

Fig. S1. Quantitative ^{13}C NMR spectra of MWL and DES lignins.

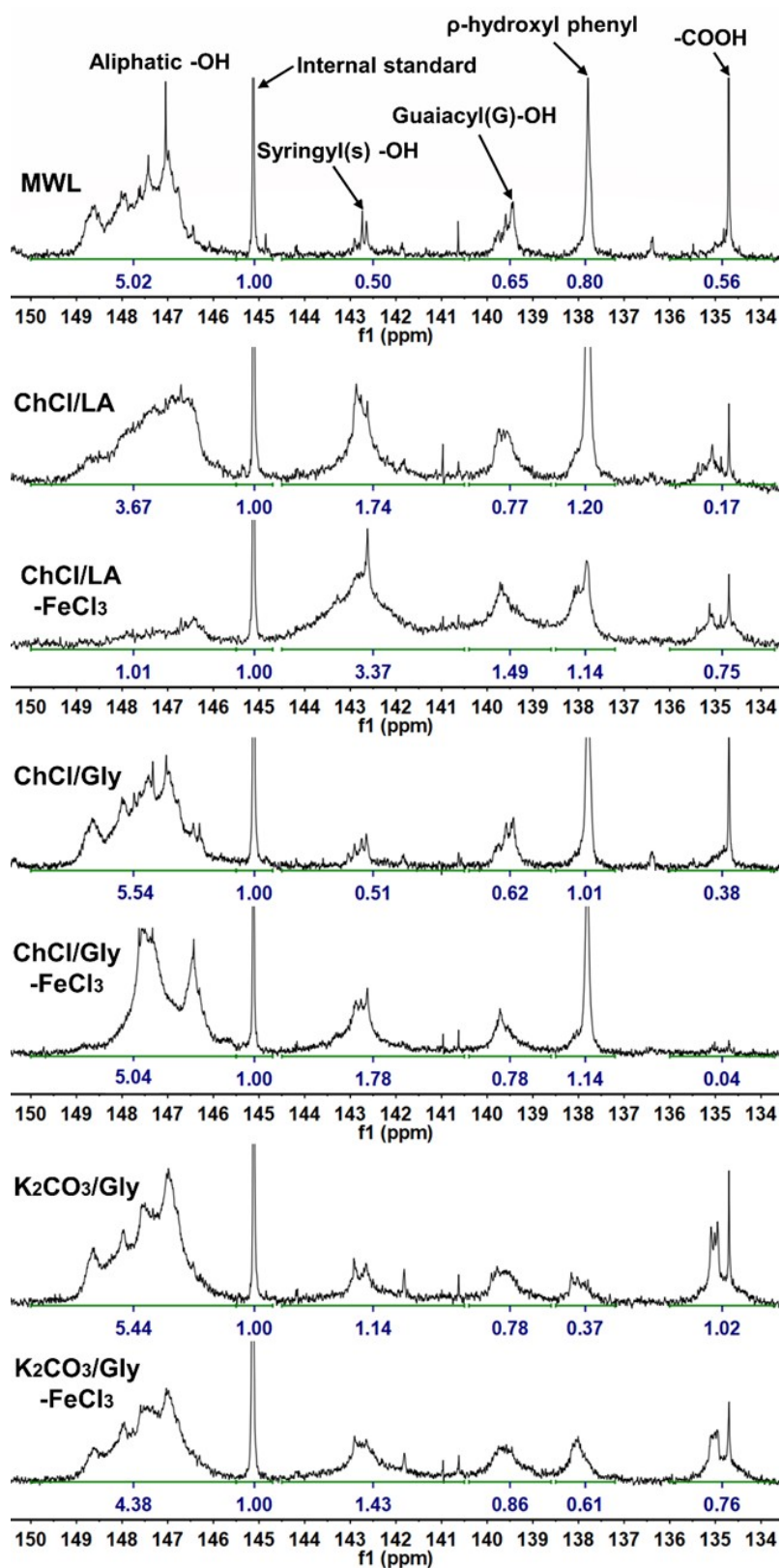


Fig. S2. Quantitative ^{31}P NMR spectra of MWL and regenerated lignins.

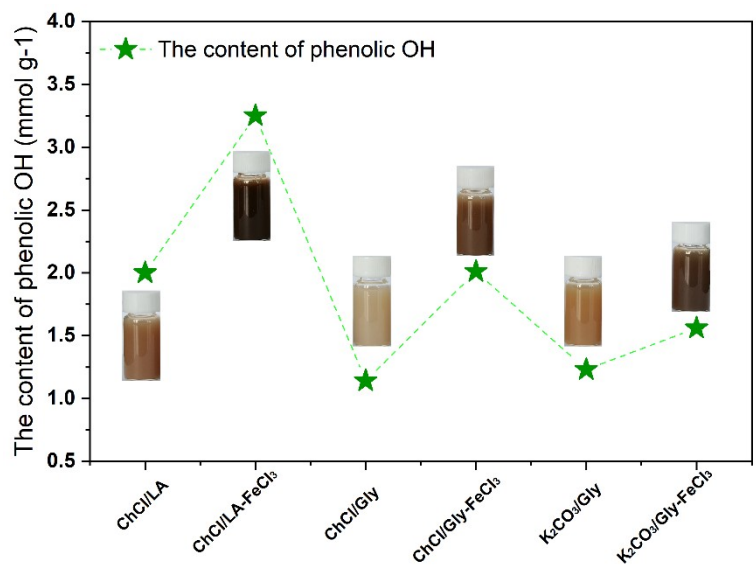


Fig. S3. The content of phenolic-OH and its corresponding digital photo of these DES lignin nanospheres.

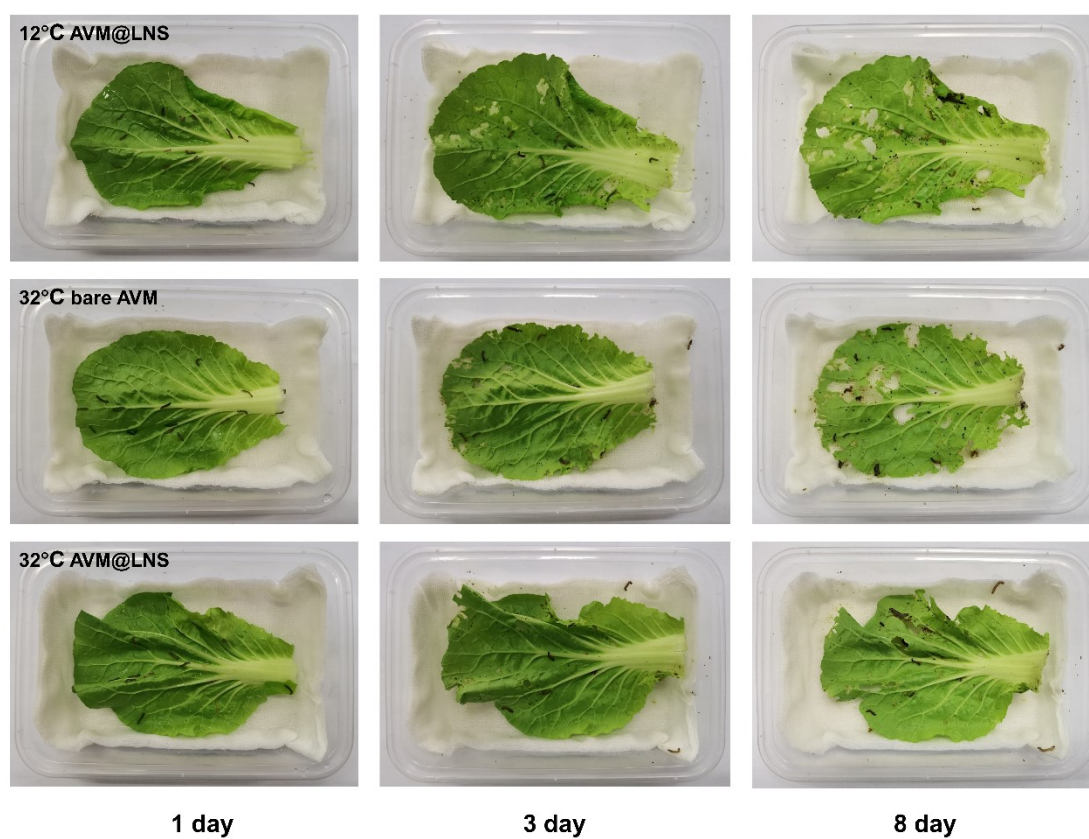


Fig. S4. Photographs of Baby Bok Choy after feeding *Mythismna separata* at different times.