

MAXIMIZING COMPETITIVE AND ADAPTIVE POTENTIAL OF NATIVE PLANT MATERIALS FOR REVEGETATION PROJECTS: LOCAL ECOTYPES VERSUS CULTIVARS

FY2010 Native Plant Material Accomplishments

This project involves a partnership between the USFS Northern Region and the University of Montana's College of Forestry and Conservation to investigate the benefits and tradeoffs of using local ecotypes under a variety of ecosystem conditions and applications. The research project was designed and initiated in 2009 - 2010 with field data collection occurring in FY11 - 12.

Research accomplishments during FY10 included:

- Held four meetings with UM scientists and Forest Service personnel to coordinate on project design and implementation.
- Finalized sampling design and methods for common garden and reciprocal transplant experiments.
- Conducted a literature review of local adaptation in plants based on studies involving common gardens and reciprocal transplants.
- Collected seeds of target species from the Kootenai and Bitterroot National Forests (western Montana); seed will be used for a local-adaptation reciprocal-transplant study that will be implemented in 2011.
- Began collecting input data for the creation of a local-adaptation trait-analysis model.

Year awarded: Initial award FY10

Project completion: 2013 (expected)

Total amount awarded: \$68,548
NFN3 Funding

Expenditures:

- \$2,191 other awarded funds
- \$6,979 UM matching funds

Remaining awarded funds: \$66,357

Partners/contractors/coop:

- Univ. of Montana, Missoula, MT

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Figure 1. Alexis Jones, dissertation student for adaptive potential study.



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