

Table S3. Correlations between wheat starch and flour properties

|           | FN    | AA                   | AM                   | C-granule           | B-granule           | A-granule           | To                   | Tp                   | Te                  | H                   |
|-----------|-------|----------------------|----------------------|---------------------|---------------------|---------------------|----------------------|----------------------|---------------------|---------------------|
| MV        | 0.318 | -0.610 <sup>+</sup>  | -0.353 <sup>**</sup> | -0.203              | -0.267              | 0.304               | 0.667 <sup>+</sup>   | 0.680 <sup>+</sup>   | 0.562 <sup>+</sup>  | 0.162               |
| FN        |       | -0.332 <sup>**</sup> | -0.177               | 0.097               | 0.116               | -0.083              | 0.001                | -0.009               | 0.067               | 0.033               |
| AA        |       |                      | 0.138                | 0.220               | 0.160               | -0.197              | -0.352 <sup>**</sup> | -0.329 <sup>**</sup> | -0.113              | 0.261               |
| AM        |       |                      |                      | -0.411 <sup>+</sup> | -0.393 <sup>+</sup> | 0.410 <sup>+</sup>  | 0.054                | 0.048                | -0.030              | -0.055              |
| C-granule |       |                      |                      |                     | 0.645 <sup>+</sup>  | -0.880 <sup>+</sup> | -0.439 <sup>+</sup>  | -0.425 <sup>+</sup>  | -0.296              | 0.074               |
| B-granule |       |                      |                      |                     |                     | -0.913 <sup>+</sup> | -0.457 <sup>+</sup>  | -0.465 <sup>+</sup>  | -0.318              | -0.036              |
| A-granule |       |                      |                      |                     |                     |                     | 0.513 <sup>+</sup>   | 0.510 <sup>+</sup>   | 0.371 <sup>**</sup> | 0.014               |
| To        |       |                      |                      |                     |                     |                     |                      | 0.961 <sup>+</sup>   | 0.851 <sup>+</sup>  | 0.325 <sup>**</sup> |
| Tp        |       |                      |                      |                     |                     |                     |                      |                      | 0.921 <sup>+</sup>  | 0.286               |
| Te        |       |                      |                      |                     |                     |                     |                      |                      |                     | 0.434 <sup>+</sup>  |

MV – maximum viscosity; FN – falling number; AA – alpha-amylase activity; AM – amylose content; To – gelatinization onset temperature; Tp – peak temperature; Te – end temperature (Te),  $\Delta H$  – enthalpy of gelatinization

<sup>+</sup>Statistically significant correlation at  $p < 0.01$  level; <sup>\*</sup> Statistically significant correlation at  $p < 0.05$  level;

<sup>\*\*</sup> Statistically significant correlation at  $p < 0.10$  level