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## Functional traits related to environmental divergence in combination with phylogenetic relationship of *Picea* species

### Supplementary Material

Table S1. The divergence time of species in this study

Nodes	Divergent time (Ma)	References
Node1	16	
Node2	0.287	Feng et al., 2018, unpublished
Node3	0.127	Bi et al., 2016
Node5	12.4	Sun et al., 2015
Node6	8	Feng et al., 2018
Node7	5.20	Li et al., 2013
Node8	2.09	Li et al., 2013

Table S2. Principal component analysis (PCA) of eight environmental variables collected from each species' habitat. Values are PC loadings

Principal components	1	2
Mean annual temperature	0.842	0.083
Maximum temperature of warmest month	-0.590	0.693
Minimum temperature of coldest month	0.884	-0.336
Temperature annual range	-0.853	0.503
Mean annual precipitation	0.918	0.294
Precipitation of wettest month	0.846	0.431
Precipitation of wettest quarter	0.891	0.347
Precipitation of driest quarter	0.132	0.917

Table S3 PC scores for nine spruces

	PC1	PC2
<i>P. crassifolia</i>	-1.442	-0.670
<i>P. asperata</i>	-0.348	-0.253
<i>P. meyeri</i>	-0.955	0.563
<i>P. koraiensis</i>	0.065	2.117
<i>P. wilsonii</i>	0.265	0.874
<i>P. spinulosa</i>	1.942	-0.277
<i>P. likiangensis</i> var. <i>likiangensis</i>	0.853	-0.746
<i>P. l.</i> var. <i>rubescens</i>	-0.536	-0.779
<i>P. l.</i> var. <i>linzhiensis</i>	0.156	-0.828