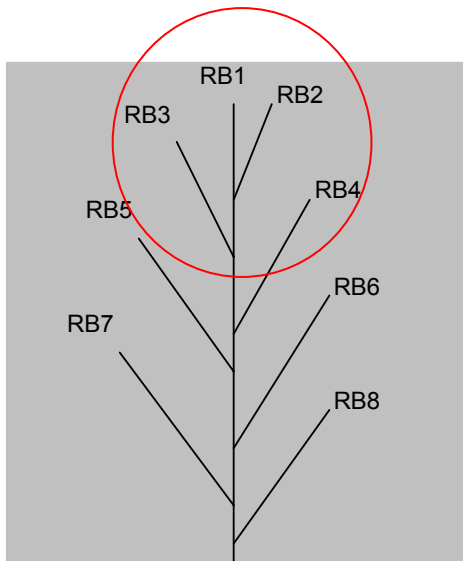
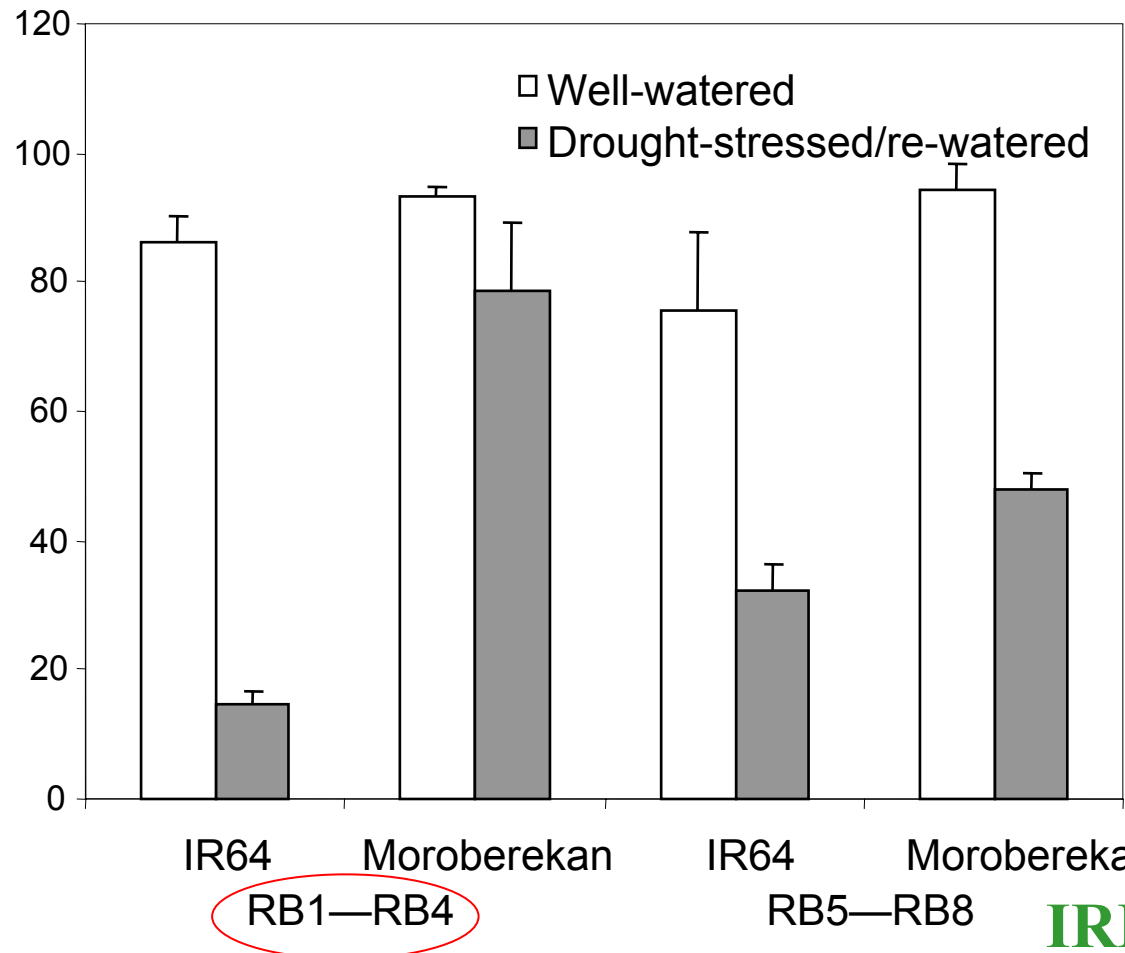


Genetic variation in tolerance to drought that starts 3 days before heading

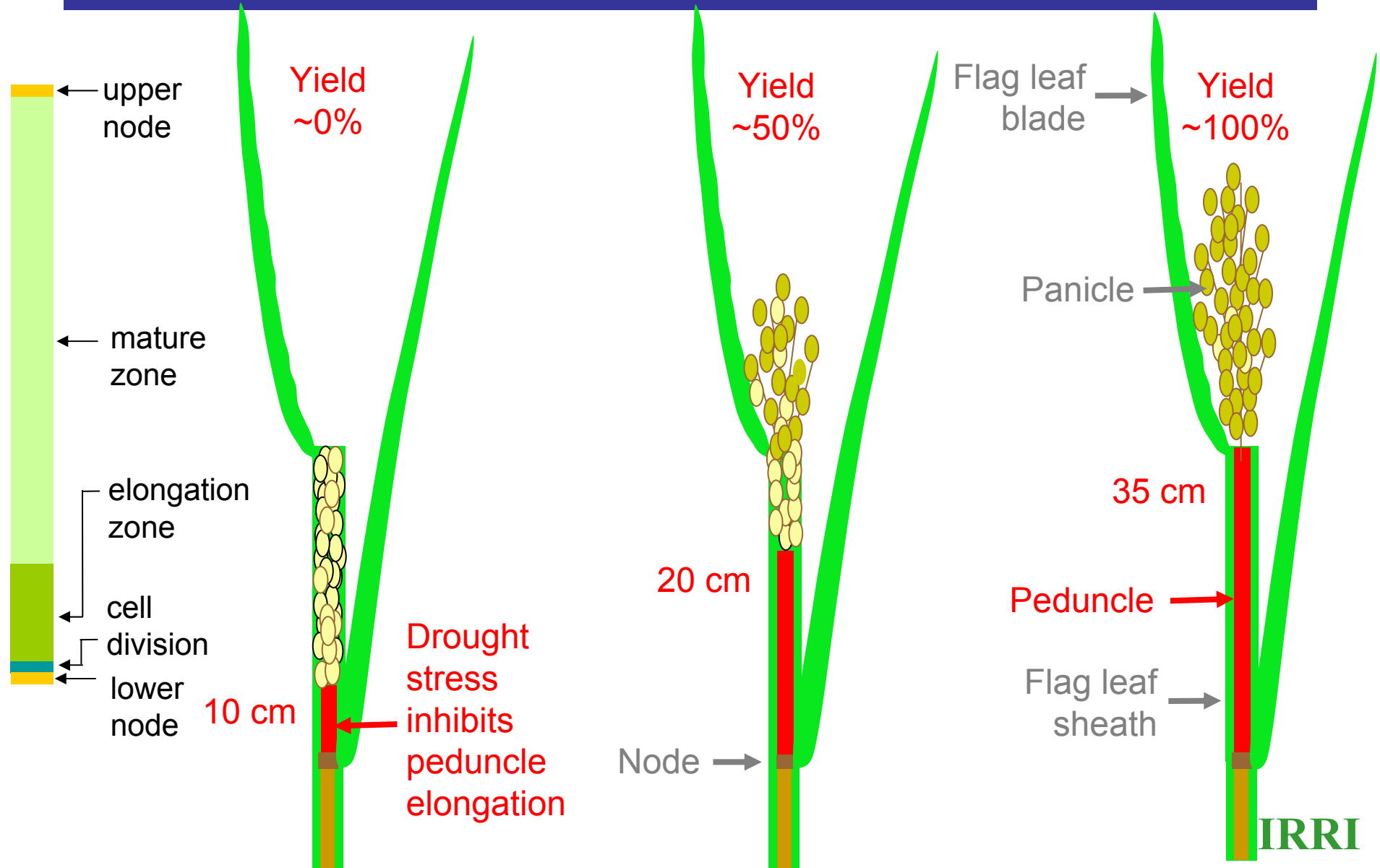
Panicle



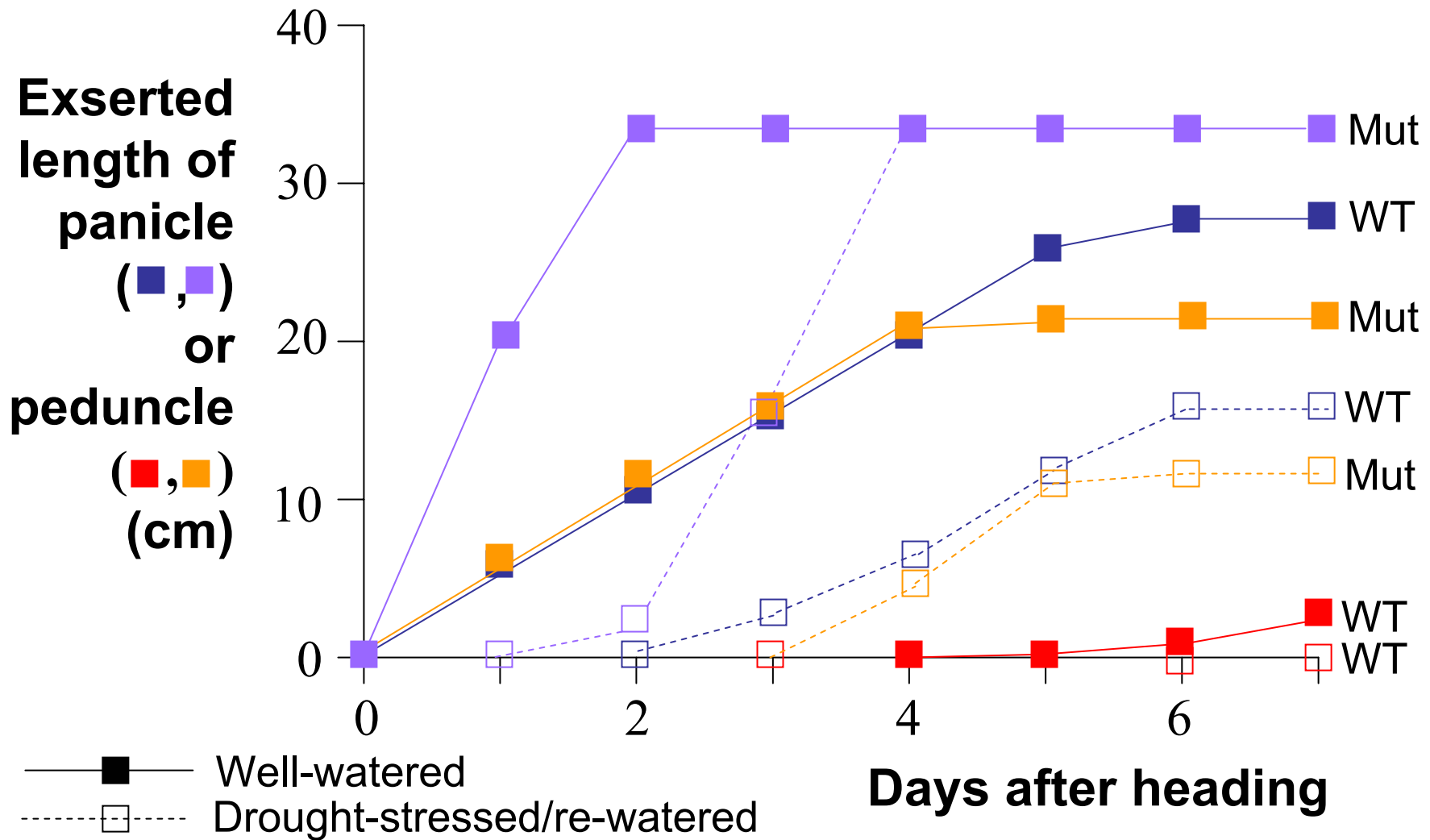
Spikelet fertility (%)



Peduncle elongation has a direct impact on yield through panicle exertion

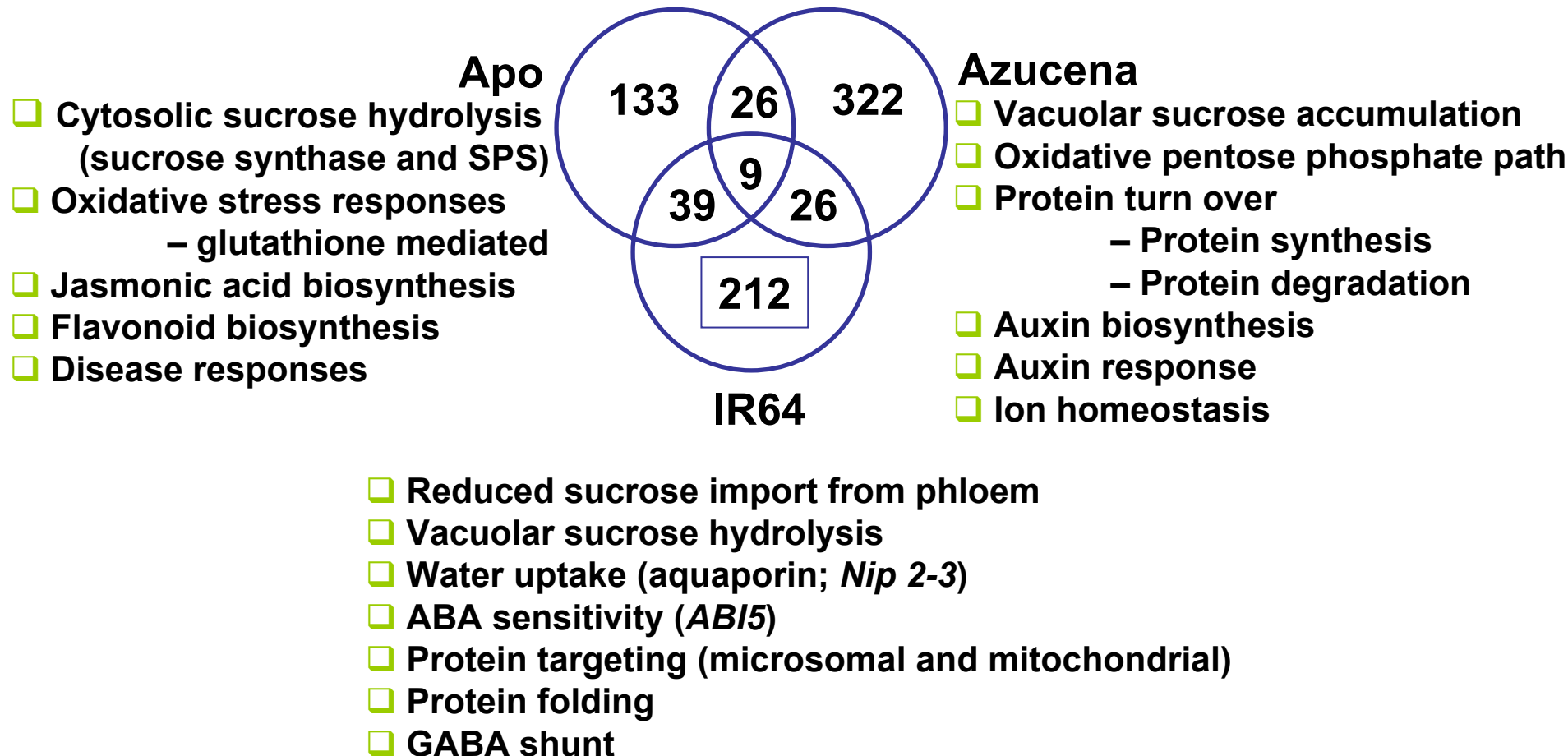


Effect of drought stress on peduncle elongation in IR64 wild type and *eui* mutant



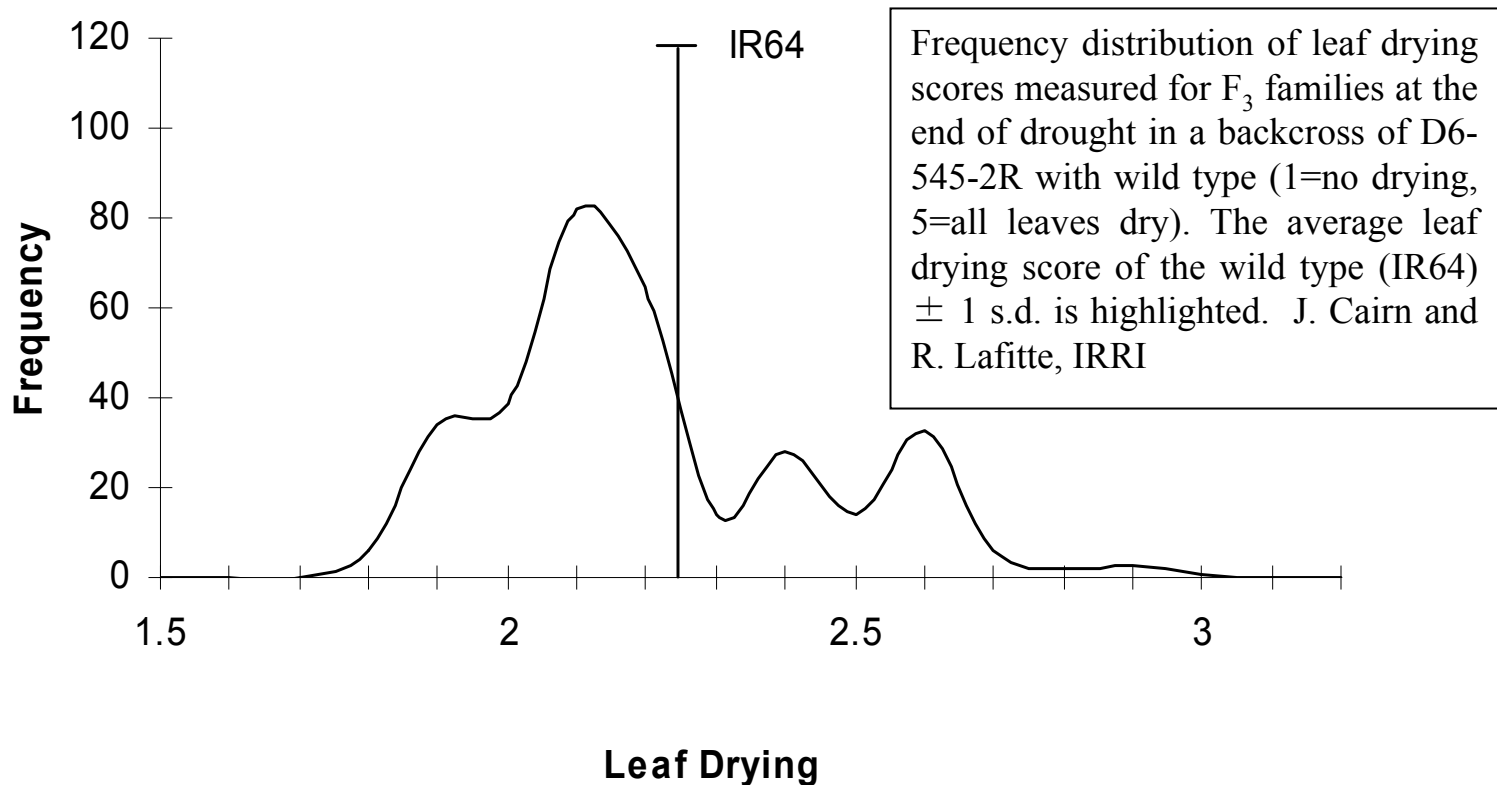
eui = elongated uppermost internode (elongated peduncle)

Panicle Gene Expression Studies using cDNA Microarrays – Genotype specific drought responsive processes in the field

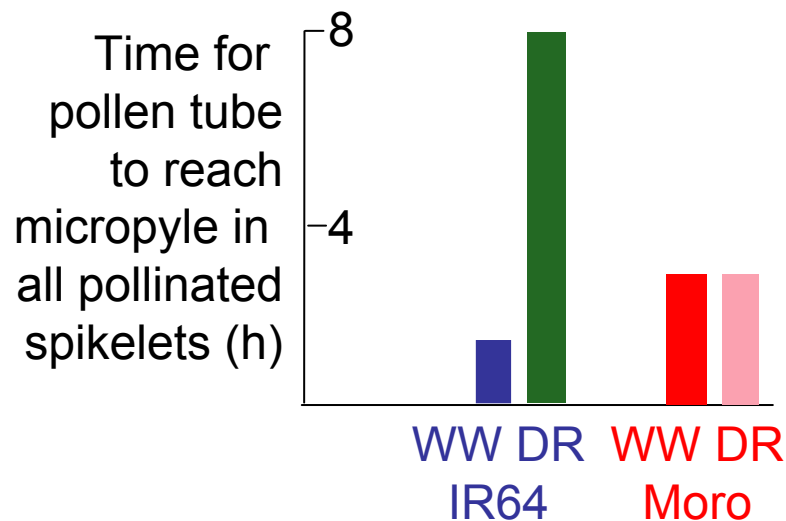
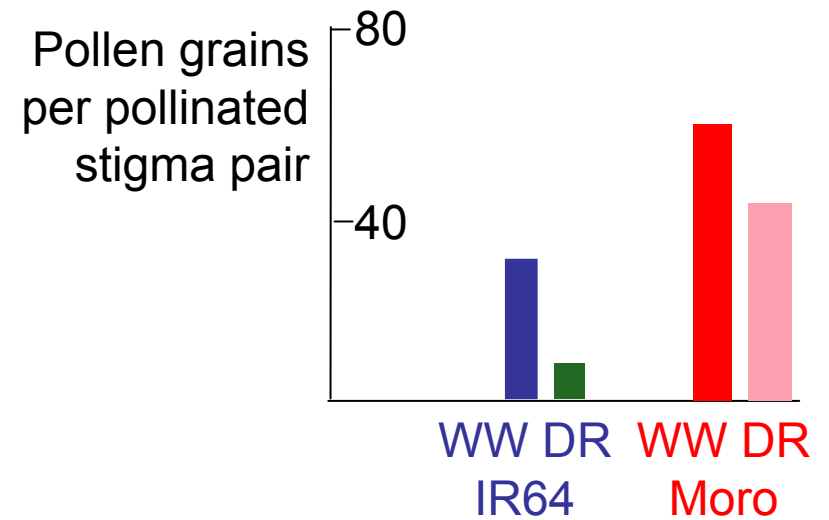
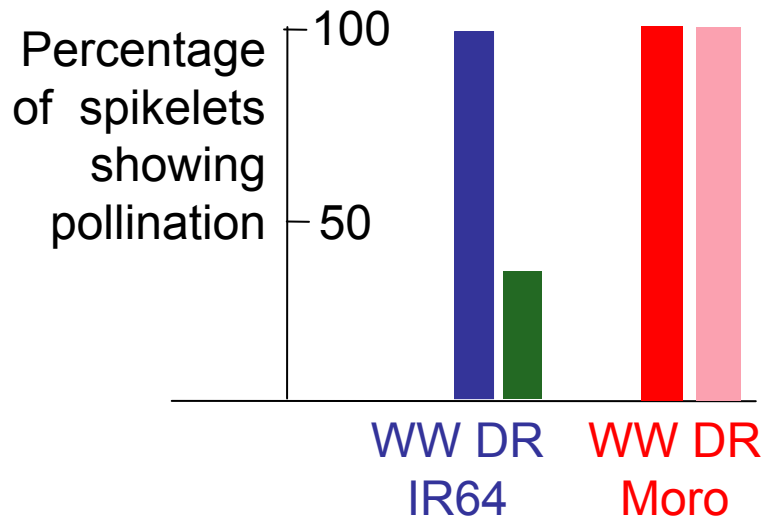


Genetic analysis of drought tolerant mutants (Jill Cairn and Renee Lafitte)

Field screening of 3,500 mutants lines has identified several conditional drought-tolerant or drought-susceptible mutants. Two gain of drought tolerance mutants, D6-545-2R and D6-547-2R, were identified in several field evaluations. Unlike the wild type, these mutants continued to grow during drought stress, and had significantly greater yield under stress than the wild type.



Genetic variation in tolerance of pollination and pollen tube growth to drought



WW = well-watered
DR = drought-stressed/
re-watered

OsCIN2 expression correlates in space and time with peduncle elongation

-3 -1 0 +2 +4 +7 Days after heading

