



**Sup. 3** Outline of the matrix based yeast two-hybrid approach. The Arabidopsis MADS box transcription factors were cloned in the yeast two-hybrid GAL4 binding domain (bait) and activation domain (prey) vector and transformed to yeast *MAT $\alpha$*  and *MATa*, respectively. The baits and preys were systematically mated by spotting them on top of each other on a plate with non-selective medium (A). After overnight incubation, the spots were transferred to a plate selecting for diploid yeast containing the two plasmids (B). The plates were incubated for two days at 30 °C and then the yeast was transferred to two separate selection plates ((C), SD -Trp/-Leu/-Ade and SD -Trp/-Leu/-His/+5mM 3AT) and scored for protein-protein interactions. In the row and column marked with lines water was spotted in stead of a prey culture or a bait culture, respectively.