

# **Factors of Siberian stone pine ecological and geographical differentiation along latitudinal and altitudinal transects**

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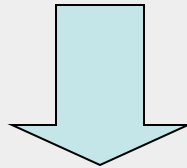
**Our goal was to find the main factors of species differentiation along it's vast natural habitat .**

# In our researches we found that

- There is genetic variability of shoot structure between latitudinal and altitudinal Siberian stone pine ecotypes
- Traits with genetic differentiation along transects are responsible for branching, shoot length and phenological development
- The variability have the same direction (related with heat sum) in both transects
- In latitudinal transect differences between ecotypes are more than between altitudinal ecotypes

# Main factors of Siberian Stone pine differentiation

- **Climate**: climatic conditions changes in the same directions in both transects
- **Photoperiodic regime**: day length changes only in latitudinal transect
- **Distances between populations**: in latitudinal transect - hundreds kilometers, in altitudinal transect - dozens kilometers.



Latitudinal ecotypes are more differentiated than altitudinal ones