Androgenic switch in barley microspores

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Stellingen

behorende bij het proefschrift

Androgenic switch in barley microspores

1. Not all microspore developmental pathways lead to barley androgenesis.
This thesis

2. Programmed cell death is as much a part of androgenic embryo development as is cell division and differentiation.
This thesis

3. The embryogenic pathway of enlarged microspores does not require the 14-3-3A processed form.
This thesis

4. It is a paradox that the vegetative cell of barley androgenic microspores gives rise to an embryo, while the generative derivatives are committed to die.
This thesis

5. Unlike proposed by Bolik and Koop (1991), barley embryogenic microspores do display star-like morphology.
Bolik M, Koop HU (1991) Protoplasma 162: 61-68
This thesis

6. Since the establishment of the apical-basal axis during androgenesis cannot be traced back to an initial asymmetric division as in zygotic embryogenesis, it is likely that apical-basal polarity in androgenic embryos arises from positional information rather than cell lineage.
Hause et al. (1994) Bot Acta 107:407-415
Yeung et al. (1996) Int J Plant Sci 157: 27-39

7. Arabidopsis is not a suitable model plant to study androgenesis.

8. The success of systems biology, the study of living organisms from an holistic perspective, requires a change in the sociology of science: biologists of this new era need to become conversant with mathematicians, computer scientists, analytical chemists and engineers.
Kitano (2002) Science 295: 1662-1664

9. Recombinant DNA technology can make our lives much easier when we will have learned to use it with sense.

10. Agronomy is the science that feeds the world. Unfortunately, fighting world hunger nowadays does not depend solely on finding scientific solutions; it needs political will and appropriate policies.

11. The Portuguese word ‘saudade’ is a melancholic feeling connected to the absence of beloved ones, the distance from a pleasant place or a dear object, the memory of delightful moments and flavors. Such feelings are difficult to be expressed in words; Portuguese and Brazilians, by simply saying ‘saudade’, can manifest all these sensations using a single word.

12. Nowadays Science is not only a cruel mistress (*Marie Curie),* it is also a cruel lover.

13. Spreken is zilver, schrijven is goed.