

	<i>Sorghum bicolor</i>			<i>Triticum aestivum</i>			<i>Hordeum vulgare</i>			<i>Zea mays</i>			<i>Oryza sativa</i>			
	Gene	Expression	Literatur	Gene	Expression	Literatur	Gene	Expression	Literatur	Gene	Expression	Literatur	Gene	Expression	Literatur	
OsMADS29-clade	Sb04g004736	strong expression in pistil, developing seed, medium expression in emerging inflorescence, endosperm,	Davidson et al. 2012	TAGL35, Ta.27569	prebooting, booting, heading stage; developing and mature ovule, integuments and nucellus	Yamada et al. 2008	MLOC_65966, Hv.13272	strong expression in pistil, medium expression in developing seed	EST db, NCBI	GRMRZM2G130382, ZMM17	strong expression in female inflorescences, weak expression in male inflorescences, developing and mature silk	Becker et al. 2002	OsMADS29, Os02g07430	moderate expression in late developing flower, high expression in developing seed	Yang et al.	
		low expression throughout life cycle, maximum expression in leaf	Hruz et al. 2008		medium expression in prebooting and heading stage, high expression in booting stage	Hruz et al. 2008		medium expression during reproductive phase, expression in inflorescences and developing ears and silks	Hruz et al. 2008		high expression in pistil, ovary and caryopsis	Hruz et al. 2008				
OsMADS30-clade	Sb10g026690	weak expression in endosperm, seed and pistil	Davidson et al. 2012	no annotated ortholog			MLOC_64819, Hv.29229	low expression throughout life cycle, maximum expression at booting stage, emerging inflorescence; protoplast	Hruz et al. 2008	GRMRZM2G161666, ZMM51	very low expression in all tissues	Hruz et al. 2008	OsMADS30, Os06g45650	low expression in root, developing flower and seed, no expression in leafs	this study	
		medium expression throughout life cycle, max. expression during booting stage in leaf	Hruz et al. 2008					very low expression in all tissues	Sekhon et al. 2011		constant low expression	Hruz et al. 2008				
											very weak expression in developing seed 5 and 10 DAP	Davidson et al. 2011		constant low expression	Yang et al.	
													OrMADS30	very low expression	this study	
OsMADS31-clade	Sb06g028420	medium expression in pistil and developing seed, weak expression in anthers and emerging fluorescence	Davidson et al. 2012	Traes_2AL_8DF89A, A72	no data available		MLOC_12133, gb/BQ753907	cDNA from carpel, pre anthesis	NCBI	GRMRZM2G137387, ZMM20	constant medium low expression	Hruz et al. 2008	OsMADS31, Os04g52410	constant medium expression	Yang et al.	
		medium expression throughout life cycle, maximum expression in leaf	Hruz et al. 2008	Traes_2DL_6CD5A5, CD9	no data available			medium expression during late ovule and early seed development	Sekhon et al. 2011		medium expression in pistil and ovary	Hruz et al. 2008				
											low expression during ovule and seed development, seedling leafs	Davidson et al. 2011				
											constant medium low expression, peak during booting stage, medium expression developing tassel and ear	Hruz et al. 2008				
											GRMRZM2G005155, ZMM9	medium expression in developing ovule, silk, ear and tassel	Davidson et al. 2011			
											GRMRZM2G135018, ZMM27	constant medium low expression, peak during booting stage, medium expression developing tassel and ear	Hruz et al. 2008			
											AC233912, MADS21	low expression in leaf, ear and tassel primordia, shoot apex	Bolduc et al. 2012			
										GRMZM2G128953, ZMM28	low expression in developing ovule and seed	Davidson et al. 2011				
											weak expression in shoot apex, leaf, tassel and ear primordia	Bolduc et al. 2012				
											medium low expression in leaf, ear and tassel primordia, shoot apex	Bolduc et al. 2012				
											weak expression in developing tassel, ear and seed,	Davidson et al. 2011				
											GRMZM2G148220, ZMM48	weak expression in leaf primordia and shoot apex	Bolduc et al. 2012			

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Publication
Hruz T, Laule O, Stabo G, Wessendorp F, Bleuler S, Oertle L, Widmayer P, Gruissem W and P Zimmermann (2008). GENEVESTIGATOR V3: a reference expression database for the meta-analysis of transcriptomes. *Advances in Bioinformatics* 2008, 420747
Davidson RM et al. Comparative transcriptomics of three Poaceae species reveals patterns of gene expression evolution 2012
Yamada, 2009: Class D and Bistser MADS-box genes are associated with ectopic ovule formation in the pistil-like stamens of alloplasmic wheat (*Triticum aestivum* L.)
Sekhon RS, Haining Lin, Kevin L Childs, Candice N Hansey, C Robin Buel, Natalia de Leon and Shawn M. Kaeppler (2011), Genome-wide atlas of transcription during maize development, *Plant Journal* 2011, 66, 553–563
Davidson RM, Candice N. Hansey, Malali Gowda, Kevin L Childs, Haining Lin, Brienne Vaillancourt, Rajandeep S. Sekhon, et al., Utility of RNA Sequencing for Analysis of Maize Reproductive Transcriptomes, *The Plant Genome* 2011
Bolduc N, Yilmaz A, Mejia-Guerra MK, Morohashi K, O'Connor D, Grotewold E, Hake S., Unraveling the KNOTTED1 regulatory network in maize meristems. *Genes dev.* 2012
Yang X, Wu F, Lin X, Du X, Chong K, Gramzow L, Schilling S, Becker A, Theissen G, Meng Z. 2012. Live and let die - the B(sister) MADS-box gene OsMADS29 controls the degeneration of cells in maternal tissues during seed development of rice (*Oryza sativa*). *PLoS One* 7: e51435.