A Biodegradable Fe-Fertilizer with High Mechanical Property and Sustainable Release for Potential Agriculture and Horticulture Applications

Tao Li, Shaoyu Lü*, Yanzheng Ji, Taomei Qi, Mingzhu Liu*

State Key Laboratory of Applied Organic Chemistry, Key Laboratory of Nonferrous Metal Chemistry and Resources Utilization of Gansu Province, College of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou 730000, People's Republic of China

*Corresponding author. Tel.: +86-931-8912387; fax: +86-931-8912582

E-mail address: lshy@lzu.edu.cn, mzliu@lzu.edu.cn



Figure S1. The experimental instrument of measuring mechanical strength of fertilizers.



Figure S2. FTIR spectra of lignin (a) and AL (b).



Figure S3. DSC curves of lignin (a) and AL (b).



Figure S4. The morphology of lignin (A) and AL (B).



Figure S5. FTIR spectra of sodium alginate (a) and OSA (b).



Figure S6. The DSC curves of OSA (a) and sodium alginate (b).