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## **Analysis of gene expression in the outer cell layers of Arabidopsis roots during lateral root development**

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# Stellingen

Behorend bij het proefschrift

## **Analysis of gene expression in the outer cell layers of *Arabidopsis* roots during lateral root development**

1. The strong induction of *AIR1* and *AIR3* gene expression in cells overlaying the places of lateral root primordium formation demonstrates the active role of these cells during lateral root development.

*This thesis*

2. Cross-talk between auxin and jasmonate signaling pathways must involve the interaction between common components of the ubiquitin-mediated proteolytic machinery.

*This thesis*

3. The finding that constitutive overexpression of *AIR3*, an auxin-inducible gene, results in nitrate tolerant root growth shows the complexity of the regulation of lateral root growth.

*This thesis*

4. The fact that two genes show the same expression pattern and are involved in the same physiological process does not indicate that they possess similarities in their promoter regions.

*This thesis*

5. The completely different expression patterns of *NAC1*, an auxin-induced transcription factor, and *AIR3* do not yet support a simple model where *NAC1* directly stimulates *AIR3* expression by activating the *AIR3* promoter, as proposed by Xie et al., (2000) in *Genes Dev* 14: 3024-3036.
6. The role of subtilisin-like serine proteases in the control of developmental processes in plants has not been recognized sufficiently.

von Groll et al., (2002) *Plant Cell* 14: 1527-1539; Tanaka et al., (2001) *Development* 128: 4681-4689; Ribeiro et al., (1995) *Plant Cell* 7: 785-794; Zhao et al., (2000) *Plant Physiol* 123: 1185-1196; Gollmack et al., (2003) *Physiol Plant* 118: 64-73

*This thesis*

7. There is no evidence for the hypothesis that genes are activated in the outer cell layers of the root in response to the damage caused by the emerging lateral root as suggested by Keller and Lamb (1989) in *Genes Dev* 3: 1639-1646.
8. The expression pattern of a gene does not provide evidence of its specificity of action as the consequences of its action may occur at a distance.

Matsubayashi et al., (2001) *Trends Plant Sci* 6: 573-577; von Groll et al., (2002) *Plant Cell* 14: 1527-1539; Lenhard and Laux, (2003) *Development* 130: 3163-3173;  
*This thesis*

9. For a successful integration of foreigners in Dutch society it is not only required that the immigrants learn the language and culture of the country, but that the Dutch society learns to trust the capabilities and to value the potential of the immigrants.
11. 'Trade not Aid' is difficult to achieve with high tariff walls in the First World.
12. Common sense is the less common of the senses.
13. Salsa gives flavor to live.