

Title: Transcriptome and metabolome reveal distinct carbon allocation patterns during internode sugar accumulation in different sorghum genotypes.

Authors: Yin Li, Wenqin Wang, Yaping Feng, Min Tu, Peter E. Wittich, Nicholas J. Bate, Joachim Messing

Running head: transcriptome and metabolome in sorghum internode

TableS11. Information about QTLs associated with plant height, flowering time, glucose concentration, juice volume, juice weight, non-fibrous carbohydrates and sugar contents, which were identified by previous studies.

| Year of reference | QTL name | chromosome | Left coordinate | Right coordinate | TYPE | Traits | Reference |
|-------------------|-----------------|------------|-----------------|------------------|----------------|--|---|
| 2015 | FD1 | Chr02 | 8,031,702 | 20,388,713 | double markers | flowering date | Anne Mocoour, et al. 2015 |
| 2015 | FD2 | Chr04 | 61,178,557 | 62,286,897 | double markers | flowering date | Anne Mocoour, et al. 2015 |
| 2015 | FD3 | Chr08 | 9,515,032 | 46,796,389 | double markers | flowering date | Anne Mocoour, et al. 2015 |
| 2010 | GLUC1 | Chr01 | 68,494,074 | 69,632,980 | double markers | glucose content | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2010 | GLUC2 | Chr03 | 7,489,898 | 55,404,530 | double markers | glucose content | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2011 | JW1 | Chr01 | 16,624,307 | 50,203,705 | double markers | juice weight | Yan-an Guan, et al. 2011 |
| 2011 | JW2 | Chr01 | 50,068,342 | 50,645,315 | double markers | juice weight | Yan-an Guan, et al. 2011 |
| 2011 | JW4 | Chr07 | 57,780,614 | 59,111,746 | double markers | juice weight | Yan-an Guan, et al. 2011 |
| 2011 | JW5 | Chr09 | 57,312,365 | 58,975,869 | double markers | juice weight | Yan-an Guan, et al. 2011 |
| 2010 | PHT1 | Chr01 | 23,702,809 | 61,146,468 | double markers | plant height | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2010 | PHT10 | Chr08 | 46,039,745 | 48,122,969 | double markers | plant height | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2015 | PHT11 | Chr09 | 16,146 | 2,589,508 | double markers | plant height | Anne Mocoour, et al. 2015 |
| 2015 | PHT2 | Chr01 | 62,704,567 | 66,681,750 | double markers | plant height | Anne Mocoour, et al. 2015 |
| 2010 | PHT3 | Chr10 | 11,029,735 | 11,037,083 | single marker | plant height | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2015 | PHT4 | Chr10 | 3,630,327 | 4,593,432 | double markers | plant height | Anne Mocoour, et al. 2015 |
| 2010 | PHT5 | Chr04 | 48,757,775 | 51,234,749 | double markers | plant height | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2010 | PHT6 | Chr04 | 58,537,697 | 61,178,168 | double markers | plant height | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2015 | PHT7 | Chr04 | 57,538,106 | 58,537,974 | double markers | plant height | Anne Mocoour, et al. 2015 |
| 2010 | PHT8 | Chr06 | 58,217,493 | 58,217,656 | single marker | plant height | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2015 | PHT9 | Chr07 | 50,339,917 | 56,155,869 | double markers | plant height | Anne Mocoour, et al. 2015 |
| 2008 | SUG1 | Chr01 | 50,203,535 | 55,065,768 | double markers | sugar | Kimberley B. Ritter, et al. 2008 |
| 2011 | SUG10 | Chr03 | 7,489,898 | 52,308,712 | double markers | sugar | Yan-an Guan, et al. 2011 |
| 2002 | SUG11 | Chr04 | 51,234,586 | 67,894,310 | double markers | sugar | A. Natoli, et al. 2002 |
| 2010 | SUG12 | Chr04 | 58,537,697 | 58,537,974 | single marker | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2015 | SUG13 | Chr04 | 51,875,816 | 55,385,999 | double markers | sugar | Anne Mocoour, et al. 2015 |
| 2002 | SUG14 | Chr05 | 5,686,170 | 11,099,019 | double markers | sugar | A. Natoli, et al. 2002 |
| 2008 | SUG15 | Chr05 | 1,907,420 | 11,099,019 | double markers | sugar | Kimberley B. Ritter, et al. 2008 |
| 2010 | SUG16 | Chr06 | 58,217,493 | 58,217,656 | single marker | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2015 | SUG17 | Chr06 | 1,822,330 | 1,908,756 | double markers | sugar | Anne Mocoour, et al. 2015 |
| 2011 | SUG18 | Chr07 | 57,780,614 | 59,111,746 | double markers | sugar | Yan-an Guan, et al. 2011 |
| 2008 | SUG19 | Chr08 | 45,992,122 | 50,413,945 | double markers | sugar | Kimberley B. Ritter, et al. 2008 |
| 2010 | SUG2 | Chr01 | 50,608,251 | 50,608,477 | single marker | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2010 | SUG20 | Chr08 | 48,122,810 | 50,414,003 | double markers | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2010 | SUG21 | Chr08 | 46,039,745 | 48,122,969 | double markers | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2015 | SUG22 | Chr08 | 1,553,582 | 1,971,577 | double markers | sugar | Anne Mocoour, et al. 2015 |
| 2011 | SUG3 | Chr01 | 50,068,342 | 50,645,315 | double markers | sugar | Yan-an Guan, et al. 2011 |
| 2011 | SUG4 | Chr01 | 55,721,520 | 58,712,796 | double markers | sugar | Yan-an Guan, et al. 2011 |
| 2010 | SUG5 | Chr10 | 11,036,814 | 47,161,323 | double markers | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2002 | SUG6 | Chr02 | 5,700,033 | 61,503,893 | double markers | sugar | A. Natoli, et al. 2002 |
| 2010 | SUG7 | Chr02 | 61,887,961 | 61,888,140 | single marker | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2010 | SUG8 | Chr02 | 5,076,675 | 13,161,221 | double markers | sugar | Amukelani Lacreacia Shiringani, et al. 2010 |
| 2011 | SUG9 | Chr02 | 40,504,003 | 60,421,867 | double markers | sugar | Yan-an Guan, et al. 2011 |
| 2016 | NFC1_2016_chr04 | Chr04 | 63,201,409 | 63,401,429 | GWAS | n-fibrous carbohydrates (NF ⁰) | Brenton et al. 2016 |
| 2016 | NFC2_2016_chr04 | Chr04 | 63,247,613 | 63,447,623 | GWAS | n-fibrous carbohydrates (NF ⁰) | Brenton et al. 2016 |
| 2015 | JV_2015_chr06 | Chr06 | 51,666,559 | 51,901,476 | GWAS | Juice volume | Burks et al. 2015 |
| 2016 | NFC3_2016_chr06 | Chr06 | 4,220,818 | 4,430,906 | GWAS | n-fibrous carbohydrates (NF ⁰) | Brenton et al. 2016 |
| 2016 | NFC4_2016_chr06 | Chr06 | 49,673,083 | 49,884,457 | GWAS | n-fibrous carbohydrates (NF ⁰) | Brenton et al. 2016 |