Grain sorghum BTx623

Sweet sorghum Rio

Low Brix degree Early flowering

High Brix degree Late flowering

F1 cross

F2 plants

Selected low Brix and early flowering F2s

Selected high Brix and late flowering F2s

(b) Stem tissue at flowering (BTx623, Rio, LB/EF F2s and HB/LF F2s)

Total RNA extracted with miRNA isolation Kit

Pooling

FlashPAGE fractionation

Small RNAs < 40nt

cDNA library construction with SOLiD small RNA expression Kit

cDNA library barcoding

SOLiD sequencing

Data analysis

(c) Brix degree

Flowering time