

Site	Geology (*)	Texture (**)	O.M.(%)	pH	%CaCO ₃
LP	Limestones (7)	Clay –loam (5)	4.73	7.86	33,25
SCF	Granitoids (1)	Loamy sand (2)	2.83	7.11	4,81

Table S1. Physical and chemical properties of soils from common garden field experiment locations at Les Planes (LP) and Santa Coloma de Farnes (SCF). (Geology: numbers from more to less silicate. (**): texture: numbers from more to less sand)

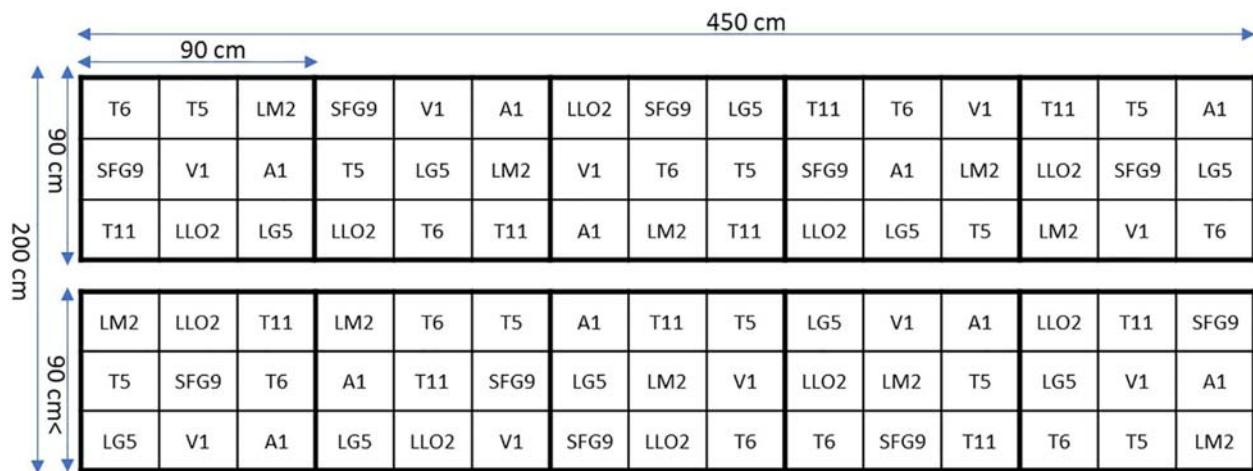


Table S2. Map of cultivation frame. Big square represents the space used for the common garden experiment (450 cm x 200 cm). In each 90 x 90 square all demes were present and randomly distributed; in each small subsquare (30 cm x 30 cm) 2 plants per deme were cultivated.

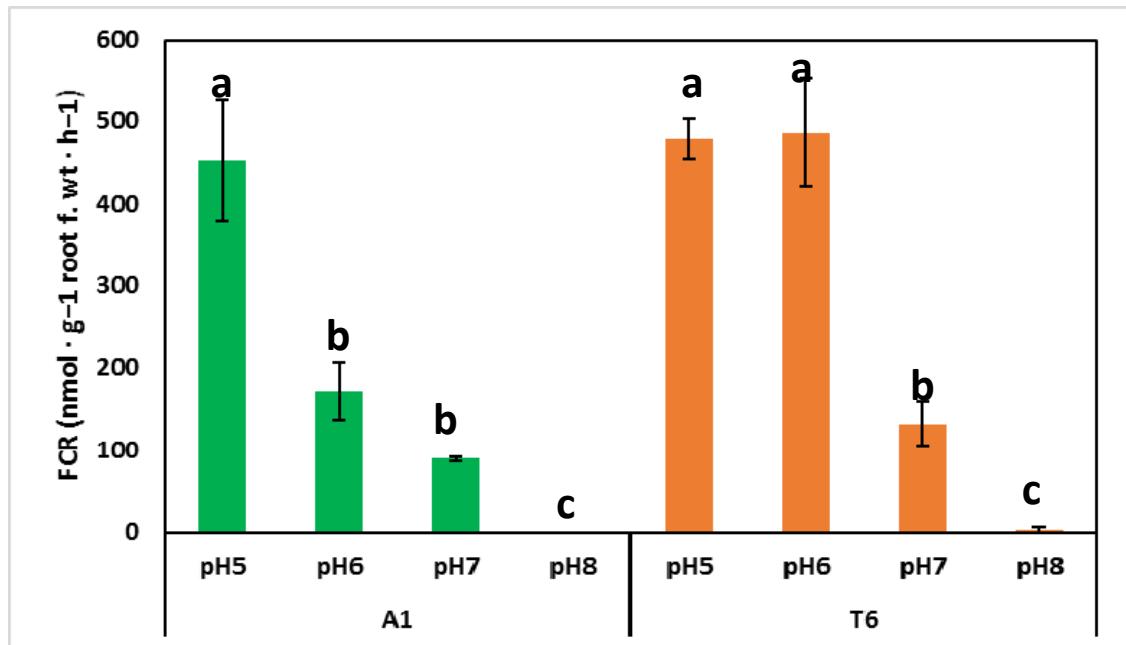


Figure S1. Activity of ferric chelate reductase (FCR) in roots of carbonate tolerant $A1_{(+C)}$ and carbonate sensitive $T6_{(-C)}$ measured after 30 min exposure to solution without Fe and at different pH. Values are means \pm SE ($n = 4$).

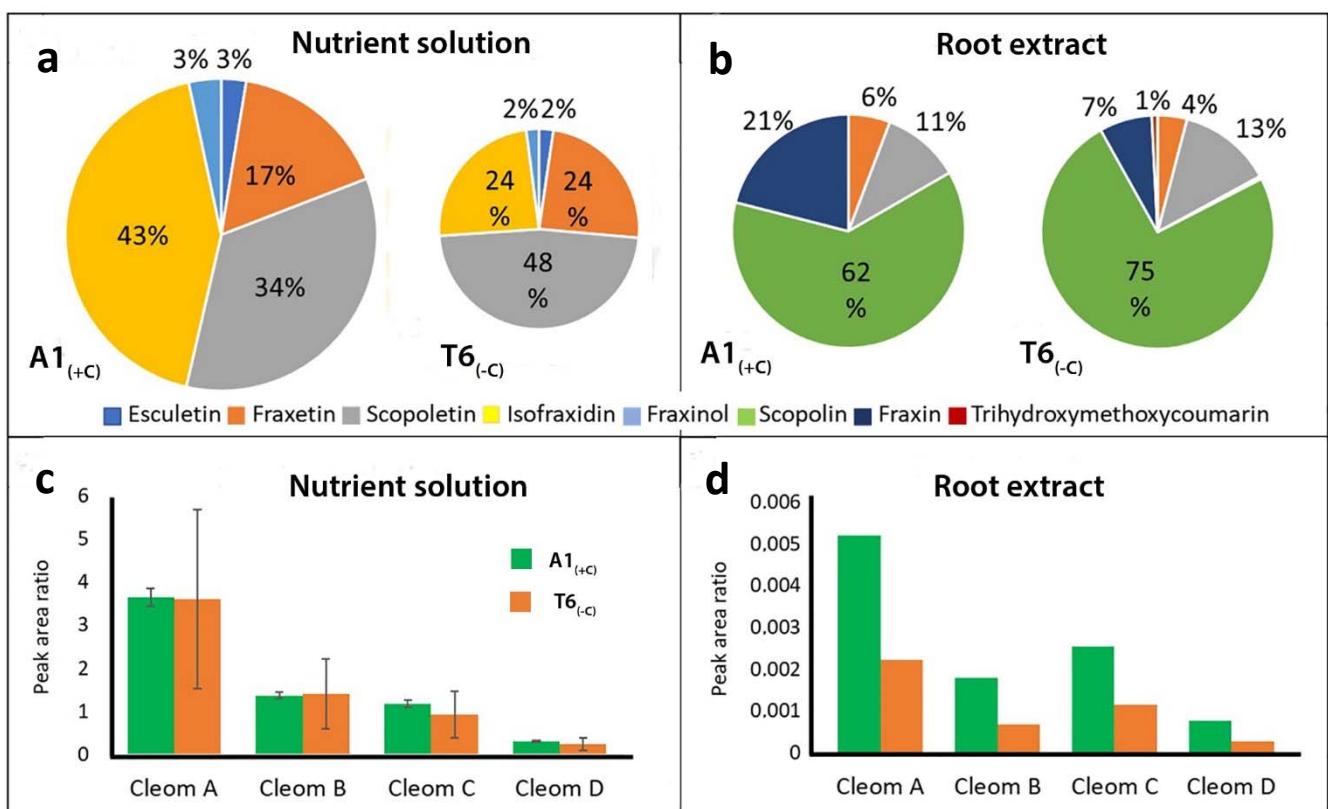


Figure S2. Percent distribution of coumarins in *A. thaliana* root exudates (a) and root extracts (b) from carbonate tolerant $A1_{(+C)}$ and carbonate sensitive $T6_{(-C)}$; the circle diameter is proportional to the actual exudation amount. Relative amounts (peak areas) of coumarinolignans in nutrient solution from carbonate tolerant $A1_{(+C)}$ and carbonate sensitive $T6_{(-C)}$; values are means \pm SE ($n=3$) (c); (d) coumarinolignans from root extracts; due to low concentrations, all extracts were pooled into a single sample.