

How is a Plant like a Snowflake?

Rachel Mitchell
rachelmm@uw.edu

School of Environmental and Forest Sciences

Is Every Plant The Same?

We often assumed that plants within a species are very similar to one another. As a result, scientists have ignored differences between individuals within a species (called *intraspecific variation*), and looked only at how species are different from one another (*interspecific variation*).



Variation in plant leaves for four populations of Hairy Cat's Ear (*Hypochaeris radicata*).

Why Does Variation Matter?

If a species exhibits a lot of variation, they may be able to colonize a wide variety of habitats and cope with changes in environmental conditions. Properly accounting for this variation may help with restoration efforts.

Every Plant is Unique!

I measured differences in plant traits in 10 populations of a common, weedy species (*H. radicata*). Like snowflakes, individual plants exhibit a great deal of variation within a species for all traits measured (up to a 45-fold difference).