



**Figure S3: Correspondence between the optical map and the PacBio assembly of the *Microbotryum lychnidis-dioicae* mating-type chromosomes.** The vertical lines within the chromosomes indicate restriction sites. Alignments compare restriction fragment sizes on single DNA molecules and from *in silico* sequences. Regions highlighted in blue indicate aligned optical map and *in silico* restriction site distributions, while regions in grey could not be aligned (*i.e.*,  $a_1$  centromeres and  $a_2$  telomeres).