

The purpose of Breeding Planner is to assist plant breeders understand and plan all the steps necessary to develop populations on time and produce sufficient seed for their planned multi-location trials. Breeding Planner enables plans to be created for a Marker Assisted Recurrent Selection (MARS) scheme; a Marker Assisted Selection scheme (MAS) and a Marker Assisted Backcross scheme (MABC), which are the three major functionalities (Figure 1).

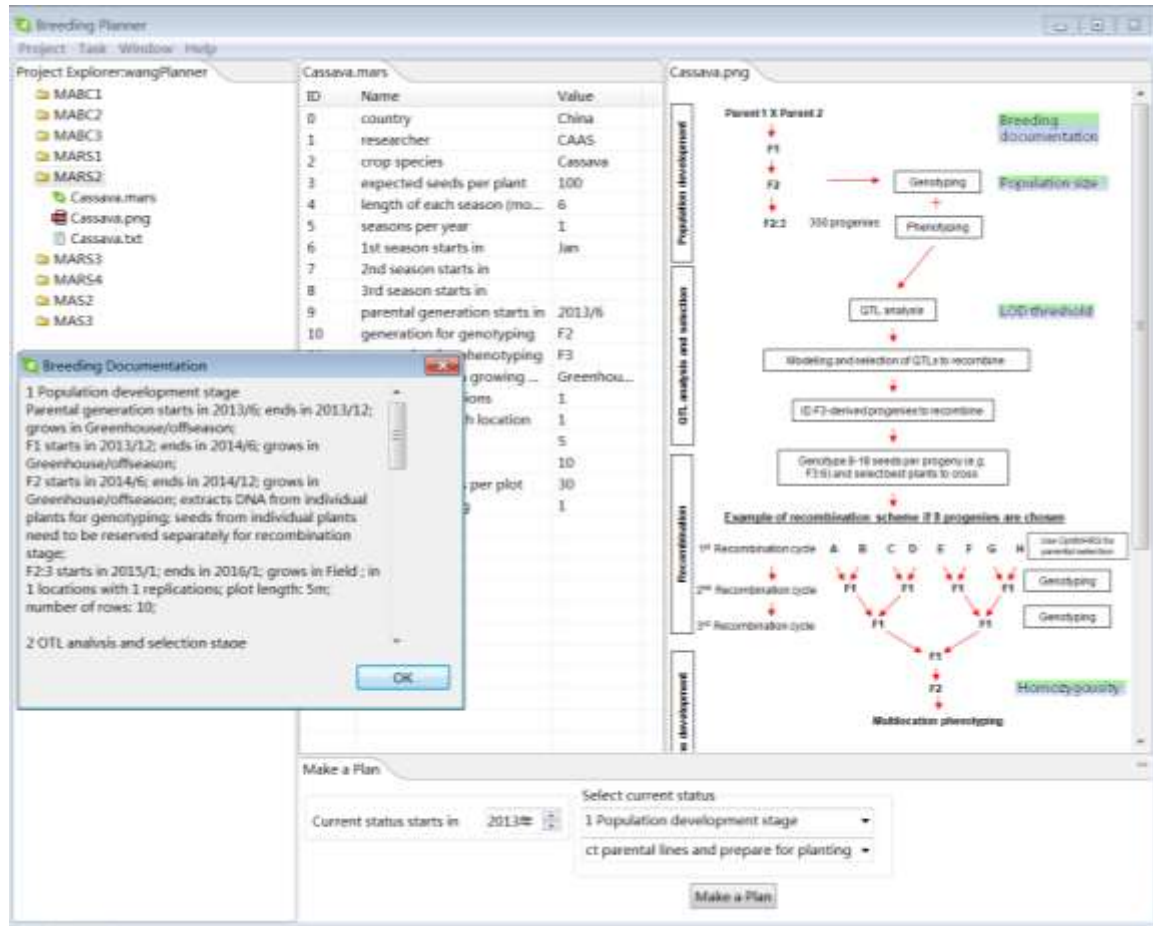


Figure 1. Interface of the Breeding Planner

From the Breeding Planner user interface (Figure 1), users can easily create MARS, MABC and/or MAS breeding programs. Based on users' input parameters, Breeding Planner can draw the breeding flowchart (upper right side of Figure 1), and give a detailed breeding documentation by clicking just one button on the interface (lower left side of Figure 1). Breeding Planner can also help breeders to make a plan for the future breeding activities (right bottom side of Figure 1). Useful information is also available to help breeders decide a suitable population size, rounds of selfing, threshold value in QTL mapping and so on.