

Supplementary material

Potato juice, a starch industry waste, as a cost-effective medium for the biosynthesis of bacterial cellulose

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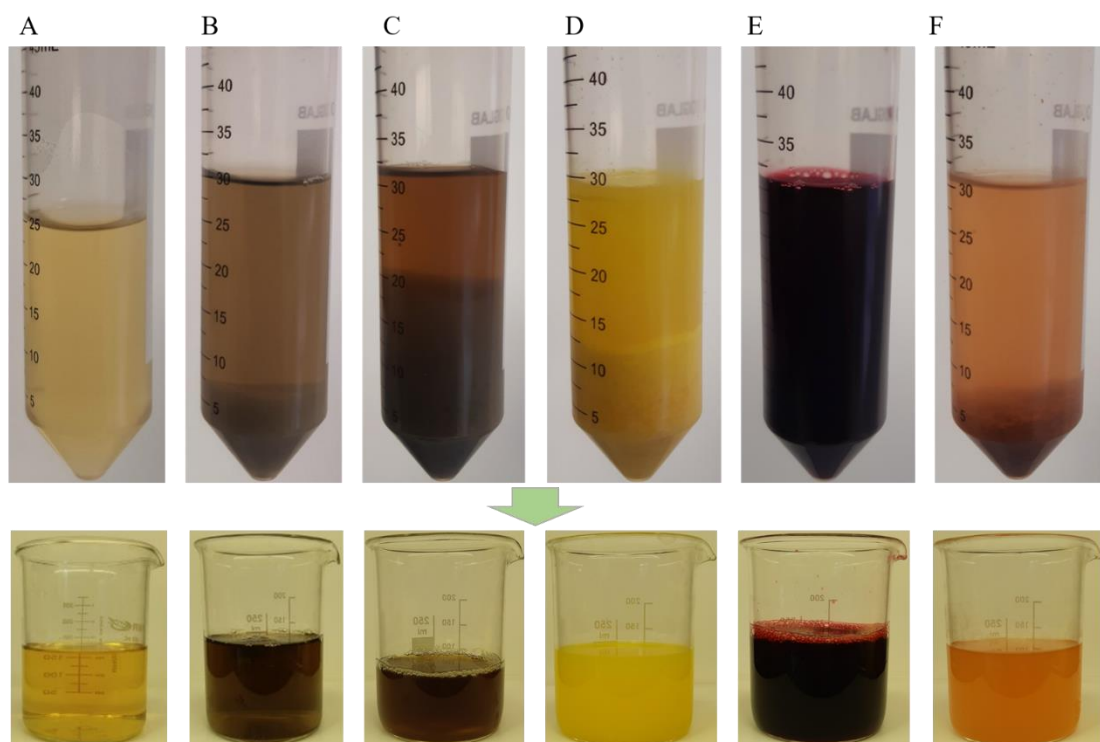


Figure S1. HS and natural ingredients-based media before (in 50 mL plastic tubes) and after decantation (in glass beakers); (A) HS; (B) potato juice; (C) potato peels; (D) orange peels; (E) beetroot; (F) apple.

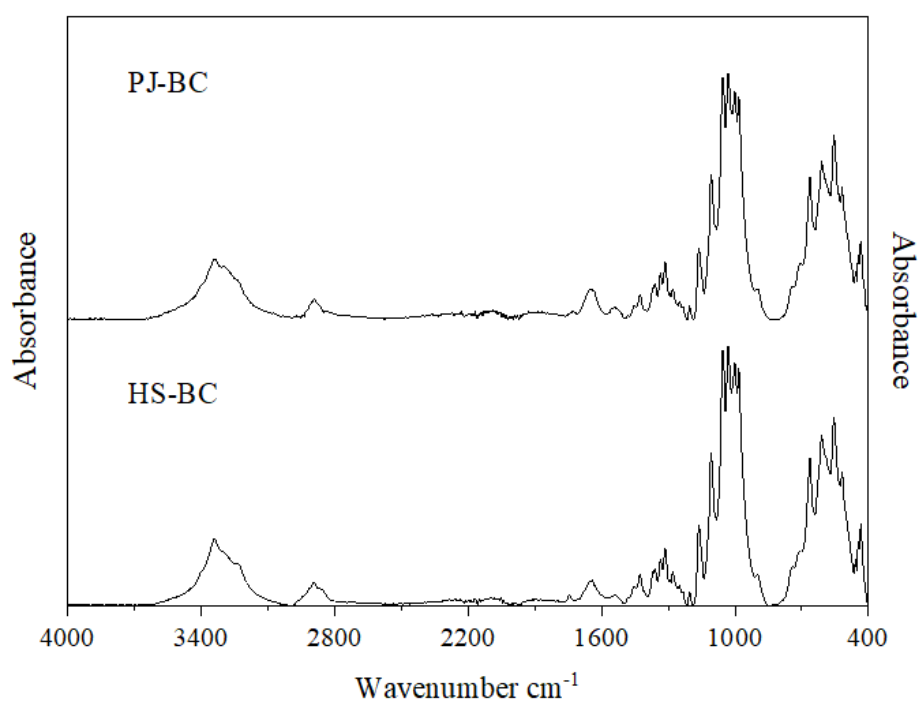


Figure S2. ATR-FTIR spectra of HS-BC and PJ-BC obtained from *K. xylinus* ATCC 53524 cultures.

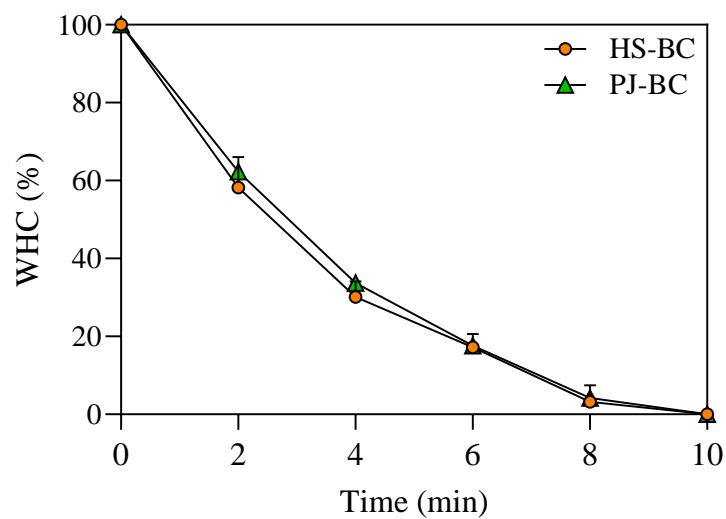
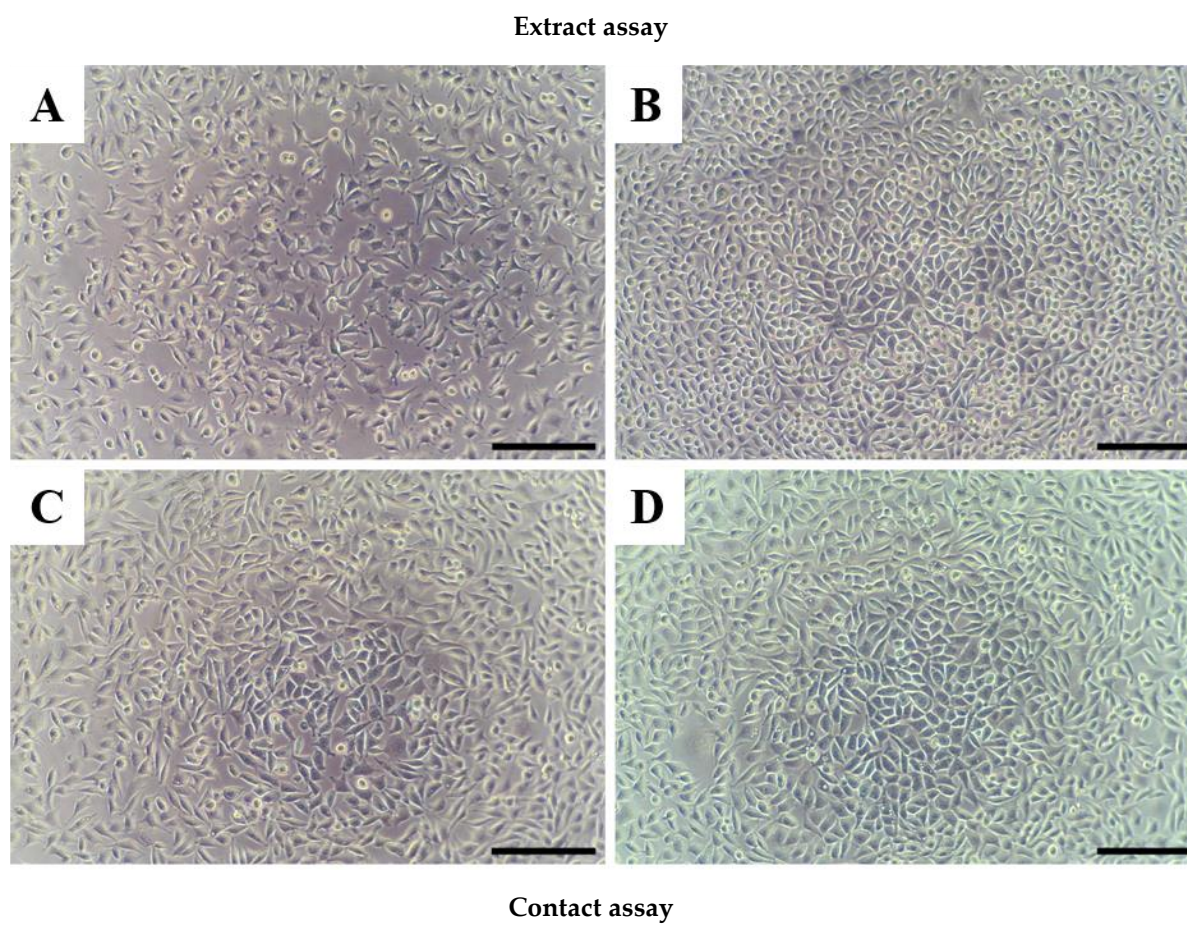


Figure S3. Water holding capacity (%) of HS-BC and PJ-BC obtained from *K. xylinus* ATCC 53524 during drying process at 60°C. Data are presented as a mean \pm standard error of the mean (SEM).



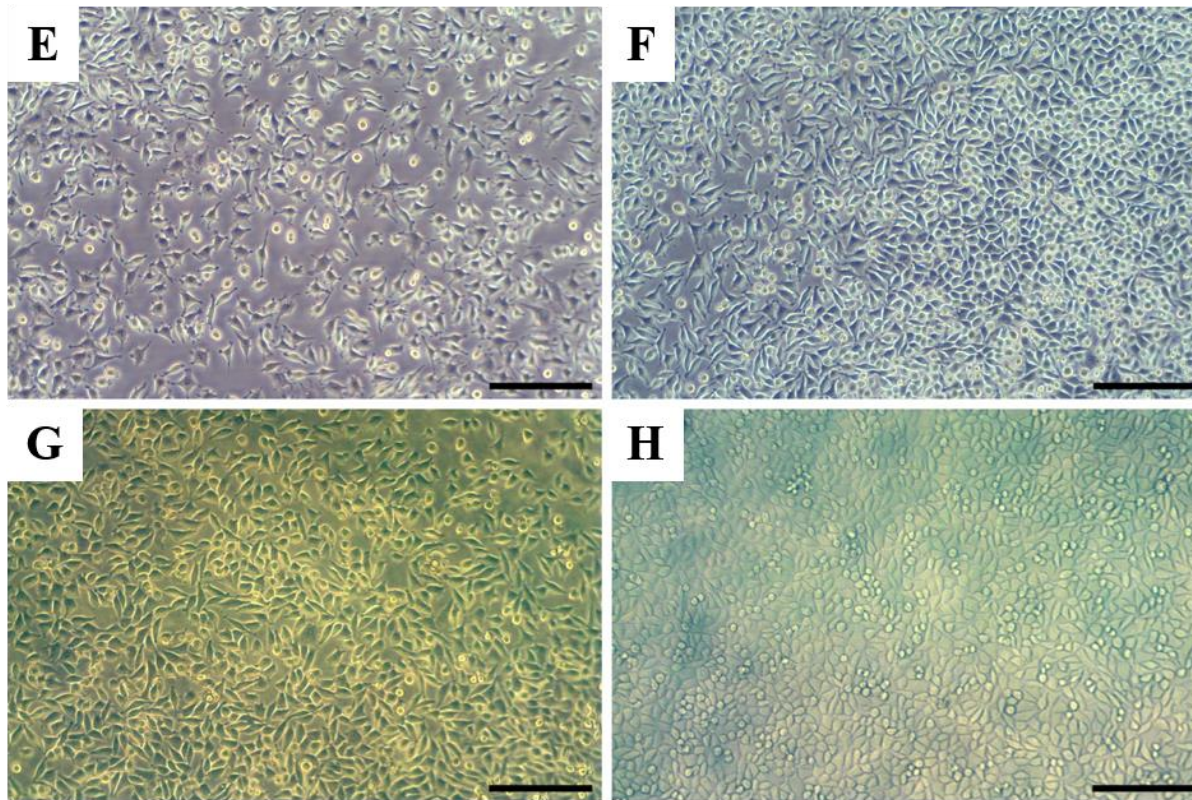


Figure S4. Representative micrographs of L929 cells. (A) 24 h after seeding (10000 cells per well); (B) After 24 h of incubation with sham extract; (C),(D) After 24 h incubation with extracts of HS-BC and PJ-BC obtained from *K. xylinus* ATCC 53524, respectively; (E) 24 h after seeding, prior to disc placement; (F) After incubation for 24 h without disc (sham); (G),(H) After 24 h incubation beneath discs of HS-BC and PJ-BC obtained from *K. xylinus* ATCC 53524, respectively. Images taken with discs in place - prior to removal. Scale bar indicates 200 μm.

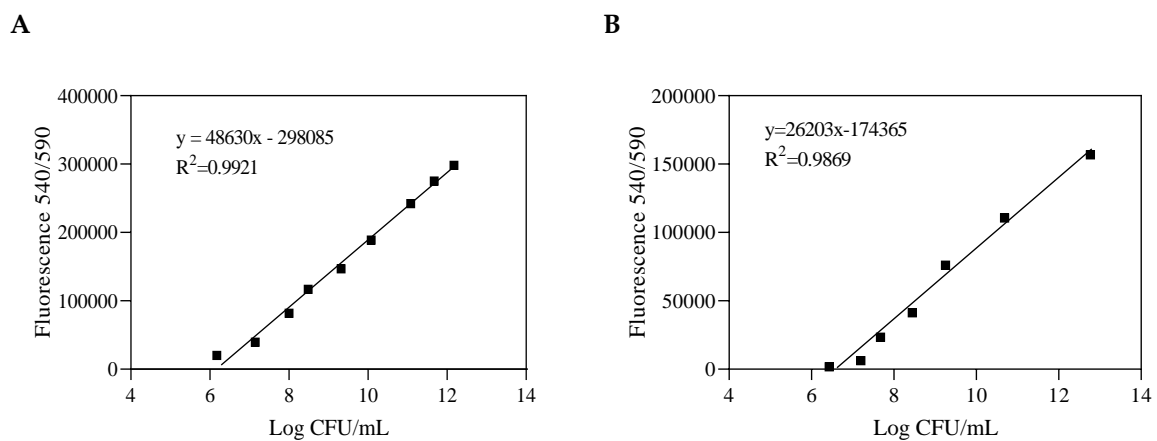


Figure S5. Standard curve of alamarBlue fluorescence intensity versus logarithm of *K. xylinus* ATCC 53524 cell concentration in the culture medium (A) and in the BC membranes (B).