**Table S1** Effect of DE value on starch solubility of kudzu root starch

|  |  |
| --- | --- |
| DE value | Starch solubility (%) |
| 10 | 50.1 |
| 14.66 | 79.3 |
| 16.73 | 88.7 |
| 19.37 | 95.2 |
| 21.33 | 100 |

When the DE value reached 21, starch was completely dissolved. While DE value was at 19, it reached solubility over 95%. Therefore, with the purpose of high starch utilization, a higher DE value should be chosen during the liquefaction process.