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Estimating transpiration coefficients of grapevines (Vitis vinifera L.) "Tempranillo" subjected to delayed pruning

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Introduction

- Increase in temperatures during ripening period of grapes causes undesirable properties to wines.
- Crop forcing consist of removing all the leaves and fruits and pruning shoots
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to 6-8 buds in spring with the objective of delaying ripening period.

Objective

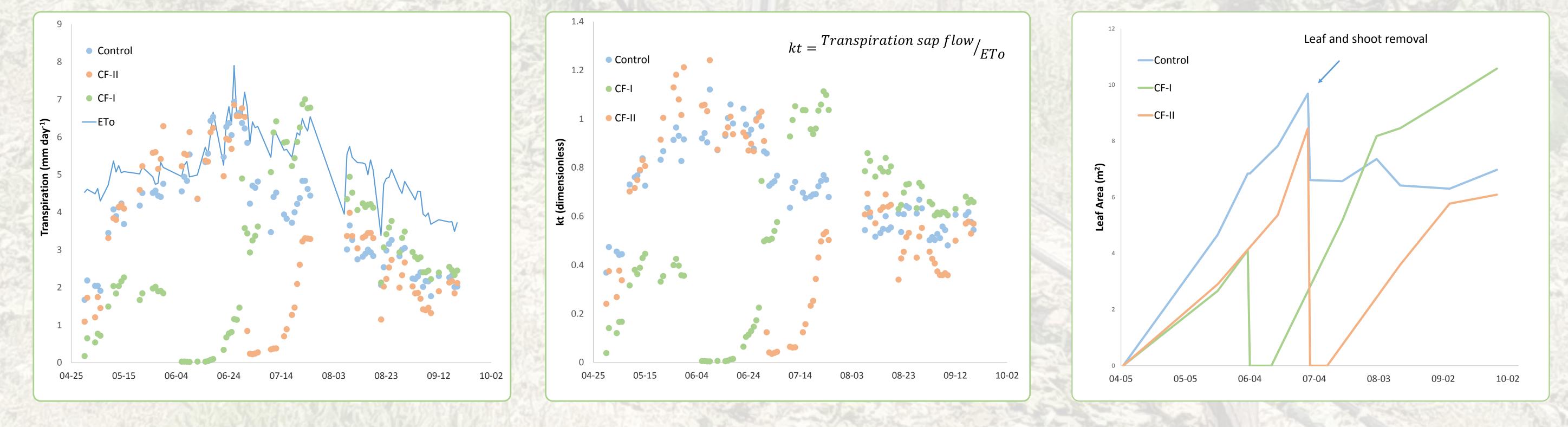
• Determine how the crop forcing technique alters transpiration coefficients.,

Materials and Methods



- Plant material: grapevines "Tempranillo" spaced 1,6x2,5 m fully irrigated located in Lleida (41,6°N; 0,52°E).
- Treatments: 4 trees/treatment of Control (no forced), CF-I (forced on 4th of June) and CF-II (forced on 1st of July).
 One sap flow probe (CHPM) per tree calibrated using a whole canopy gas exchange chamber.

Results



Conclusions

 After applying the technique of forcing regrowth, transpiration rate follows the shape of ETo and matches the pattern of Control treatment in both dates of forcing

Small differences in kt are attributed to differences in canopy size

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