



Sweet Sorghum an alternative energy Crop

Grant Agreement n° 227422

WP3

Deliverable 3.17:

Two hundred RILs from EMBRAPA mapping population phenotyped for juicy stem and juice sugar

Composition of the consortium

CIRAD
ICRISAT
EMBRAPA
KWS
IFEU
UniBO
UCSC
ARC-GCI
UANL
WIP



A field trial was conducted in 2011 with 400 $F_{2:10}$ RILS for evaluation of stem juiciness. Analyses of juice extraction and sugar content of 102 lines was made using a hydraulic press and a digital spectrophotometer.

From the results we could conclude that absence or presence of juice in the stem has a simple genetic inheritance (1:1 segregation ratio) and it is highly linked or pleiotropic (correlation coefficient = 0.93) to the midrib leaf color (a monogenic) character.

So, juicy and dry stem are associated to dull green and white midrib, respectively. Dry stem is dominant to juicy stem.