

Supplementary Information Table 1. The 24 vascular plant species used in the survey.

Sample number	Group	Common name	Latin name	Material	RNA concentration/lane (ng/μl)
1	Pteridophytes	clubmoss	<i>Lycopodium sp.</i>	5-10 day seedlings	10.0
2		horsetail	<i>Equisetum sp.</i>	Young leaves	10.0
3		quillwort	<i>Isoetes sp.</i>	Young leaves	10.0
4		fern	<i>Cyrtomium sp.</i>	Young leaves	8.0
5		fern	<i>Adiantum sp.</i>	Young leaves	5.6
6	Gymnosperms (Conifers)	western red cedar	<i>Thuja plicata</i>	Young needle tips	2.1
7		monkey-puzzle tree	<i>Araucaria araucana</i>	Young needle tips	20
8		norway spruce	<i>Picea abies</i>	Young needle tips	20
9		eastern white pine	<i>Pinus strobus</i>	Young needle tips	10
10		white spruce	<i>Picea glauca</i>	Young needle tips	10
11		Douglas fir	<i>Pseudotsuga menziesii</i>	Young needle tips	20
12		lodgepole pine	<i>Pinus contorta</i>	Young needle tips	10
13		Ephedra	<i>Ephedra sp.</i>	Young leaves	7.8
14	Gymnosperms (Other)	cycad	<i>Cycas revoluta</i>	Young leaves	10
15		maidenhair tree	<i>Ginkgo biloba</i>	Young leaves	20
16		water lily	<i>Nymphaea caerulea</i>	Young leaves	10
17	Angiosperms (Monocots)	barley	<i>Hordeum vulgare</i>	5-10 day seedlings	10
18		maize	<i>Zea mays</i>	5-10 day seedlings	10
19		rice	<i>Oryza sativa</i>	Young leaves	10
20		lettuce	<i>Lactuca sativa</i>	5-10 day seedlings	10
21	Angiosperms (Eudicots)	pea	<i>Pisum sativum</i>	5-10 day seedlings	10
22		cauliflower	<i>Brassica oleracea</i>	Top layer of inflorescence	10
23		tobacco	<i>Nicotiana tabacum</i>	5-10 day seedlings	10

24	tomato	<i>Solanum lycopersicum</i>	Young leaves	6.7
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Supplementary Information Table 2. Total unique sequence counts correlating 5' (starting) and 3' (ending) nucleotide usage for the 21-nt sequence fraction of *P. concorta*. A bias towards starting with a U and ending with a nucleotide other than G was observed (bolded totals).

	3'				
	A	C	G	U	Total:
5' A	1,328	1,743	1,037	1,748	5,856
C	1,635	2,288	1,336	1,801	7,060
G	1,203	1,757	858	1,284	5,102
U	2,989	3,675	1,930	3,308	11,902
Total:	7,155	9,463	5,161	8,141	