Sampling protocol for non-photorespiratory light-response curves.

Goal is to capture variation in relationship between øPSII and øCO2 under non-photorespiratory conditions.

* Things that may cause variation in this relationship:
  + Light level
  + Diurnal variation in genes/metabolites
  + Drought

My initial assumption will be that under non-photorespiratory conditions, genetic differences between the constructs will be negated. This assumption will be tested by including multiple trees from each group (high PLGG1 and low PLGG1 and control) in diurnal curve sampling.

Procedure:

Day 1

* Ambient assimilation and øPSII will be taken every 2 hours for at least three trees/group.

Part 2

* Light response curves will be taken for 6 trees, two per group.

Repeat monthly, if irrigation treatment is included include at least 3 irrigated trees in Day 1 procedure and 1 light response curve for irrigated trees.