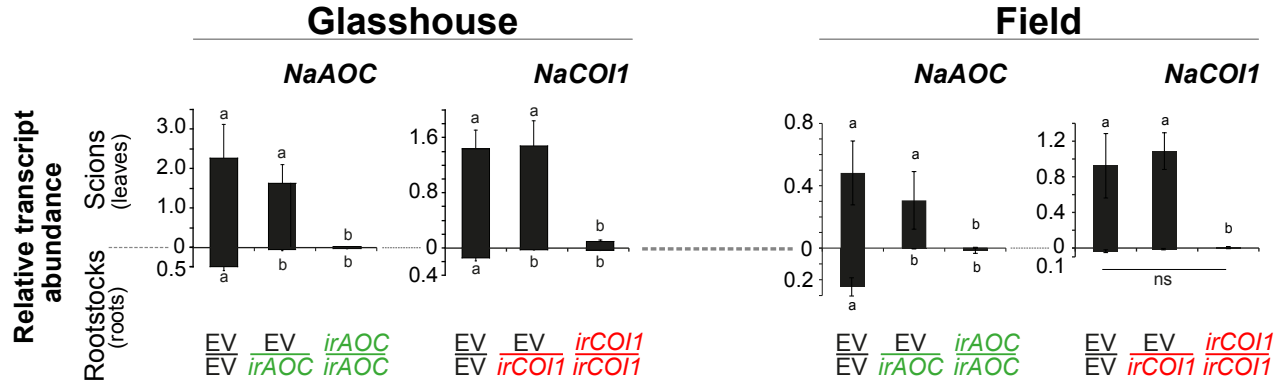

Fig. S1. Silencing of target genes is restrained to transgenic rootstocks of EV/*irAOC* and EV/*irCOI1* grafted plants under glasshouse and field conditions. Grafts of the scions and rootstocks of the same genotypes (EV/EV, *irAOC*/*irAOC* and *irCOI1*/*irCOI1*) were used as controls. Average ± SE transcript abundance of *NaAOC* and *NaCOI1* in systemic leaves of control plants or roots of induced plants, 1 day after leaf wounding (glasshouse) or 7 weeks after planted in field plot. Bars sharing same letters do not differ significantly (Two-way ANOVA followed by Fisher LSD test, n = 6, glasshouse; n = 7, filed; ns = not significant). *NaAOC*, *N. attenuata*'s allene oxidase cyclase gene; *NaCOI1*, *N. attenuata*'s coronatine insensitive1 gene. EV, empty vector; *irAOC*, allene oxidase cyclase silenced line; *irCOI1*, coronatine-insensitive 1 silenced line.

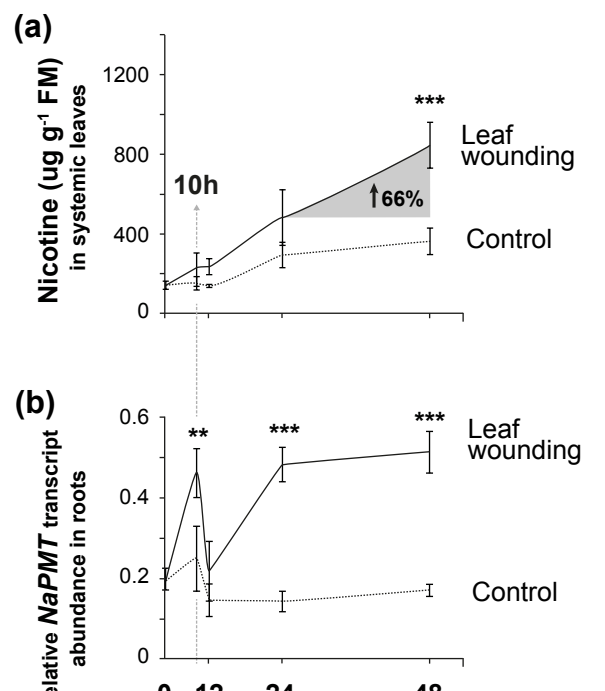

Fig. S2. The largest increase (66%) in endogenous nicotine in systemic leaves of non-grafted WT plants takes place between the first and second day after leaf wounding (a), which is associated with induced *NaPMT* transcript abundance in roots (b). Average ± SE values of control or induced plants. Asterisks refer to comparisons between control and wounding treatment within same time point (***, p <0.001; **, p <0.01; Two-way ANOVA followed by Dunnett's test, n = 5).

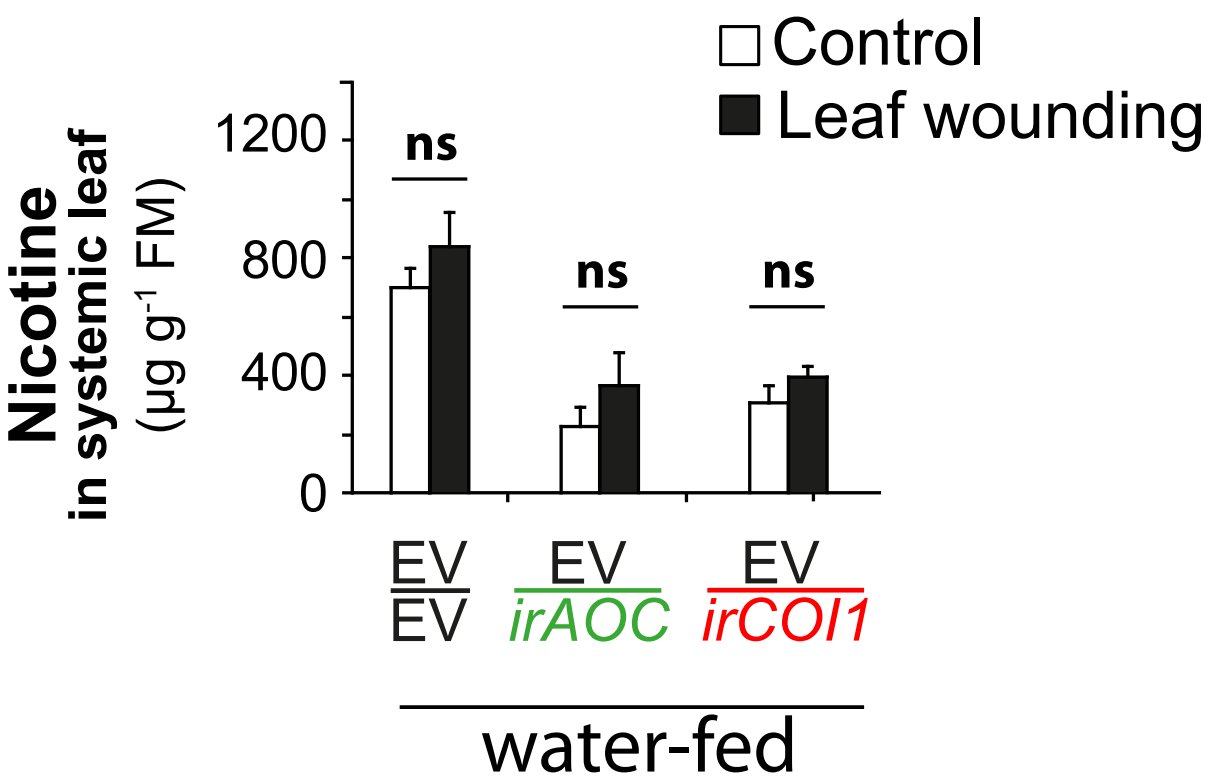

Fig. S3. In water-fed leaves, wounding failed to induce leaf-nicotine levels in EV/EV, EV/*irAOC*, and EV/*irCOI1* grafts. Average ± SE nicotine accumulated in leaf lamina of detached systemic leaves of control or induced grafted plants incubated in a nicotine-free water solution. Control and wounding treatment within same graft kind did not differ significantly (ns, not significant; Two-way ANOVA followed by Fisher LSD test, n = 8). EV, empty vector; irAOC, allene oxidase cyclase silenced line; irCOI1, coronatine-insensitive1 silenced line.

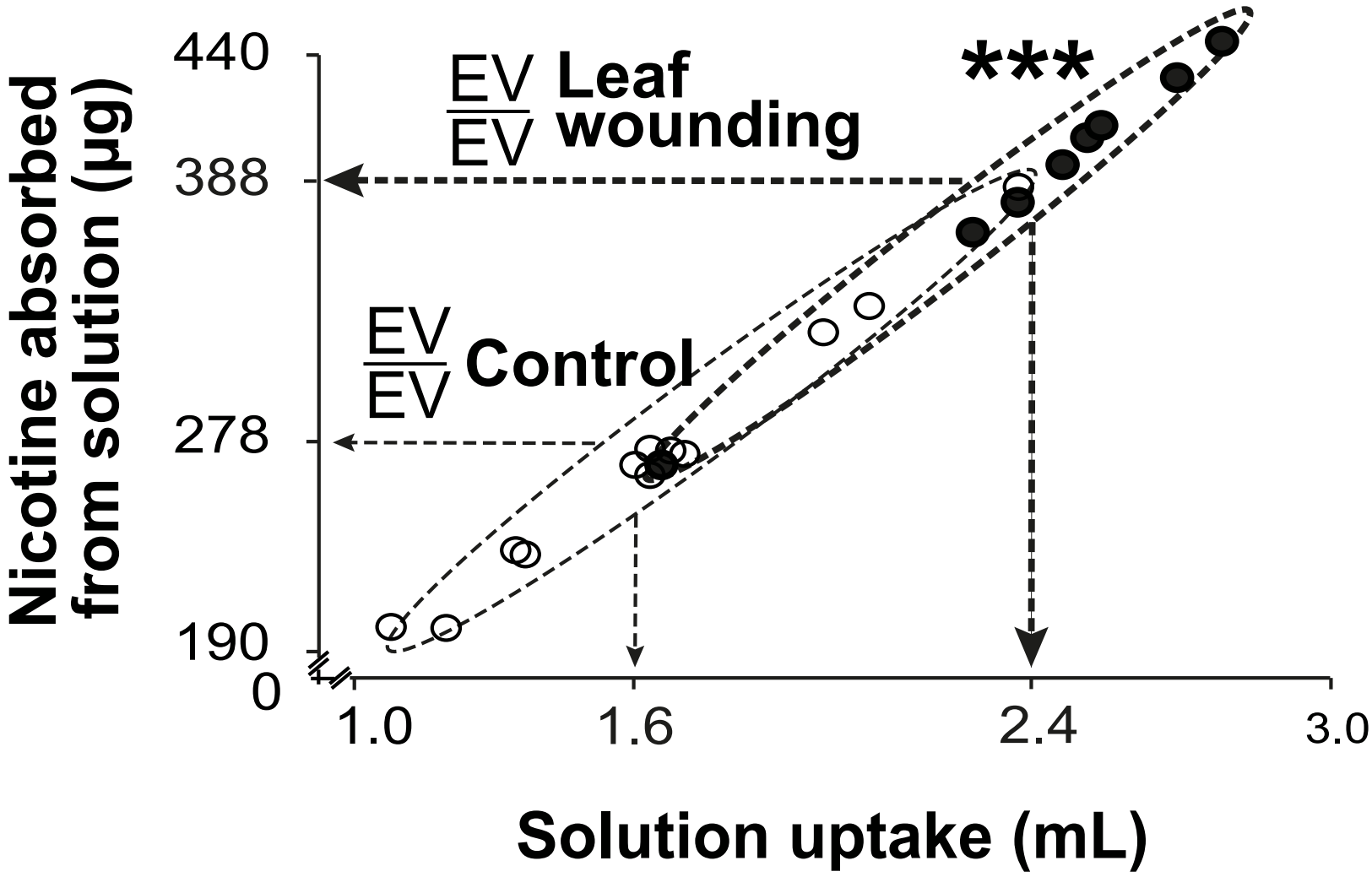

Fig. S4. Systemic leaves detached from wound-treated EV/EV plants (closed circles) and fed with a nicotine-containing solution transpired significantly more than those detached from untreated plants (open circles). Correlation plot of solution uptake (mL) *versus* nicotine absorbed from solution (µg). Asterisks refer to comparison between control and wounding treatment (***, $p < 0.001$; t-test, n = 8). EV, empty vector.