**Supplemental Table S2: Tissue samples present in the sorghum transcriptome atlas.** Tissue samples in the gene atlas were collected as part of either a tissue by development timecourse or a nitrogen source study. This table represents an abridged version of the complete table, which can be found in Supplemental File S2.

|  |  |  |  |
| --- | --- | --- | --- |
| **Tissue by development timecourse** | | |  |
| **Organ Type** | **Developmental Stage** | **Tissue Description** | **Sample identifier plot abbreviation** |
| **Leaves** | Juvenile (DAE 8) | Leaf blade of first emerged leaf | Leaf-blade\_W\_J |
| Lower portion (proximal) of third emerging leaf blade (in whorl) | Leaf-blade\_P\_J |
| Upper portion (distal) of third emerging leaf blade | Leaf-blade\_D\_J |
| Vegetative (DAE 24) | Lower portion (proximal) of shoot, including sheaths, after removing first through fourth emerged leaves | Leaf\_P\_V |
| Middle portion of shoot after removing first through fourth emerged leaves | Leaf\_M\_V |
| Upper portion (distal) of shoot, including leaves emerged from whorl, after removing first through fourth emerged leaves | Leaf\_D\_V |
| Floral initiation (DAE 44) | Leaf sheath of last fully emerged (ligulated) leaf | Leaf-sheath\_W\_F |
| Lower portion (proximal) of leaf blade of last fully emerged leaf (ligulated) | Leaf-blade\_P\_F |
| Upper portion (proximal) of leaf blade of last fully emerged leaf (ligulated) | Leaf-blade\_D\_F |
| Anthesis (DAE 65) | Leaf sheath of leaf below flag leaf | Leaf-sheath\_W\_A |
| Lower portion (proximal) of leaf blade of leaf below flag leaf | Leaf-blade\_P\_A |
| Upper portion (distal) of leaf blade of leaf below flag leaf | Leaf-blade\_D\_A |
| Grain maturity (DAE 96) | Leaf sheath of flag leaf | Leaf-sheath\_W\_G |
| Lower portion (proximal) of flag leaf blade | Leaf-blade\_P\_G |
| **Roots** | Juvenile (DAE 8) | Section from middle layer of root mass | Root\_M\_J |
| Distal section of root tips | Root\_D\_J |
| Vegetative (DAE 24) | Section from middle layer of root mass | Root\_M\_V |
| Distal section of root tips | Root\_D\_V |
| Floral initiation (DAE 44) | Section from middle layer of root mass | Root\_M\_F |
| Distal section of root tips | Root\_D\_F |
| Anthesis (DAE 65) | Distal section of root tips | Root\_D\_A |
| Grain maturity (DAE 96) | Distal section of root tips | Root\_D\_G |
| **Stem** | Juvenile (DAE 8) | Entire stem (approximately 2 mm in size) | Stem\_W\_J |
| Vegetative (DAE 24) | Entire stem (approximately 1 cm in size) | Stem\_W\_V |
| Floral initiation (DAE 44) | Mature internode from middle of stem | Internode\_M\_F |
| 2cm long growing internode near apex (further from apex than 1 cm growing internode) | Internode\_2cm\_F |
| 1cm long growing internode near apex (closer to apex than 2 cm growing internode) | Internode\_1cm\_F |
| Anthesis (DAE 65) | Mature internode from middle of stem | Internode\_M\_A |
| Mature internode immediately below peduncle | Internode\_B\_A |
| Grain maturity (DAE 96) | Mature internode from middle of stem | Internode\_M\_G |
| Mature internode immediately below peduncle | Internode\_B\_G |
| **Reproductive Structures** | Floral initiation (DAE 44) | Region of developing panicle in apex | Panicle\_E\_F |
| Region of developing peduncle in apex | Peduncle\_E\_F |
| Anthesis (DAE 65) | Lower (proximal) half of panicle | Panicle\_P\_A |
| Upper (distal) half of panicle | Panicle\_D\_A |
| Grain maturity (DAE 96) | Mature, dormant, dry seed | Seed\_O\_G |
| Developing seed, imbibed overnight | Seed\_E\_G |
|  |  |  |  |
| **Nitrogen source survey** | |  |  |
| **Nitrogen source** | **Tissue** | **Tissue Description** | **Sample identifier plot abbreviation** |
| **Control conditions** | Root | Roots from plants (30 DAE) grown under standard conditions | Root\_C\_N |
| Shoot | Shoots from plants (30 DAE) grown under standard conditions | Shoot\_C\_N |
| **No additional nitrogen source** | Root | Roots from plants (30 DAE) grown without a nitrogen source | Root\_V\_N |
| Shoot | Shoots from plants (30 DAE) grown without a nitrogen source | Shoot\_V\_N |
| **Ammonia as nitrogen source** | Root | Roots from plants (30 DAE) grown on 5mM ammonium sulfate as sole nitrogen source | Root\_A\_N |
| Shoot | Shoots from plants (30 DAE) grown on 5mM ammonium sulfate as sole nitrogen source | Shoot\_A\_N |
| **Potassium and sodium nitrate as nitrogen source** | Root | Roots from plants (30 DAE) grown on 5mM potassium and sodium nitrate as sole nitrogen source | Root\_I\_N |
| Shoot | Shoots from plants (30 DAE) grown on 5mM potassium and sodium nitrate as sole nitrogen source | Shoot\_I\_N |
| **Urea as nitrogen source** | Root | Roots from plants (30 DAE) grown on 5mM urea as sole nitrogen source | Root\_U\_N |
| Shoot | Shoots from plants (30 DAE) grown on 5mM urea as sole nitrogen source | Shoot\_U\_N |