

## EFFECT OF ENVIRONMENTAL FACTORS ON WILD STRAWBERRY PRIMARY METABOLIC PROFILE

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Climate factors such as temperature and precipitation vary significantly over continental scales, strongly structuring biomes along latitudinal gradients, and resulting in species differently adapted either genetically or plastically to cope with their local climate. However, climate change will likely alter these biomes. Thus, it is expected that Nordic regions, historically colder and rainier, will tend to have higher temperatures and less rainfall, which might lead to changes in the distribution of plants leading to novel patterns of local adaptation and maladaptation. In this study we aim to study how plant traits vary with latitude and in response to different temperature and drought conditions in order to find genetic determinants of climate adaptation. Our group is focused in determining the role of the metabolic profiling to that adaptation. For that purpose, we use the woodland strawberry (*Fragaria vesca*) as the model organism. In particular, we have analyzed 16 different genotypes that have been grown in five common gardens located in Belgium, Sweden, Finland, and Spain, in which drought treatments were also performed. Here, we present the chemical analysis (primary metabolism) in leaves of these genotypes in order to better understand how environmental factors can alter the primary metabolic profiles of *F. vesca* accessions grown in different locations.

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