

Table S1. Functions identified in transcriptomic analysis of *Silene ciliata* plants for level 2 after Blast annotation, number of sequences obtained for each function and their corresponding percentages.

Function	Number of sequences	Percentage
cellular process	5520	68.8
metabolic process	4783	59.6
biological regulation	2370	29.5
response to stimulus	2199	27.4
regulation of biological process	2149	26.8
cellular component organization or biogenesis	1542	19.2
developmental process	1229	15.3
localization	1197	14.9
multicellular organismal process	1130	14.1
signaling	692	8.6
reproduction	624	7.8
reproductive process	621	7.7
negative regulation of biological process	586	7.3
positive regulation of biological process	544	6.8
multi-organism process	544	6.8
growth	253	3.2
immune system process	201	2.5
rhythmic process	73	0.9
cell proliferation	71	0.9
locomotion	38	0.5
biological adhesion	20	0.2
detoxification	16	0.2
behavior	11	0.1
carbon utilization	6	0.1
pigmentation	5	0.1
cell killing	3	0.0
nitrogen utilization	3	0.0
carbohydrate utilization	1	0.0
sulfur utilization	1	0.0

Table S2. Twenty-five more represented functions identified in transcriptomic analysis of *Silene ciliata* plants level 3 after Blast annotation for candidate SNPs with unusually high degree of allele frequency differentiation between elevations, number of sequences obtained for each function and their corresponding percentages.

Function	Number of sequences	Percentage
organic substance metabolic process	57	52.3
cellular metabolic process	54	49.5
primary metabolic process	52	47.7
nitrogen compound metabolic process	41	37.6
ion binding	39	35.8
heterocyclic compound binding	35	32.1
organic cyclic compound binding	35	32.1
biosynthetic process	32	29.4
regulation of biological process	29	26.6
regulation of cellular process	26	23.9
cellular component organization	21	19.3
anatomical structure development	21	19.3
cellular component organization	21	19.3
transferase activity	20	18.3
response to stress	19	17.4
multicellular organism development	19	17.4
establishment of localization	19	17.4
hydrolase activity	18	16.5
small molecule binding	18	16.5
small molecule metabolic process	18	16.5
cellular response to stimulus	17	15.6
oxidoreductase activity	16	14.7
response to abiotic stimulus	16	14.7
protein binding	14	12.8
response to chemical	14	12.8