



Third Crop Options Native Plant and Seed Production



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Background:

Not that long ago, native plant communities such as prairies, savannas, woodlands, and wetlands covered Minnesota's landscape. These diverse plant communities supported a diverse mix of birds, wildlife, and beneficial species such as butterflies (the number two pollinator after bees). Agricultural activities and development have greatly reduced these communities and even pushed some, like the native prairie, to the brink of extinction.

Besides their aesthetics, native plants on the landscape result in many other benefits. Once established, native plants require little maintenance or inputs as they are the best adapted species to local climate and soil conditions. Perennial natives often have extensive root systems resulting in increased water infiltration and the reduction or elimination of erosion. When establishment and maintenance costs are calculated over time, native plantings usually cost less than non-native plantings. Texas, for example, saves an estimated \$8 million a year in maintenance costs due to use of native prairie species in roadside plantings.

Definitions vary as to what makes a species native, but generally a plant located within 200 miles or less of its genetic origin is considered "native". Depending on the year and species, demand for native seed and local ecotypes often exceeds supply and as a result purchasers must either change their planting mix or use non-native seed. For those willing to put forth the time and effort needed to produce and market native seed and plants, native seed and plant production can be a viable and profitable 3rd Crop option.

Uses:

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| <ul style="list-style-type: none">• Landscaping – urban and rural• Decoration/ Floral Arrangements• Medicinal use• Essential Oil Production/Aromatherapy• Conservation plantings (e.g. CREP, CRP, RIM)• Prairie restoration• Wetland restoration | <ul style="list-style-type: none">• Wildlife areas• Roadside plantings<ul style="list-style-type: none">○ Natives preferred over non-natives○ Prefer ecotype from within 200 miles or less of its genetic origin• Edibles (Some are very poisonous, so know plant identification!) |
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Production and Management Considerations:

Producing native seed and plants for sale requires timely labor and patience. It generally takes at least 3 years (up to 10) to produce a saleable quantity of seed. Once plants are established, however, they can live for 50 to 100 years or more. Production can vary greatly from one year to the next without a change in management tactics. Trying a diverse mix of species initially to find out what grows best in your location is a good strategy although learning how to successfully produce a species others have a hard time with can yield successful results.

Native seed and plant producers use seed collected from the wild (and sell this or plant it to produce more) or use purchased seed to produce seed for sale. Either way, knowing the genetic origin of your seed is important. Permission from the landowner is required if you are collecting seed or plants from private lands. Collecting seed or plants from public lands requires a permit from the agency that controls the land and is not allowed in all areas.

If you plant seed or seedlings, management considerations such as weed control and water are critical initially. Native seeds often need to go through a treatment to break dormancy (e.g. stratification, scarification, cold treatment) and they may not come up the first year after planting. Mowing and/or periodic prescribed burns are also recommended.

Anyone selling seed in Minnesota must acquire a permit to do so from the Minnesota Department of Agriculture (651-297-2200) and adhere to regulations, such as truth in labeling laws (e.g. listing germination percentage), regarding the sale of seed. Germination testing should be done at a lab familiar with native seeds since standard germination procedures can yield poor results.

The Minnesota Crop Improvement Association (MCIA: 800-510-6242), a non-profit organization, certifies crop seeds in Minnesota. Voluntary applicants can apply to have their seed certified into one of three classifications depending on the level of selection that has taken place. “Yellow-tagged” or source identified seed, for example, is from areas where no selection or testing of the parent population has been conducted.

Profit Potential:

Profit potential in native seed and plant production can vary greatly depending on species, supply, demand, ease of production, and whether or not the seed is certified. Retail prices vary greatly among species (e.g. on a pure live seed basis through a local provider, Black Eyed Susan sells for \$3/oz while Prairie Phlox sells for \$50/oz). Species selling for higher prices are often difficult to produce. Production per acre varies greatly among species as well as by year. Producers can generally expect to receive from 20 to 50% of the retail price for their seed depending on a number of factors including supply, demand, and quality.

Profit potential per acre can be significantly greater than with corn or soybeans, but labor requirements including timeliness must be considered. Potential market outlets should be identified or established prior to incurring extensive input costs.

Market Opportunities and Development:

It was concluded at the National Native Seed Production Conference in 2001 that demand for native wildflower and grass seed far exceeds supply and that markets exist in the federal, state, and private sectors. Supply is often the factor limiting their use. Local ecotypes are preferred but not always available and users in Minnesota may end up buying from suppliers as far away as Texas.

Although trends indicate demand exceeding supply in the foreseeable future, both demand and supply can greatly vary from year to year. Niche markets could become quickly saturated if production significantly increases. “Yellow-tagged” seed is a market opportunity as not all native seed meets these criteria, but this process increases the cost of production. It is recommended to line up markets before significant production investments are made.

References and Resources:

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3. Greener Roadsides. U.S. Dept. of Transportation Federal Highway Administration.
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4. MN Crop Improvement Association, 1900 Hendon Ave., St. Paul, MN 55108. 1-800-510-6242. <http://www.mncia.org/>
5. MN Dept. of Agriculture, 90 West Plato Blvd., St. Paul, MN 55107. 1-651-297-2200.
<http://www.mda.state.mn.us/appd/weeds/fmsmsrp.html>
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