

**P009** Localization of the GEG function within the cell wall  
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The GEG1 gene product has a role in the regulation of cell expansion during the maturation of *Gerbera hybrida* petals. *GEG1* expression is detected in petals and carpels and it coincides spatiotemporally with flower opening and cessation of cell elongation. At the same stage of development the inner structure and organization of petal cells changes rapidly allowing petals to bend and flowers to open. In transgenic plants constitutively expressing *GEG1*, reduced corolla lengths with concomitant reduction of longitudinal cell expansion were observed (Kotilainen *et. al.* 1999, Plant Cell 11: 1093-1104) suggesting that GEG1 protein participates in the regulation of cell and organ shape.

In this poster we present the localization of GEG1 protein in cell walls of gerbera petals. We also introduce five other GEG-like gene products found from a gerbera EST collection. The deduced amino-acid sequences of these proteins share high similarity with previously characterized small putative cell wall proteins encoded by GA-inducible genes, for example *GAST1* (tomato), *GASA1-4* (arabidopsis) and *GIP1-5* (petunia).