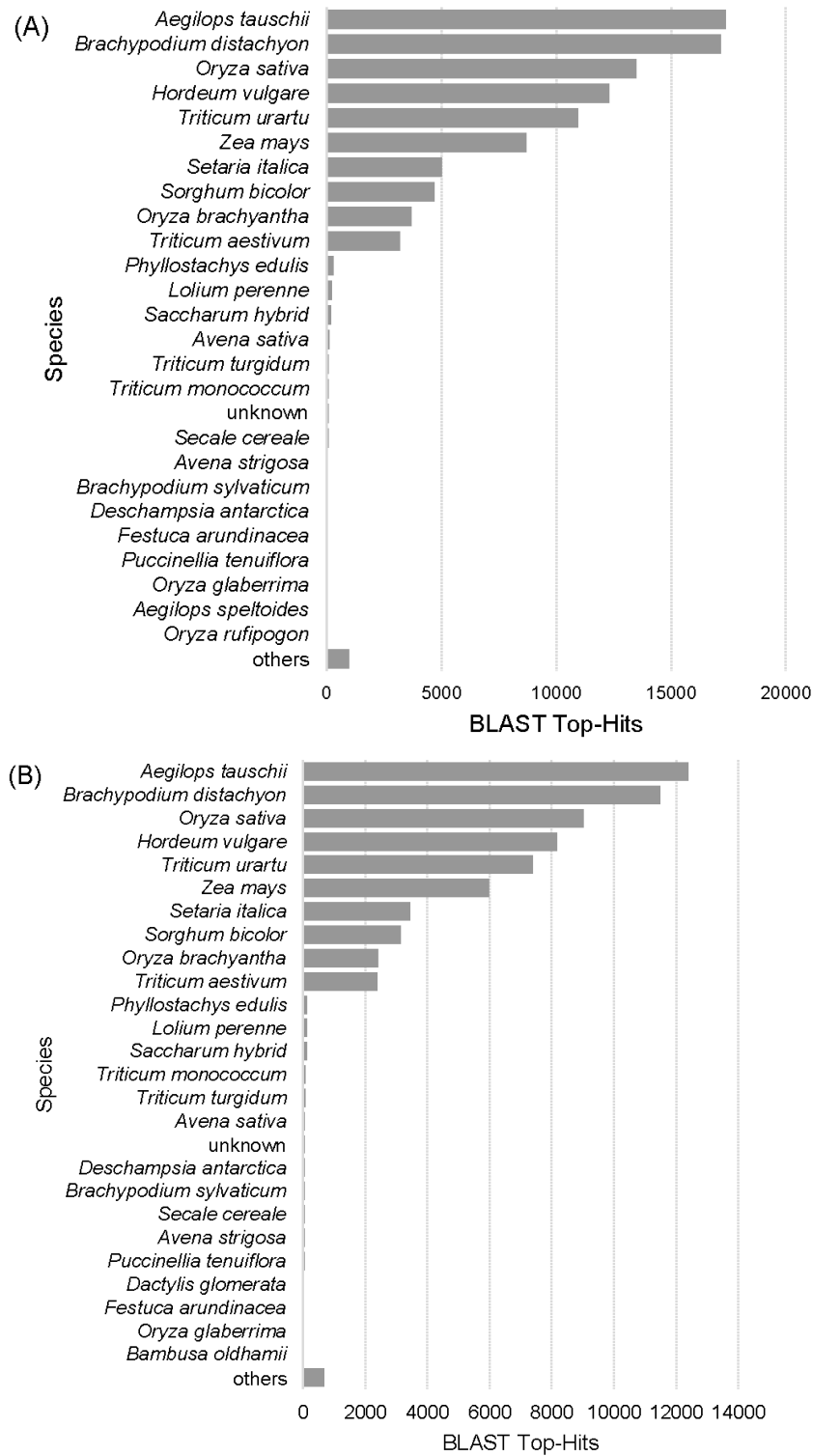


# Supplementary Information



**Figure S1.** Species distribution of BLASTX Top-Hits for all the contigs of *P. annua* (A) and *P. tenuiflora* (B).

**Table S1.** The number of raw reads, reads after trimming, after rRNA removal and after duplicate removal. The number in the library name shows biological replicates. Trimming and duplicate removal were performed on CLC Genomics Workbench 7.5, and rRNA removal was performed using SortMeRNA (see Materials and Methods for details).

	Library Name	Raw Reads	After Trimming	After rRNA Removal	After Duplicate Removal
Trial 1	<i>P.annua</i> Control #1	1,221,676	1,201,260	377,122	365,988
	<i>P.annua</i> Control #2	1,326,619	1,297,889	636,339	618,198
	<i>P.annua</i> Control #3	1,371,558	1,331,303	575,493	562,330
	<i>P.annua</i> NaHCO <sub>3</sub> #1	6,309,444	5,485,722	3,014,428	2,804,851
	<i>P.annua</i> NaHCO <sub>3</sub> #2	4,485,250	4,061,710	1,891,144	1,798,961
	<i>P.annua</i> NaHCO <sub>3</sub> #3	12,398,809	11,594,592	5,869,987	5,405,662
	<i>P.tenuiflora</i> Control #1	1,577,650	1,530,988	585,050	564,038
	<i>P.tenuiflora</i> Control #2	1,721,592	1,667,846	714,887	691,831
	<i>P.tenuiflora</i> Control #3	1,291,296	1,261,253	538,138	524,223
	<i>P.tenuiflora</i> NaHCO <sub>3</sub> #1	2,361,633	2,195,966	1,313,286	1,239,410
	<i>P.tenuiflora</i> NaHCO <sub>3</sub> #2	13,744,215	12,175,016	6,715,728	6,069,658
	<i>P.tenuiflora</i> NaHCO <sub>3</sub> #3	12,779,944	11,844,012	6,109,852	5,554,015
Trial 2	<i>P.annua</i> Control #1	4,067,142	4,041,424	3,422,795	3,053,814
	<i>P.annua</i> Control #2	2,756,049	2,736,724	2,218,280	1,836,941
	<i>P.annua</i> Control #3	3,566,929	3,545,502	3,146,146	2,620,974
	<i>P.annua</i> NaHCO <sub>3</sub> #1	23,931,480	23,734,563	21,874,365	14,381,537
	<i>P.annua</i> NaHCO <sub>3</sub> #2	3,144,662	3,036,706	2,498,396	2,203,896
	<i>P.annua</i> NaHCO <sub>3</sub> #3	2,874,893	2,852,650	2,274,594	1,979,087
	<i>P.tenuiflora</i> Control #1	3,311,254	3,287,158	2,878,206	2,440,290
	<i>P.tenuiflora</i> Control #2	2,702,464	2,679,783	2,172,421	1,924,276
	<i>P.tenuiflora</i> Control #3	1,474,054	1,427,478	1,191,040	1,080,375
	<i>P.tenuiflora</i> NaHCO <sub>3</sub> #1	2,972,086	2,876,671	2,489,945	2,186,153
	<i>P.tenuiflora</i> NaHCO <sub>3</sub> #2	3,506,956	3,471,033	2,881,652	2,593,260
	<i>P.tenuiflora</i> NaHCO <sub>3</sub> #3	2,360,628	2,339,598	2,029,696	1,765,696

**Table S3.** Primers used for qRT-PCR analysis.

<b>Primer Name</b>	<b>Sequence</b>
Put_1383 FW	CGTCGCCTTCATAGACATCA
Put_1383 RV	GGCACGATGAAGGTGGTACT
Put_4625 FW	GGGGATGATTTGTTACACACC
Put_4625 RV	CATCTGCAGGGTACCAATCC
Put_1357 FW	GTGGCCGTGGTGATACTCTT
Put_1357 RV	GAAAATGAACTGCGTCAGCA
Put_22802 FW	TCCAAATTATGAGGCACGCG
Put_22802 RV	TTGCAGCTGTGTTCTTGTCC
Put_2050 FW	TTGGCTGGAGAATTTGATCC
Put_2050 RV	CCAGAGAACCGAAGTGGGTA
Put_1973 FW	CGTCATGCACTACCTCATGC
Put_1973 RV	AGCCTGTTGTGATCAGTCGA
Put_11515 FW	TCGATGTGAATGATGCAGCG
Put_11515 RV	GCAGGCGTGAGAAAATGGTA