

PROJECT TITLE

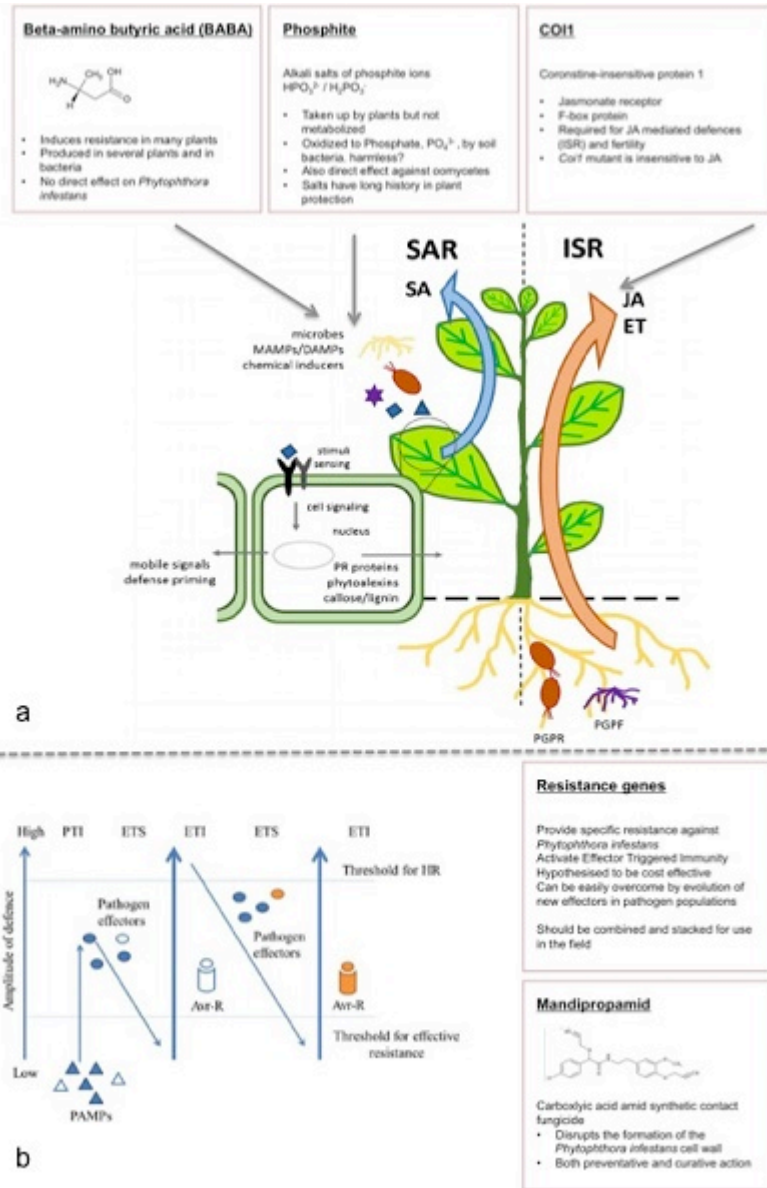
Assessing the cost of resistance in potato

CONSORTIUM

P 1	Erik Alexandersson		
P 2	Åsa Lankinen		
P 3	Erik Andreasson		
P 4	Erland Liljeroth		
P 5	Laura Grenville-Briggs Didymus		

SUMMARY OF THE REPORT

Plants have evolved an array of defenses against pathogens. However, mounting a defense response comes with a certain fitness cost in the form of reduced growth and reproduction. This has implications in both natural and agricultural populations, where in the former this fitness cost can be a driver of local adaptation whereas in the latter it can reduce yield and consequently affect food production. Here we



measured the cost with advanced phenotyping.

In this experimental set-up used the PhenoLab at University of Copenhagen to measure the growth rate, architecture and changes in development (phenology) as well as the effect on photosynthesis and plant health of plants treated with plant resistance inducers (PRIs) and transgenic potato plants carrying the additional resistance genes. From this experimental set-up we saw differences in growth parameters between potato lines.