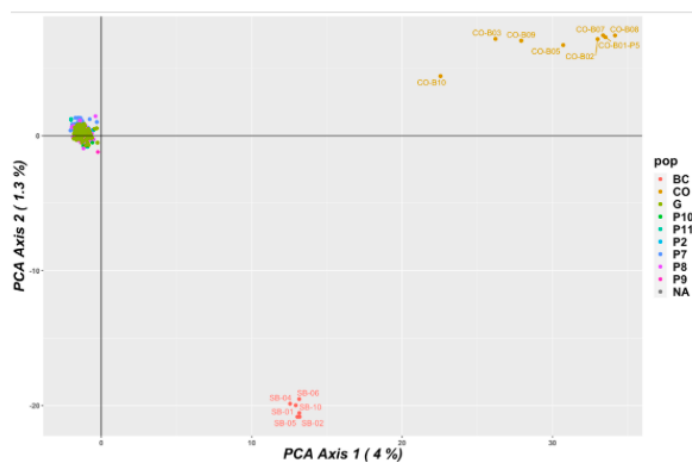


## Invitation to collaborate with important samples

**Project:** Possible intriguing genetic pattern of *Salix brachycarpa*

***Salix brachycarpa* preliminary status:** During an investigation primarily focused on the local endemic *Salix chlorolepis* (found on the serpentinised habitat of Mount Albert, Quebec, Canada) and the trans-continental *S. brachycarpa*, with whom it hybridizes, we found an intriguing pattern with the latter species. At that time, we were interested in characterizing the genetic signature of *S. brachycarpa* outside of the sympatric zone, and thanks to the help of botanists from western Canada and the US, we got samples from British Columbia and Colorado, besides those from Mount Albert. Genotyping of our samples resulted in 15308 SNP that were firstly characterised with a PCA (see figure).

So far, our analysis showed that *S. brachycarpa* from Mount Albert readily clusters with the local endemic *S. chlorolepis* but otherwise displays a genetic pattern that is distinct in the three areas from where we got samples. We now hypothesize that *S. brachycarpa* may acquire its local distinctiveness from its high propensity to hybridize with other local willows, inasmuch that “pure-bred” *S. brachycarpa* may in fact be quite a “rare” species.



**Figure.** Dispersal of three groups of *S. brachycarpa* (pink : British Columbia, bottom, gold : Colorado, upper right, Mt-Albert, other at the middle-left) in the plan of the two first axis of the principal components analysis.

### Invitation:

We are very interested in pursuing this investigation across the entire range of the species in North America. Therefore, we are seeking collaborators familiar with *Salix brachycarpa* that could help us to get samples from a larger array of sites from Canada and the United States. If you are willing to participate in this research (collecting 5-10 fresh leaves per sample), let us know by email ([luc\\_sirois@uqar.ca](mailto:luc_sirois@uqar.ca)) your complete postal address, so we can send you precise instructions and sampling material.

*Your help will greatly contribute to the study and the conservation of this puzzling, interesting and beautiful species.* Thank you very much,

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