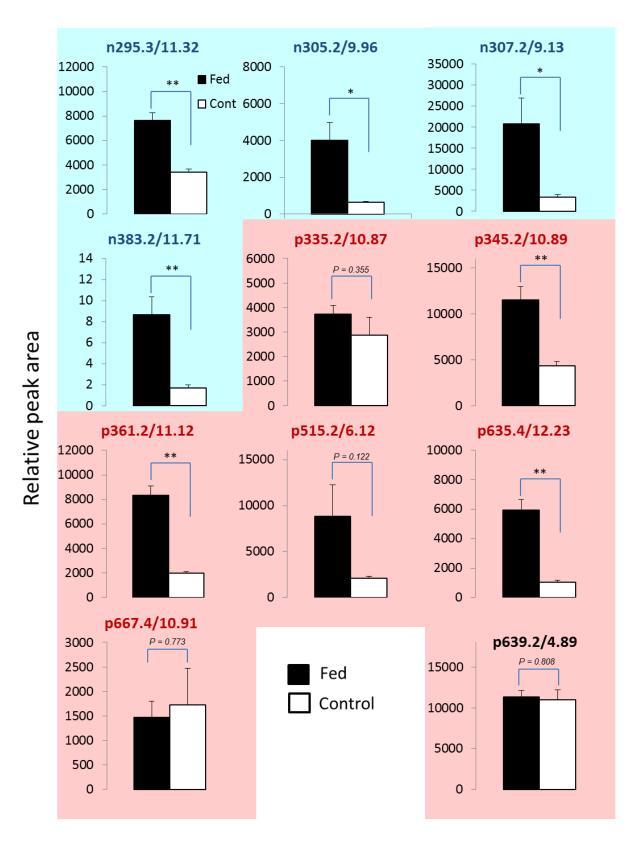
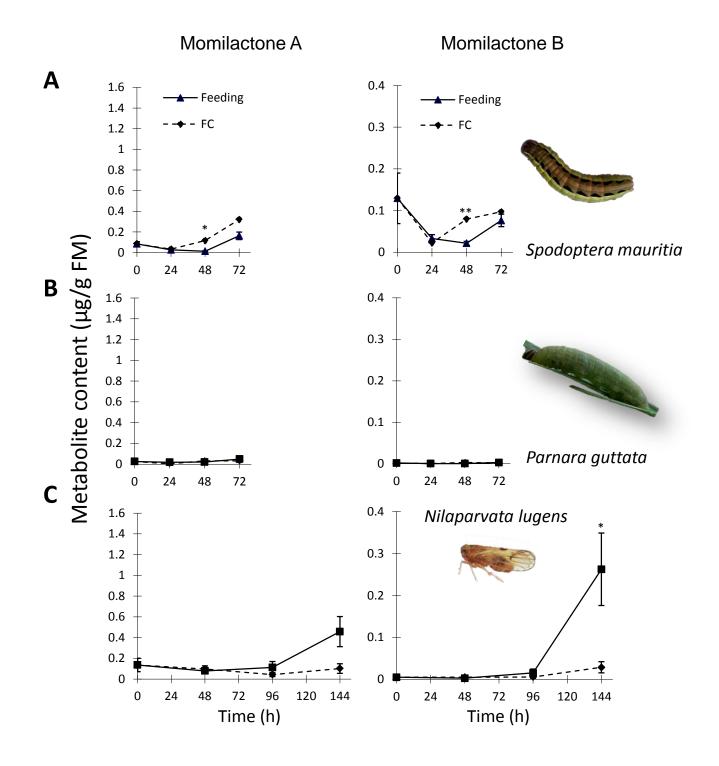


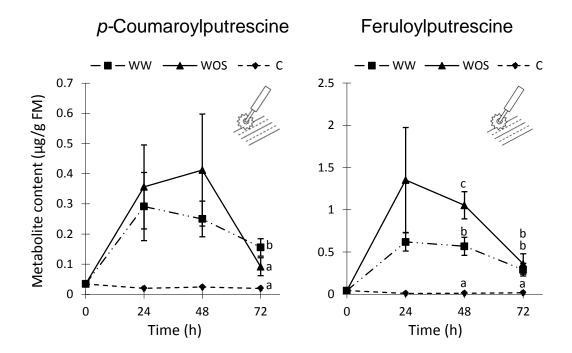
**Summary of UV-absorbing compounds in rice seedlings subjected to herbivory.** Samples used for UPLC-ESI-TOF-MS analysis were examined on HPLC coupled with photodiode array (PDA) detector as previously described in Onkokesung *et al.* 2012. All UV-absorbing peaks detected at wavelengths typical for various phenolic compounds were integrated by software and summarized in the graphs as relative peak areas. Values are means of eight biological replicate measurements with SE indicated. Asterisks show statistically significant differences between treated and untreated leaves determined separately in local and systemic group samples by Student's-t test (\*P<0.05; \*\*P<0.01). Red dots in peak spectra reconstructed from PDA data show wavelength used for each peak's integration. FM, fresh mass; S.f., *S. frugiperda* feeding; C, control; Syst., systemic leaf.



**Herbivore feeding elicits metabolites in rice seedlings.** Rice leaves were exposed to two days of feeding by the larvae of lawn armyworms *S. mauritia* and fed (black bars) and control (untreated; white bars) leaves were extracted and subjected to LC-MS in SIM (selected ion monitoring) mode. Regulation of selected m/z from previous metabolomics analysis was confirmed in 7 of 10 examined ions in either negative (blue background) or positive (pink) MS mode. Non-regulated positive ion m/z 639.2 (putative tricin-7-rutinoside, yellow background) was used as additional control. Values are means of 3 biological replicate measurements with SE indicated. Asterisks show statistically significant differences between treated and untreated leaves determined by Student's-t test (\*P<0.05; \*\*P<0.01).



**Herbivore feeding elicits accumulation of momilactones in rice seedlings.** Rice leaves exposed to continuous feeding of lawn armyworms, *S. mauritia* (A), rice skippers, *P. guttata* (B) and BPHs, *N. lugens* (C) were extracted and subjected to triple quadrupole LC-MS analysis for quantification of diterpene phytoalexins, momilactone A and momilactone B. Schematic representation of rice herbivores used in experiments is attached to each graph. Values are means of 4-6 biological replicate measurements with SE indicated. Asterisks show statistically significant differences between treatments determined at each time point by Student's-t test (\*P<0.05; \*\*P<0.01). FM, fresh mass; FC, feeding control.



Wounding and simulated herbivory induces PA accumulation in rice seedlings (repeated experiment in the Figure 4). Rice leaves were wounded with a fabric pattern wheel on each side of the midvein and immediately treated with 20 µL water (WW) or 5-fold diluted OS from lawn armyworm *S. mauritia* (WOS) larvae. Plants were incubated for indicated time-periods and PA levels were determined by triple quadrupole LC-MS. Values are means of four biological replicate measurements with SE indicated. Different letters show statistically significant differences between treatments determined at each time point by ANOVA (P<0.05; Fisher's LSD test). FM, fresh mass.