

The Frost Resistance in Selected QTL-NILs and Recombinant Barley Genotypes

GENOTYPES

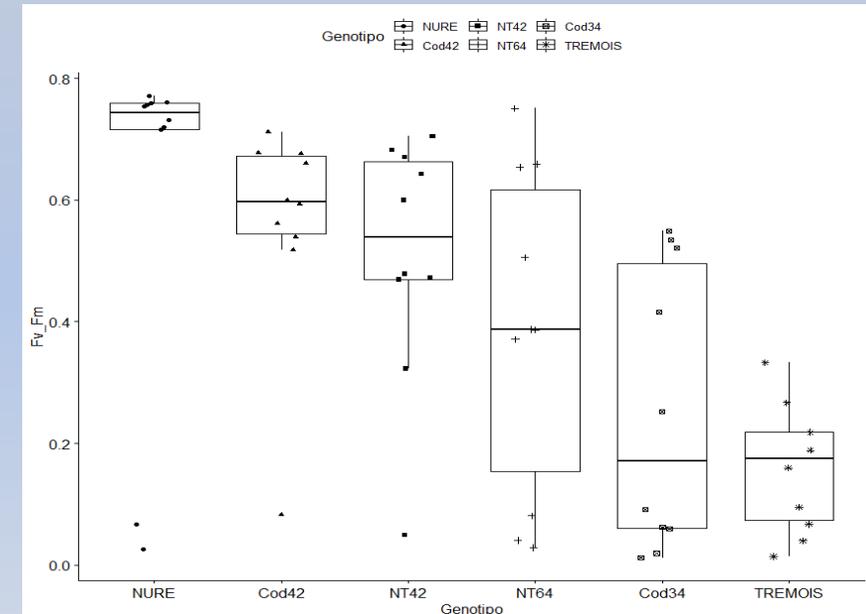
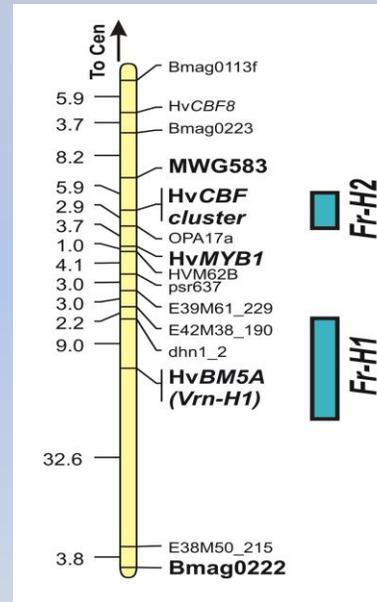
- QTL-NILs Rizza *et al.* (2016)
- Recombinant Francia *et al.* (2007)
- Varieties with Winter, Spring, and Facultative habitus

AIM OF THE PROJECT

investigate the contribution of the allelic state at FR-H1 and FR-H2 to the expression levels of CBF genes (and/or additional candidate genes) in barley selected recombinant and QTL-NILs

RESULTS

- According to Rizza *et al.*, (2011) nonparametric test Kruskal-Wallis has been applied. On rank data one way ANOVA Analysis of the Variance has been assessed.



- Francia, E., Barabaschi, D., Tondelli, A., Laidò, G., Rizza, F., Stanca, A.M., Busconi, M., Fogher, C., Stockinger, E.J., Pecchioni, N., 2007. Fine mapping of a HvCBF gene cluster at the frost resistance locus Fr-H2 in barley. *Theor Appl Genet* 115, 1083-1091. <https://doi.org/10.1007/s00122-007-0634-x>
- Mareri, L., Milc, J., Laviano, L., Buti, M., Vautrin, S., Cauet, S., Mascagni, F., Natali, L., Cavallini, A., Bergès, H., Pecchioni, N., Francia, E., 2020. Influence of CNV on transcript levels of HvCBF genes at Fr-H2 locus revealed by resequencing in resistant barley cv. 'Nure' and expression analysis. *Plant Science* 290, 110305. <https://doi.org/10.1016/j.plantsci.2019.110305>