

Table S1 The amount of snRNA-seq transcriptome data generated in this study.

Type	Number of cells	Median UMIs/cell	Median genes/cell	Total genes detected
ear	7,708	2,659	2,093	25,439
tassel	6,824	1,963	1,574	24,429
sorghum	7,329	1,976	1,579	23,007
tassel repeat 2	8000	2,137	1,698	25,701

Table S2 The amount of BMKMANU S1000 spatial transcriptome was generated in this study.

Type	Number of spots	Median UMIs/spot	Median genes/spot	Total genes detected
tassel_sp_L2	46,501	511	449	25,542
ear_sp_L2	42,647	518	448	25,044
sorghum_sp_L2	69,776	344	314	23,032