

Supplementary data 3.

Repetitive elements selected for sequence characterization and in situ hybridization.
Information on the source *Chenopodium* species, primer sequences used for amplification, annealing temperature (Ta) and number of sequenced clones is provided.

Repeat	Species	Primers	Ta (°C)	No of clones
CficCl-61-40	<i>C. ficifolium</i>	F: TCAAACAAAGCTTTTGAATC R: TTGTTTGAATGTGTTTGACTTT	50°	10
Proposed HOR units				
CacuCl-1-117	<i>C. acuminatum</i>	F: TCACGAAGCTTTGTTTGAATG R: TGATTCAAATGAATGTCAAATGC	50°	8
CvulCl-28-118	<i>C. vulvaria</i>	F: TCAAATGAAAGTCAAAATCATTCA R: TCATTTGATTTCGATTAGCTTTGT	60°	5
CvulCl-28-397	<i>C. vulvaria</i>	F: TCAAGGACATTCAACCAAAGC R: TGAACGCATTTGACTTTCAGTT	56°	5
CvulCl-112-117	<i>C. vulvaria</i>	F: CAATTAGCTTTGTTGAATGTGTTTG R: TGAATCAAATGAAAGTCAAATGC	62°	5
CvulCl-134-117	<i>C. vulvaria</i>	F: TTGAATCAAATGAAAGTCAAACG R: TCAATTAGCTTTGTTGGAATGC	60°	3
Cvul-145-129	<i>C. vulvaria</i>	F: CAAATCAAATGAACTCAAATGC R: TGTTTGAATGTGTTTGAATGTGTT	56°	9