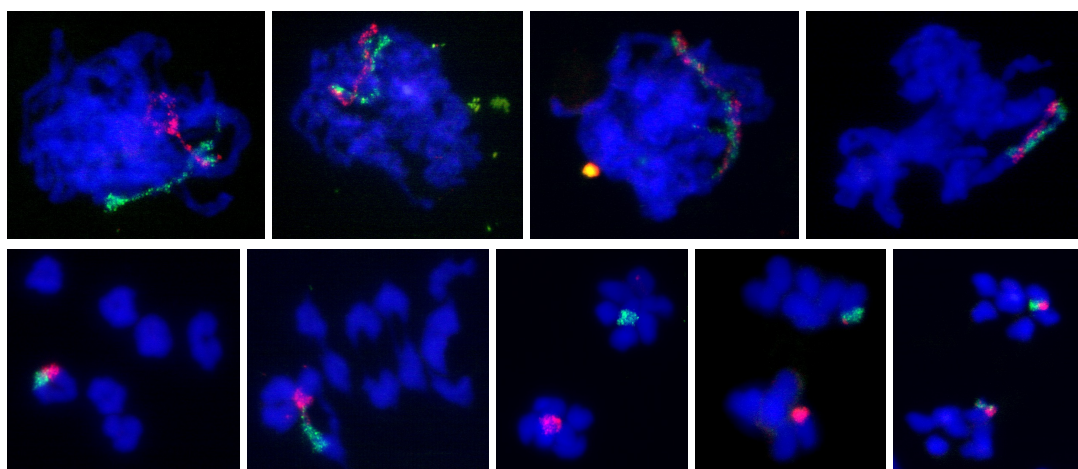
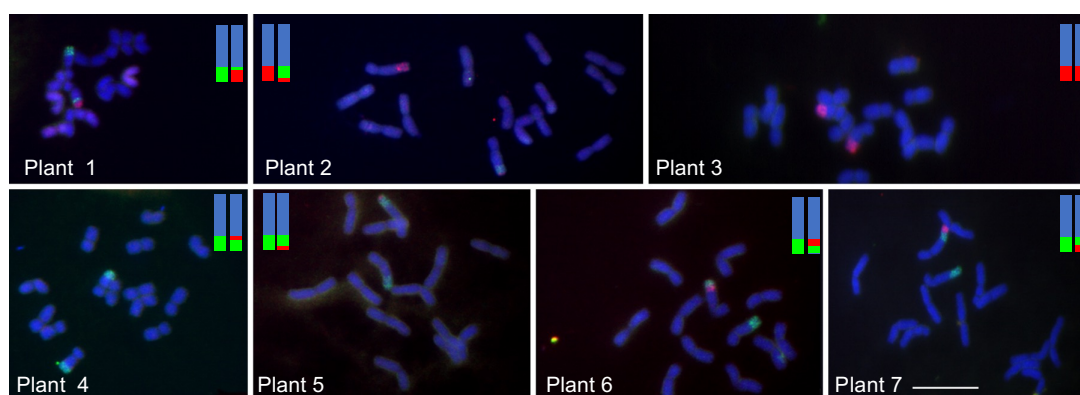


a



b



**Extended Data Figure 4. Haplotype-specific probes illustrate meiotic recombination. (a)** Meiotic dynamics of chromosome 5H homologs. From left to right, top: leptotene, zygotene, and pachytene, diplotene. Haplotype 1 (green) and haplotype 2 (red) initially unpaired come in close apposition until becoming physically connected in synapsed chromosomes; bottom: metaphase I, early anaphase I, and three examples of late anaphase I showing the presence or absence of recombination between haplotypes 1 and 2. **(b)** Meiotic crossovers revealed by chromosome painting. Mitotic chromosomes of 7 selfed offspring of the diploid *H. bulbosum* clone FB19-011-3 after FISH with haplotype-specific probes. Explanatory graphical genotypes are shown in the top-right corners of each subpanel. Size bar = 10  $\mu$ m.