SUPPLEMENTARY MATERIALS
to the article A.A. Egorova, S.V. Gerasimova, A.V. Kochetov
"Developmental and hormonal regulation of *Arabidopsis thaliana* ornithine-delta-aminotransferase"

Table 1. Primers and probes, used in qPCR

Name	Structure
OAT-RT-Probe	5′ – CGTCCTGACATGGTGATACTTGGGAA – 3′ (FAM/BHQ1)
OAT- ATH-F	5′ – AGATGCTAGCTTGTGATTGGG – 3′
OAT- ATH-R	5′ – CCGTGTTGACCAGGTTTTATATG – 3′
PDF2-RT-Probe	5′ – CATTCCGATAGTCGACCAAGCGGTT – 3′ (FAM/BHQ1)
PDF2- ATH-F	5′ – TTCCAAACTCTTACCTGCGG – 3′
PDF2- ATH-R	5′ – ATGGCCGTATCATGTTCTCC – 3′
F-box-RT-Probe	5′ – CTGGAAATTCGTTGGCTTGCTCTGC – 3′ (FAM/BHQ1)
F-box- ATH-F	5′ – TGGAGCGTTTAGGATTTTGGG – 3′
F-box- ATH-R	5′ – CTCTTCGTCTCCATTCTTAGCAG – 3′

Table 2. OAT promoter induction

Inducer	Concentration	Localization of promoter activity	Duration of effect, days	Number of induced lines/ Number of used lines
NAA (1-naphthaleneacetic acid)	1 mg/L	Root tips, cotyledons	6	2/6
IAA (indole-3-acetic acid)	2 mg/L	Root tips, cotyledons	6	2/6
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.5 mg/L	All roots, cotyledons	6	3/5
BAP (6-benzylaminopurine)	1 mg/L	Zone of root hairs	6	3/6
Kinetin	10 μM and100 μM	End of cotyledons		2/3
Trans-zeatin	100 μM	No induction	4	0/3
GA3 (Gibberellin)	10 μM	End of cotyledons		3/3
ACC (1-aminocyclopropane-1-carboxylic acid)	50 μM	All roots, cotyledons	6	3/6
ABA (Abscisic acid)	100 μM	No induction		0/3
Methyl jasmonate	1 mM	No induction		0/3
MS without nitrogen		Cotyledons		3/3
NH_4NO_3	10 mM	All roots, cotyledons	4	1/3
NaCl	200 mM	All roots	4	1/3
Sucrose	10 %	End of cotyledons		1/3
Glucose	10 %	No induction		0/3
Cold	4 hours in +4 °C, then 2 hours in 22 °C	No induction		0/3
Heat	15 minutes in +50 °C, then 6 hours in 22 °C	No induction		0/3
Control		End of cotyledons		3/6
In seed germination		All seedling, then cotyledons		6/6
In mature plants		Developing anthers and pounders		4/4

Table 3. Cis-acting regulatory DNA elements, which can take part in *OAT* gene promoter regulation

Name of element	Position	Sequence	Transcription factor	Physiological process
DRE (dehydration-responsive element)	–1658	ACCGAC	CBF3/DREB1A DREB2A	Drought, salt, temperature stress (Suzuki et al., 2005)
AuxRE (auxin-responsive element)	–1123	TGTCTC	ARF1	Hormone regulation, auxin response (Ballas et al., 1993)
PRE (Pro-or hypoosmolarity-responsive element)	–266	ACTCAT	AtbZIP53 AtbZIP10	Hypoosmic reaction, addition of exogenous proline (Satoh et al., 2002)
CArG motif	–152	CCATATTTGG	MADS domen	Specific regulation in ontogenesis (Gilles et al., 2009)
SRE (sugar-repressive element)	–25	TTATCC	Unknown	Probable involvement in gene inactivation in sprout germination from axillary bud after end of apical dominance (Tatematsu et al., 2005)

Table 4. OAT expression change in different transcriptomic experiments

Stimuli	Plant	log2-fold change	Organism part	References
Botrytis cinerea, 48 hours	Col-O, 4 weeks	2.6	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-5684
Water deprivation	Col-O, 4 weeks	2.2	Rosette	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-11538
'15 day embryo' vs '7 day embryo'	'Wild type'	2.1	Embryo	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-74692
Sulfometuron methyl	Col-O	2.1	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-8912
Dexamethasone and cycloheximide	Columbia	–2.1	Root	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-33344
Water deprivation	Columbia, 8 weeks	1.9	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-10670
Sclerotinia sclerotiorum, 48 hours	Col-O, 4–6 weeks	1.8	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-MEXP-3122
Cycloheximide	Columbia	–1.8	Root	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-33344
Drought	'Wild type'	1.8	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-MEXP-1863
Cabbage leaf curl virus	Col-O	1.7	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-ATMX-34
Abscisic acid; 0.1 millimolar	'Wild type', 2 weeks	1.6	Whole organism	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-66737
Primisulfuron	Col-O	1.6	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-8913
NaCl	Columbia, 6 days	1.6	Root	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-7641
'pH 4.5' vs 'pH 6' at 8 hours	Columbia	1.4	Root	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-18982
Plectosphaerella cucumerina	Col-O, 3 weeks	1.3	Leaf	https://www.ebi.ac.uk/gxa/experiments/E-MTAB-641
4 days salt treatment	Col-O, 4 weeks	1.3	Rosette	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-53308
3 % glucose	Columbia, 6 days	–1.3	Seedling	https://www.ebi.ac.uk/gxa/experiments/E-MEXP-2714
Abscisic acid; 50 micromolar	Col-O, 12 days	1.2	Whole organism	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-65016
Auxin	Col-O, 35 days	–1.1	Hypocotyl	https://www.ebi.ac.uk/gxa/experiments/E-GEOD-27508
Senescing leaf		2.89		Arabidopsis eFP Browser (Winter D. et al., 2007)
Silique embryo		2.17		
Part of flowers		2.36–2.90		
ABA, 10 μM, 3 hours	Columbia	0.58	7 days seedling	
Methyl jasmonate, 10 μM, 3 hours	Columbia	0.48	7 days seedling	
Brassinosteroids, 3 hours	Columbia	–0.48	7 days seedling	