

**Table S15.** List of other genomes used in this study

Species	Version	Source
<i>A. hypochondriacus</i>	Phytozome 11	JGI ( <a href="https://phytozome.jgi.doe.gov">https://phytozome.jgi.doe.gov</a> )
<i>A. thaliana</i>	Phytozome 11	JGI ( <a href="https://phytozome.jgi.doe.gov">https://phytozome.jgi.doe.gov</a> )
<i>F. esculentum</i>	Version 1.0	BGDB ( <a href="http://buckwheat.kazusa.or.jp">http://buckwheat.kazusa.or.jp</a> )
<i>T. salsuginea</i>	Phytozome 11	JGI ( <a href="https://phytozome.jgi.doe.gov">https://phytozome.jgi.doe.gov</a> )
<i>S. oleracea</i>	ASM200726v1	GeneBank ( <a href="https://www.ncbi.nlm.nih.gov">https://www.ncbi.nlm.nih.gov</a> )
<i>G. max</i>	Phytozome 11	JGI ( <a href="https://phytozome.jgi.doe.gov">https://phytozome.jgi.doe.gov</a> )
<i>Z. mays</i>	Phytozome 11	JGI ( <a href="https://phytozome.jgi.doe.gov">https://phytozome.jgi.doe.gov</a> )
<i>O. sativa</i>	Phytozome 11	JGI ( <a href="https://phytozome.jgi.doe.gov">https://phytozome.jgi.doe.gov</a> )
<i>Aegilops tauschii</i>	Aet_MR_1.0	GeneBank ( <a href="https://www.ncbi.nlm.nih.gov">https://www.ncbi.nlm.nih.gov</a> )
<i>B. vulgaris</i>	RefBeet-1.2.2	GeneBank ( <a href="https://www.ncbi.nlm.nih.gov">https://www.ncbi.nlm.nih.gov</a> )