**When plants get tanned…**

<https://msweb.uantwerpen.be/Mediasite/Play/19feb615814548cda428c8d297b584011d>

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**When:**Ma2

UV-B induced morphological changes e.g. decreased height, decreased leaf area and number of stomata, leaf curling and thicker leaves.  Elevated UV-B on a regular basis allows plants to adapt to a future higher UV-B dose. This is called UV-B acclimation. During the acclimation process, several biochemical adaptations occur and are the underlying reason of the morphological changes which are visual. Moreover, there are indications that UV-B acclimation induces an overall stress resistance.

UV-B acclimation is a complex, dynamic process that plays an essential role in preventing UV-B damage to targets such as DNA and the photosynthetic machinery.  In this study we test the hypothesis that plant hormones are part of the regulatory system that controls both the UV mediated accumulation of flavonoids, and UV induced morphogenesis. Test plants are *Arabidopsis thaliana* grown under control or UV-B acclimation conditions. PAL- and auxin inhibitors as well as specific mutant impaired in auxin or flavonoid metabolism or in the UV receptor UVR8, will be used to unravel the biochemical changes and their mutual cross-talk during UV-acclimation.

In this project, molecular, biochemical and physiological, approaches are combined with a kinematic analysis of growth to understand the acclimation response.