

Development of certified reference materials for the determination of apparent amylose content in rice

Supplementary Table S1. Moisture content (%) of the four rice reference materials for five replicates

| Samples | 1 | 2 | 3 | 4 | 5 | Mean \pm SD |
|---------|-------|-------|-------|-------|-------|------------------|
| RM01 | 10.56 | 10.44 | 10.45 | 10.54 | 10.44 | 10.49 \pm 0.06 |
| RM02 | 11.30 | 11.40 | 11.36 | 11.37 | 11.34 | 11.35 \pm 0.04 |
| RM03 | 10.92 | 10.88 | 10.87 | 10.85 | 10.91 | 10.89 \pm 0.03 |
| RM04 | 9.82 | 9.71 | 9.81 | 9.77 | 9.77 | 9.78 \pm 0.04 |

Supplementary Table S2. The iodine binding capacity of the stock potato amylose

| No. | V (mL) | m (mg) | ω_m (%) | x (%) | $m \pm sd$ |
|-----|----------|----------|----------------|---------|------------------|
| 1 | 1.139 | 5.0 | 10.18 | 19.30 | |
| 2 | 1.140 | 5.0 | 10.18 | 19.31 | 19.28 \pm 0.04 |
| 3 | 1.136 | 5.0 | 10.18 | 19.25 | |

The iodine binding capacity of the stock potato amylose was shown as mean (m) \pm standard deviation (sd) ($n=3$), and calculated as follows:

$$x = \frac{0.7610}{m(1 - \omega_m)} \times V \times 100$$

where

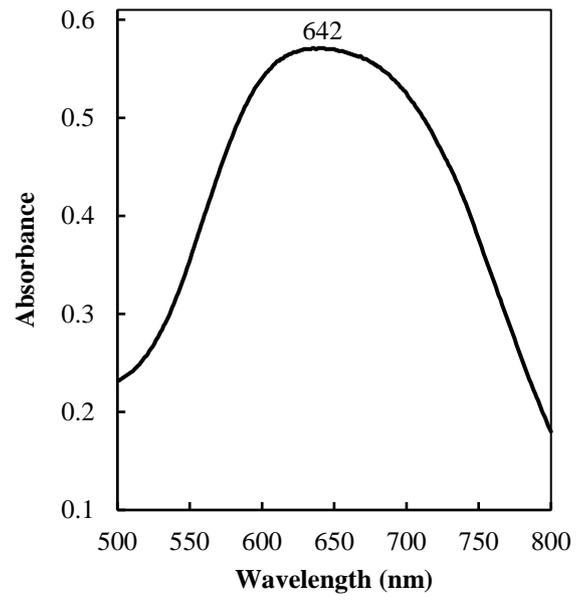
x is the iodine binding capacity;

m is the mass of potato amylose;

ω_m is the moisture content of the potato amylose;

V is the volume of stock potassium iodate solution needed to titrate the amylose solution;

0.7610 is a factor to allow for 1 mL of stock potassium iodate solution being equivalent to 0.7610 mg of iodine.



Supplementary Figure S1. The maximum absorbance of the iodine-starch complex of potato amylose standard