



**Figure S6.** Layout of experimental plots (a) for nine coastal lowland self-pollinated lines (CLS) and commercial cv Regalona (REGA) grown in a field experiment under full irrigation (blue frame) and reduced irrigation (red frame), and corresponding experimental design corresponding to a split-plot (b). The yellow stars in (a) indicate the position of field environment measurement stations for soil water content (full and reduced irrigation) and air temperature and relative humidity (full irrigation only). The image in (a) is a composition of RGB image data acquired by a drone at the inflorescence visible stage corresponding to 46 days after sowing.