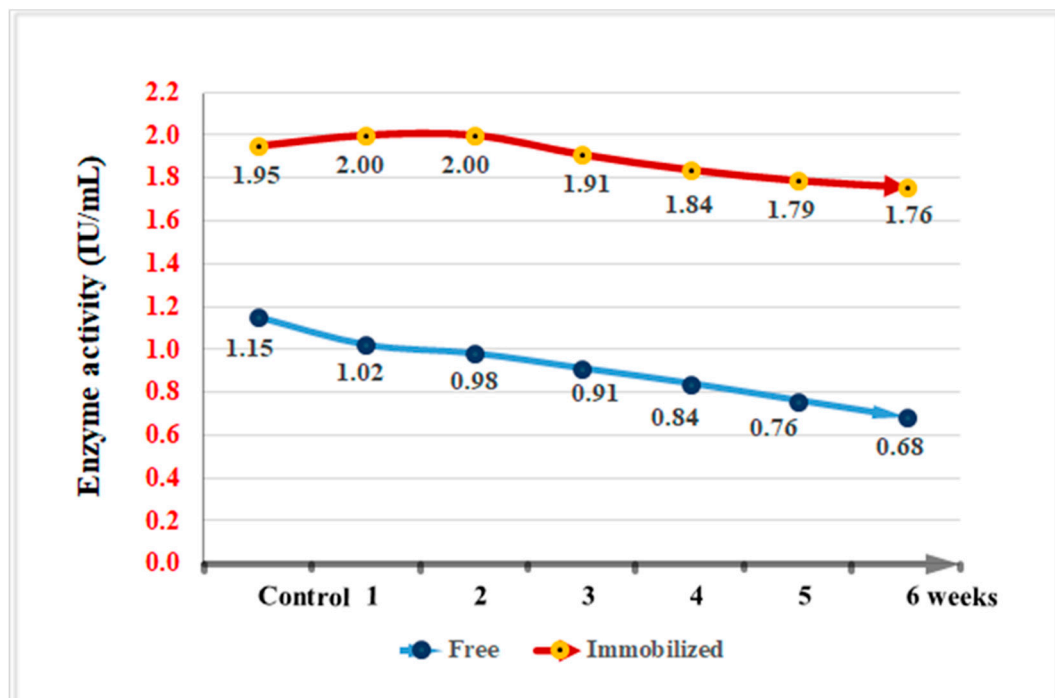


Figure S4. The Storage Stability of Free and Immobilized CMC-ase Produced by *A.niger* MT328516 under SmF.

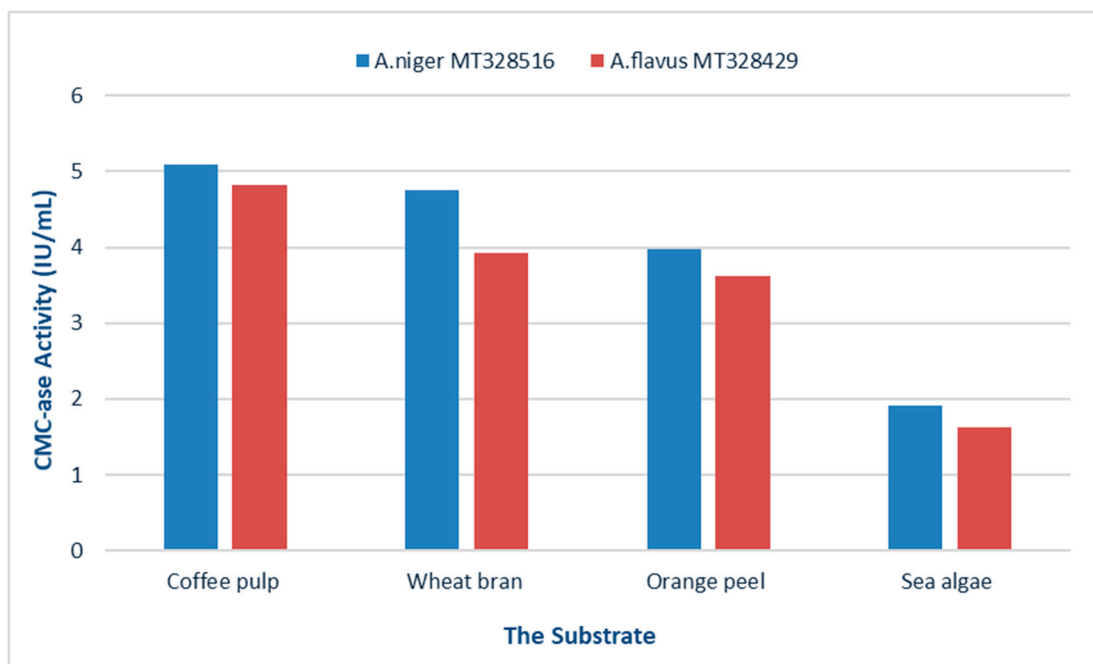


Figure S5. Production of CMC-ase Under Solid State Fermentation (SSF) by *A.niger* MT328516 and *A.flavus* MT328429 Using Cellulolytic Wastes as a Substrate.

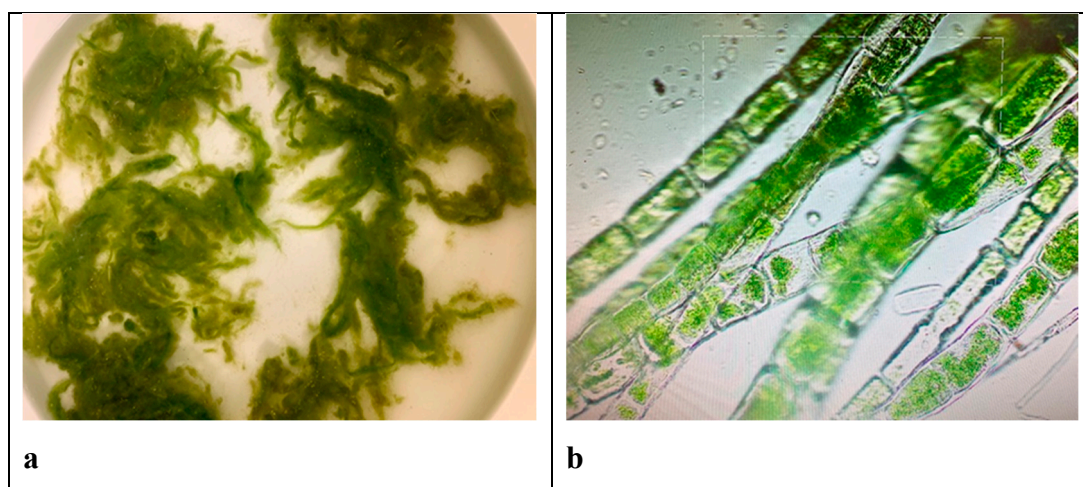


Figure S6. Sea Algae from Arabian Gulf Coast in Al-Khobar City. (a) Before processing, (b) Under an optical microscope.

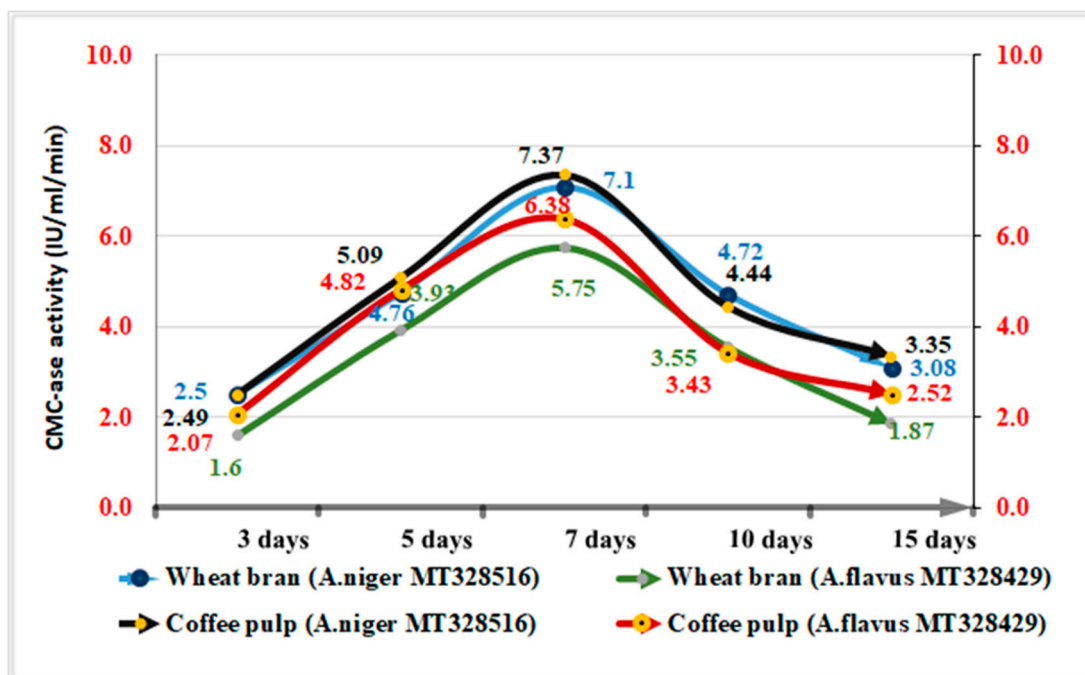


Figure S7. The Effect of Incubation Period on CMC-ase Production under SSF by *A.niger* MT328516 and *A.flavus* MT328429.

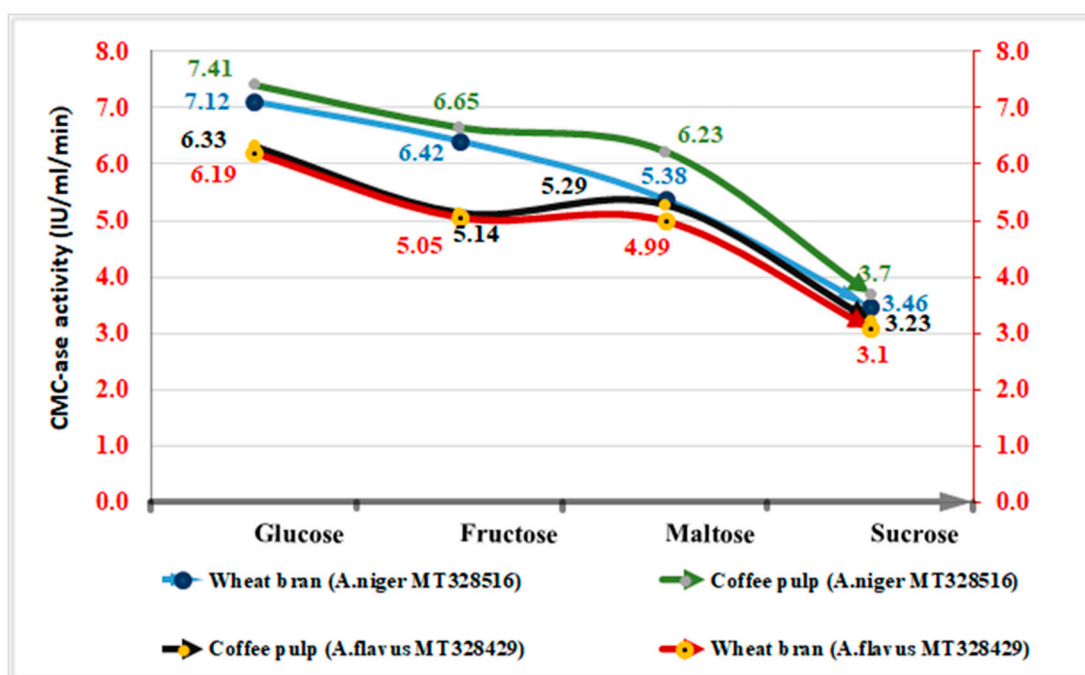


Figure S8. The Effect of Carbon Source on CMC-ase Production under SSF by *A.niger* MT328516 and *A.flavus* MT328429.

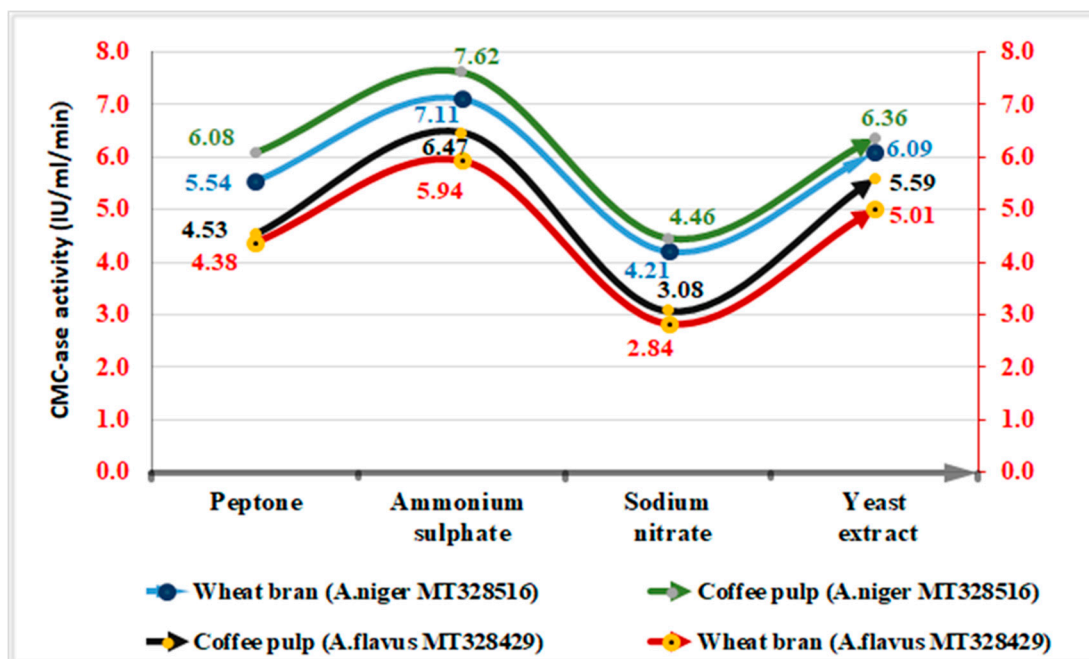


Figure S9. The Effect of Nitrogen Source on CMC-ase Production under SSF by *A. niger* MT328516 and *A. flavus* MT328429.

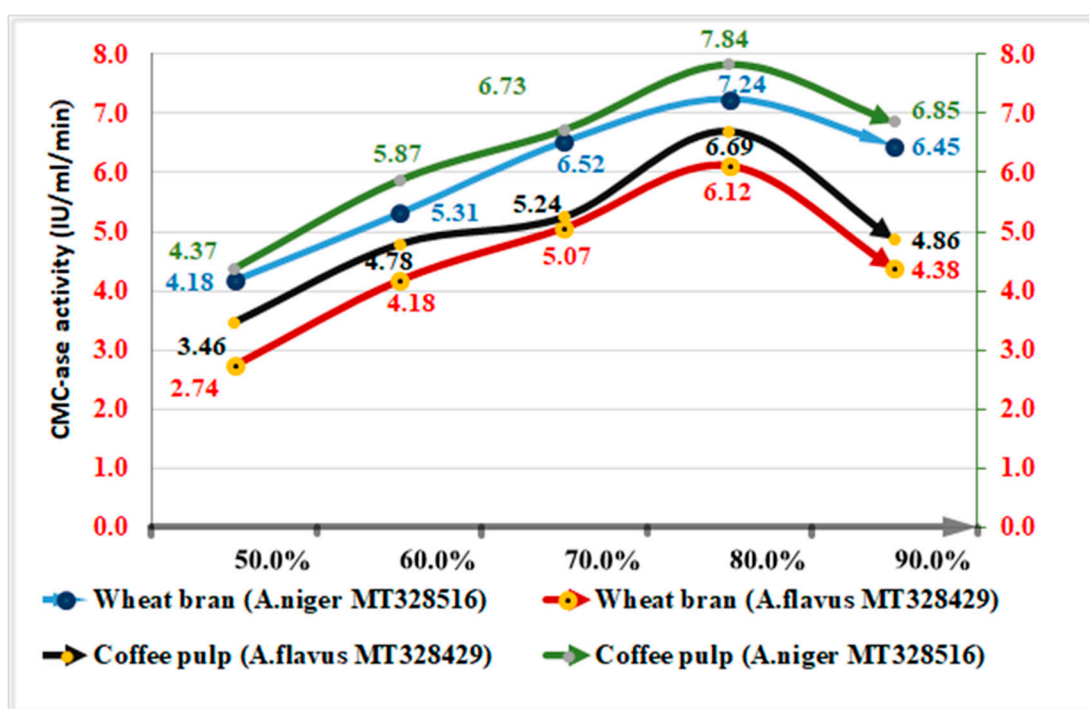


Figure S10. The Effect of Moisture Content on CMC-ase Production under SSF by *A. niger* MT328516 and *A. flavus* MT328429.

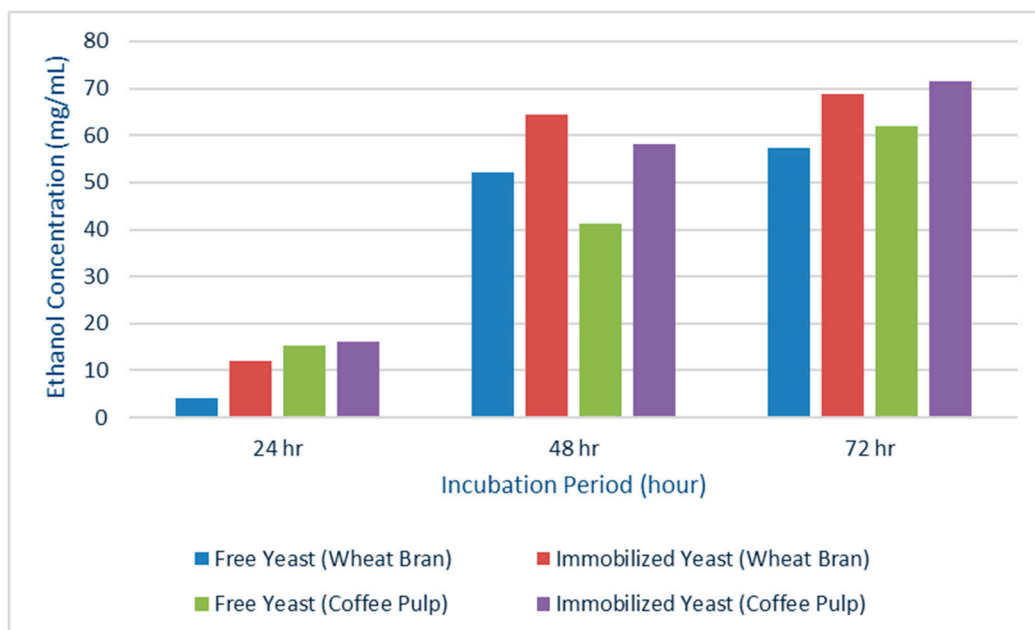


Figure S11. The Ethanol Concentration (mg/mL) Produced by Fermented the Products of enzymatic hydrolysis of Wheat Bran and Coffee Pulp by *A.niger* MT328516 Using *S.cerevisiae* as Free or Alginate Immobilized Cells.

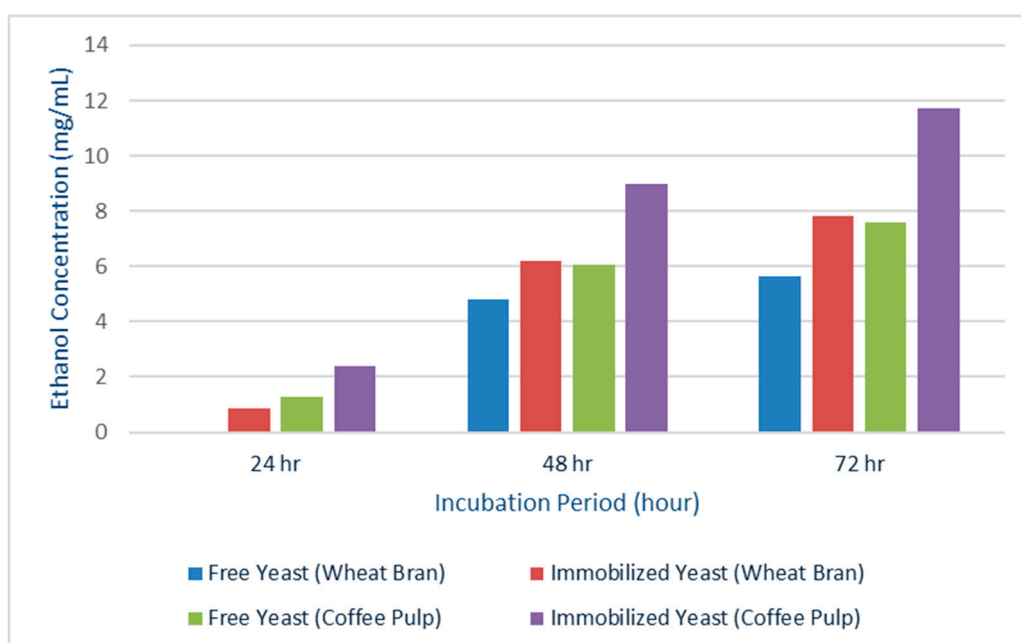


Figure S12. The Ethanol Concentration (mg/mL) Produced by Fermented the Products of enzymatic hydrolysis of Wheat Bran and Coffee Pulp by *A.flavus* MT328429 Using *S.cerevisiae* as Free or Alginate Immobilized Cells.