



## Identification of genes involved in the ACC-mediated control of root cell elongation in *Arabidopsis thaliana*

Submitted by Emmanuel Lemoine on Thu, 02/12/2015 - 13:09

Titre	Identification of genes involved in the ACC-mediated control of root cell elongation in <i>Arabidopsis thaliana</i>
Type de publication	Article de revue
Auteur	Markakis, Marios N [1], De Cnodder, Tinne [2], Lewandowski, Michal [3], Simon, Damien [4], Boron, Agnieszka [5], Balcerowicz, Daria [6], Doubbo, Thanaa [7], Taconnat, Ludivine [8], Renou, Jean-Pierre [9], Höfte, Herman [10], Verbelen, Jean-Pierre [11], Vissenberg, Kris [12]
Editeur	BioMed Central
Type	Article scientifique dans une revue à comité de lecture
Année	2012
Langue	Anglais
Date	2012/11/07
Numéro	1
Volume	12
Titre de la revue	BMC Plant Biology
ISSN	1471-2229
Mots-clés	ACC [13], Development [14], Elongation control [15], ethylene [16], Microarray Analysis [17], Root growth [18]
Résumé en anglais	Along the root axis of <i>Arabidopsis thaliana</i> , cells pass through different developmental stages. In the apical meristem repeated cycles of division increase the numbers of cells. Upon leaving the meristem, these cells pass the transition zone where they are physiologically and mechanically prepared to undergo subsequent rapid elongation. During the process of elongation epidermal cells increase their length by 300% in a couple of hours. When elongation ceases, the cells acquire their final size, shape and functions (in the differentiation zone). Ethylene administered as its precursor 1-aminocyclopropane-1-carboxylic acid (ACC) is capable of inhibiting elongation in a concentration-dependent way. Using a microarray analysis, genes and/or processes involved in this elongation arrest are identified.
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua7834">http://okina.univ-angers.fr/publications/ua7834</a> [19]
DOI	10.1186/1471-2229-12-208 [20]
Lien vers le document	<a href="http://dx.doi.org/10.1186/1471-2229-12-208">http://dx.doi.org/10.1186/1471-2229-12-208</a> [20]

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- [20] <http://dx.doi.org/10.1186/1471-2229-12-208>

Publié sur *Okina* (<http://okina.univ-angers.fr>)