**Additional file 1.** qRT-PCR primers of AsPYL genes

**Additional file 2.** *AsPYL* gene family GO annotation information.

**Additional file 3.** *AsPYL* gene family KEGG annotation pathway.

**Additional file 4.** RNA-seq data.

**Additional file 5.** Synteny data

**Additional file 6.** 12 *AsPYL* genes and corresponding ID

**Additional file 7.** Sequence of PYL family gene proteins in Arabidopsis, maize, rice, wheat and Oat

**Additional file 8.** figure 9 raw data

**Additional file 9.** qRT-PCR raw data