



Universiteit
Leiden
The Netherlands

Regulatory DNA binding peptides as novel tools for plant functional genomics

Lindhout, B.I.

Citation

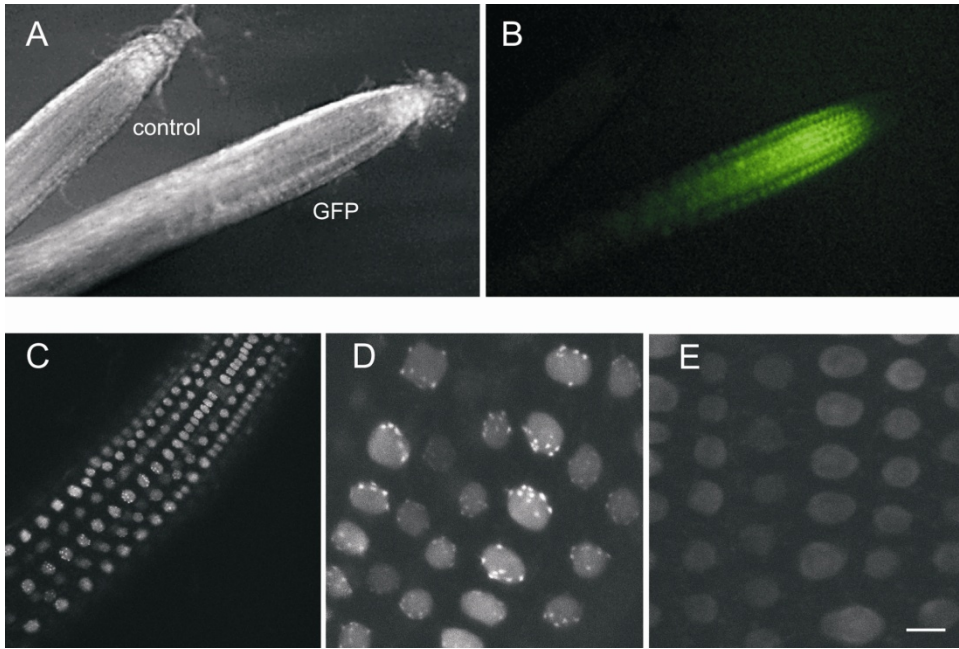
Lindhout, B. I. (2008, October 1). *Regulatory DNA binding peptides as novel tools for plant functional genomics*. Retrieved from <https://hdl.handle.net/1887/13123>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

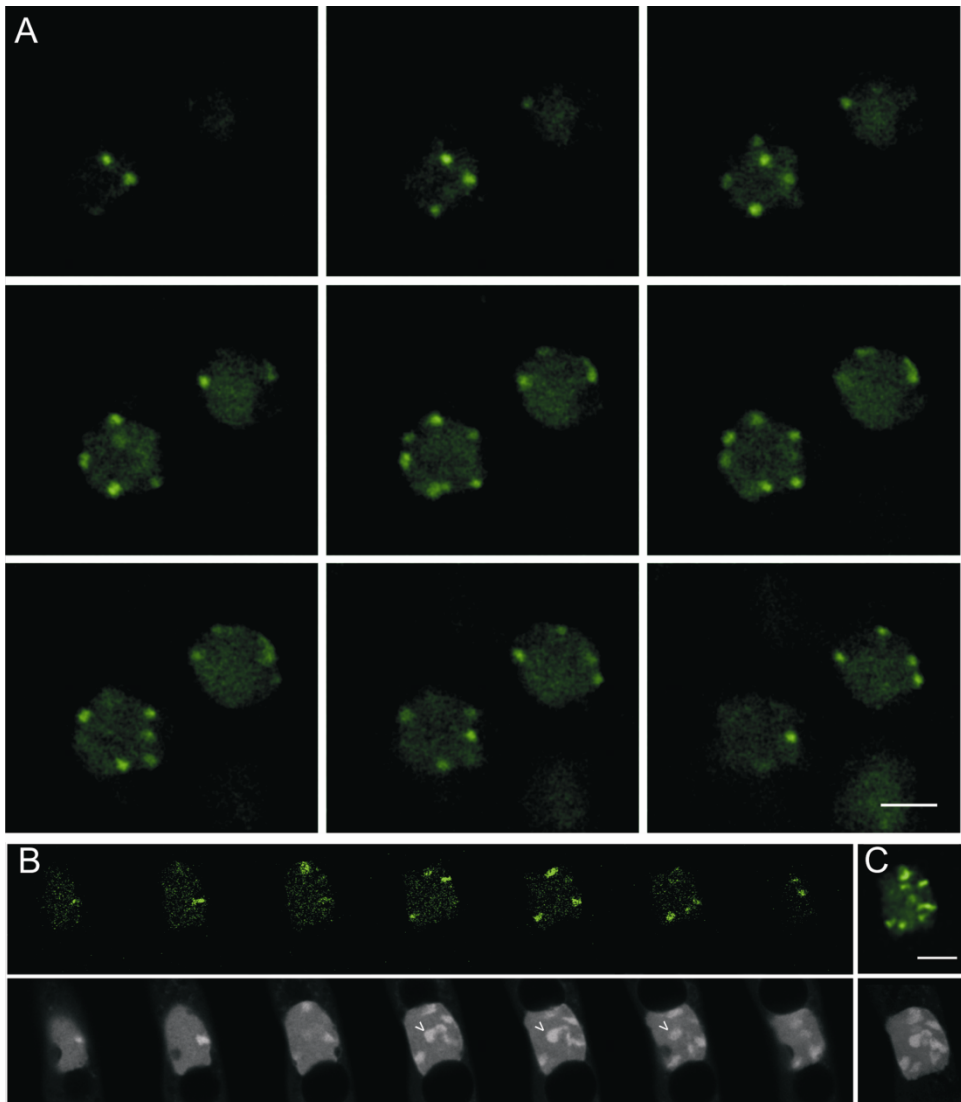
Downloaded from: <https://hdl.handle.net/1887/13123>

Note: To cite this publication please use the final published version (if applicable).



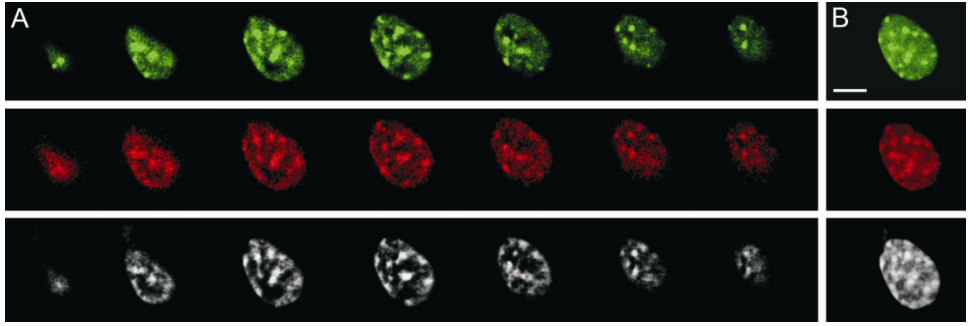
Chapter 2, Figure 2:

PZF:GFP expression in *Arabidopsis* roots. **(A)** Root tips from a GFP-transformant (GFP) and an untransformed (control) plant under white light and **(B)** under blue excitation. Only the transformant shows green fluorescence in the meristematic cells. **(C)** Confocal image of a root tip expressing 180:GFP, showing GFP-fluorescent nuclei. **(D)** Magnification of cells shown in **(C)** reveals up to ten brightly fluorescing spots per nucleus. **(E)** In comparison, the control GFP construct without PZF domain shows a diffuse fluorescence throughout the nucleus. Scale bar = 5 microns. **(C-E)** are Z stacks of optical sections.



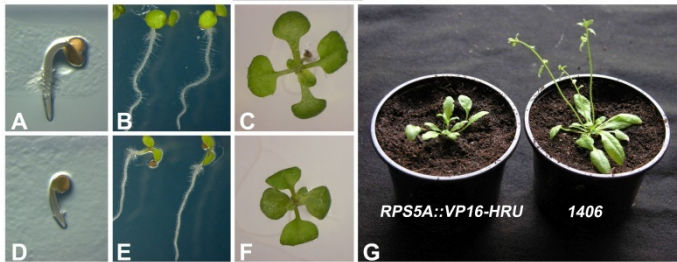
Chapter 2, Figure 3:

Live cell imaging of 180:GFP labeled nuclei. **(A)** Serial optical sections showing labeled centromeres at the periphery of nuclei. **(B)** 180:GFP fluorescent spots (upper file) correspond with chromocenters visualized with propidium iodide (lower file). The arrowhead (>) marks the central position of the propidium iodide-positive nucleolus. **(C)** Z-stack of the optical sections shown in **(B)**, illustrating the co-localization of 180:GFP fluorescent signals and propidium iodide stained chromocenters. Scale bar = 5 microns.



Chapter 2, Figure 4:

Live cell imaging of MaSat:GFP in NIH 3T3 mouse cells. **(A)** Serial optical sections of a 3T3 cell nucleus expressing MaSat:GFP (green) and mRFP-HP1 α (red). The cell was stained with DRAQ5 (white) to visualize DNA. Note the co-localization of DRAQ5-intensely stained chromocenters with regions of high mRFP-HP1 α and MaSat:GFP fluorescence. **(B)** Z-stack of the optical sections shown in **(A)**. Scale bar = 5 micron.



Chapter 5, Figure 1

Phenotypic characterization of *RPS5A::VP16-HRU* expressing plantlets compared with the parental line 1406. **(A, B and C)** 1406 seedlings grown on 1/2 MS. **(D,E and F)** *RPS5A::VP16-HRU* seedlings grown on 1/2 MS. *RPS5A::VP16-HRU* seedlings are slightly delayed and show mild epinastic growth of the cotyledons **(F)**. **(G)** *RPS5A::VP16-HRU* plants are delayed in flowering time (left plant) compared to the parental line 1406 (right plant).