New Opportunity

Following factors have created opportunities to grow oilseeds in New Mexico and surrounding states.

- Oilseed meal, which is imported from far away places, is the main source of protein for the large dairy and beef cattle industry present in Eastern New Mexico and West Texas.
- New Mexico state mandates all vehicles to run on B5 (5% biofuel) or higher by 2012 (government vehicles from 2010).
- Less water is needed for most oilseeds to maximize productivity compared to traditional cereals.
- Some of the oilseed crops have very strong root system to scavenge the soil for resources.
- Rotational benefits of growing oilseeds include better weed, insect and disease management.
- Biodiesel production contributes to rural development and job creation.
- Better lubricity of biodiesel is gaining more importance with the ultra-low sulfur fuels.

<table>
<thead>
<tr>
<th>Potential Crops</th>
<th>Pro</th>
<th>Cons</th>
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<tbody>
<tr>
<td>Canola</td>
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<tr>
<td>Pros: Both winter and spring types available. Herbicide tolerance technology makes it a good rotational crop to control grass weeds. Relatively short duration crop, high oil content, superior oil for biodiesel, no extra equipments needed, good quality meal.</td>
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<td>Cons: Shattering and volunteer problems, susceptible to heat stress, potential insect problem, market is not developed.</td>
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<tr>
<td>Mustard</td>
<td>Related to canola, only spring types, relatively short duration crop, better heat stress tolerance, no extra equipments needed.</td>
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<td>no-herbicide tolerance, lower yield potential, insect problems, market is not developed.</td>
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<tr>
<td>Safflower</td>
<td>hardly crop, good heat and drought tolerance, less insect pests, not good for humid conditions, good quality oil, non-shattering, no extra equipments needed.</td>
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<tr>
<td></td>
<td>more research needed, no-herbicide tolerance, market limited.</td>
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<tr>
<td>Sunflower</td>
<td>well adapted to the region, good heat and drought tolerance, good quality oil, non-shattering, no extra equipments needed.</td>
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<td></td>
<td>Potential insect and bird problems, exhaustive crop.</td>
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<tr>
<td>Camelina</td>
<td>Low inputs, long planting window, oil very good for jet fuel.</td>
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<tr>
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<td>more research needed, no-herbicide tolerance, shattering problem, small seed leading to harvest and planting problem, market is not developed.</td>
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</tbody>
</table>

NMSU research contributed for developing State Plan for Biofuel Development. In spite of strong cereal market and lower gas prices, a few farmers have been growing oilseed crops during the last two years and that is attracting many more farmers. Local students and public are exposed to biodiesel in different extension and outreach activities. A few small scale industries have developed in the high plains region and many more are keen to develop market based on farmer’s interest.

Project Impact

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Live, Learn and Thrive

Oilseeds for Biodiesel
Research and Extension

Funding and Collaborations

**Funding**
- National Sunflower Association
- USDA-NIFA-Alternate Crops (Multiple Grants)
- Sustainable Oils
- South Central SunGrants

**University Collaborations**
- Texas AgriLife Extension
- Texas Tech University
- Kansas State University

**NMSU Collaborators**
- Dr. Mick O’Neill, ASC-Farmington
- Dr. Robert Flynn, ASC-Artesia

Extension Programming

**Educational Presentations**
- Field Days/Demonstrations
- Farmers/Community Leaders Visit
- Institutional Training
- Regional/National Conferences
- Special Oilseed Workshops

**Applied Research**
- Agronomic Trials: Oilseed Crops Management
- Crop/Variety Development
- Crop Adaptability Studies

**Outreach**
- Publications, Presentations
- TV and News Releases
- Website Development

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