Supplemental Fig. S1. Diagrammatic representation of measurements of the quality traits. The figure shows how flour yield and softness equivalent are measured.

\[
FY = \frac{\text{Total flour}}{\text{Grain Weight}} \times 100\%
\]

\[
SE = \frac{\text{Break flour}}{\text{Total flour}} \times 100\%
\]
Supplemental Fig. S2. Diagrammatic representation of measurements of the quality traits. The figure shows how solvent retention capacity test are performed.

\[
\%\text{SRC} = \left[ \frac{\text{Gel weight}}{\text{Flour Weight}} \times \left( \frac{86}{100 - \% \text{Flour moisture}} \right) - 1 \right] \times 100
\]
Supplemental Fig. S3. Diagrammatic three dimensional representation of population structure based on the first three principal components of the marker data.