

Designing an Effective Crop Rotation

By Rob Myers, Executive Director

I often get calls from farmers asking how they can diversify their existing crop rotation. Some of the questions I ask in return are obvious ones about soil type, existing equipment, and labor availability. I find most farmers would prefer to have a rotation that spreads out their labor so that not every field has been planted or harvested in a narrow time frame. Fortunately, there are a number of alternative crops that can be planted later, or harvested earlier, than existing crops. I think it's also good to consider whether the soil in a field would benefit from another legume in the rotation, or whether the location tends to be dry. A crop that fits many of these rotations needs sunflowers, both due to its drought tolerance and fast maturity. Also, adding sunflowers or another crop to the rotation can benefit the existing crops in the rotation by reducing pressures from certain insects, diseases, or nematodes, usually leading to higher corn or soybean yields.

Upcoming Sunflower Meetings

Free registration to all meetings!

The Jefferson Institute in partnership with the University of Missouri Extension Outreach will be hosting several sunflower information meetings. For more information, please contact the Jefferson Institute at 573-449-3518 or at info@jeffersoninstitute.org. We hope you'll join us!

February 26, 2004 - Butler, MO

Flaming Lantern Restaurant - 10:00 a.m.

March 3, 2004 - Dexter, MO

Hickory House Restaurant - 6:30 a.m.

March 3, 2004 - Charleston, MO

Mississippi County Public Library - 9:00 a.m.

March 3, 2004 - Jackson, MO

Woodard's Restaurant - 12:00 p.m.

Farmer's Corner: Mel Gerber, Versailles, MO

By Cortney Malter, Communications Specialist

Several years ago, the Jefferson Institute introduced sunflowers to Mel Gerber as a planting option. At the time, Mel wanted to grow more wheat to improve soil moisture. Mel found that sunflowers would provide a good option for his crop rotation and began raising sunflowers for the birdseed market.

According to Mel, "My number one reason for growing sunflowers is to enhance my crop rotations. They have really spread out my workload, too." He says that sunflowers are a good crop for different planting dates. Mel has planted as late as the end of July. He has also found that his sunflowers have proven more profitable than soybeans in the last few years, another key motivator.

Mel wholesales his seed to Customix, located in Marshfield, MO, on an open market. He has not sold on contract and claims that it has not been a problem to sell his seed.

It has not been a completely easy road to add sunflowers to his rotation and he still has a few things to iron out. Mel explained that he has had a hard time getting a good stand and pests have been an issue. Regardless, Mel is planning on growing sunflowers for the fourth time this year and says he has some ideas on how to establish the plants.

Mel is currently producing wheat, corn, soybeans and sunflowers on his farm and says he might add canola this year. Mel produces 150 acres of sunflowers on his 2,500 acre farm in western Missouri.

Mel Gerber looks to sunflowers as an option for his crop rotation.



More SunButter™ Products!

You may recall that SunButter™, a new allergy-free alternative to peanut butter, was featured in our 2003 “Winter Issue” newsletter. A year later, SunButter, a product of SunGold Foods, has expanded its product line. Honey Crunch recently became the newest flavor addition.

SunButter is similar to the traditional sandwich spread, but made from sunflower kernels. The Honey Crunch flavored SunButter is made with crunchy honey-roasted kernels.

Though the primary aim for the products was schools, the products have shown retail market growth as well. The first retail snack product using SunButter as an ingredient has been launched: Keystone Foods is making puffed corn curls drenched in SunButter, called “SunSations”. SunSations are being marketed on the east coast, however the Roberts American Gourmet Company will market the identical snack product in the Midwest under the name of “Sunflower Butter Tings”.



For more information, visit www.sunbutter.com.

New Sunflower Varieties

Each year, the major plant breeding companies come out with new sunflower hybrids, with the majority aimed at the oilseed (and birdseed) market. This year, the biggest area of activity is with herbicide-resistant sunflowers. Herbicide-resistant sunflower varieties are called Clearfield varieties, and were developed through conventional plant breeding (they are NOT considered GMO hybrids). Clearfield varieties can be sprayed with Beyond herbicide, which provides post-emerge control of both broadleaf and grass weeds. This is an alternative to using a pre-plant combination such as Spartan/Prowl to get broad-spectrum control. Some growers have been successful growing sunflowers after wheat by simply using glyphosate as a pre-plant burndown. It is also possible to grow sunflowers organically by using tillage for weed control.



SARE Now Taking Producer Grant Applications for 2004

The North Central Region (NCR) SARE program of the USDA has allocated about \$400,000 for the 2004 Producer Grant Program. Competitive grants of up to \$6,000 are available for individual farmers and ranchers, and grants up to \$18,000 are available for groups (three or more independent and separate operations) of farmers and ranchers interested in exploring sustainable agriculture. Duration of grants will be one year for individual grants and two years for group grants.

Producers are invited to submit proposals that test, evaluate, and adapt sustainable agriculture practices for their operations; conduct learning circles, educational events, field days or demonstrations to further disseminate information to producers; develop new technologies; or create or modify equipment. Applications must identify specific problems and potential solutions to those problems. Projects that include a youth component are welcome and encouraged.

During the first 12 years of the Producer Grant Program, 495 grants were awarded to producers studying a variety of topics, such as rotational grazing, livestock systems, crop production systems, urban and rural waste management, weed control, alternative uses for CRP land, biological weed and pest control, organic farming, marketing, quality of life, water quality, and soil conservation.

Applications must be received in the NCR-SARE office by 4:30 p.m. (CST) on March 24, 2004. For more information on the application process or to obtain an application, please contact the NCR-SARE office at 402-472-7081 or the Jefferson Institute at 573-449-3518. You may also view the application online at: <http://www.sare.org/ncrsare/Producer/2004%20Producer%20RFP.pdf>.

The grant period will begin autumn 2004 when funds become available. Completion deadline for individual grants will be December 1, 2005. Group grants, with a duration of two years, will have a completion deadline of December 1, 2006.

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Sunflower Variety Summary

Most of the major plant breeding companies have sunflower varieties available. All current commercial sunflower varieties are hybrids, so new seed must be purchased for planting each year (rather than saving harvested seed). The oilseed (black seeded) type of sunflowers is recommended for planting in Missouri, since current birdseed buyers prefer the oilseed type. Some oilseed varieties have an improved type of seed oil, and are called “NuSun” varieties, but Missouri birdseed buyers do not pay a premium for NuSun. The newest development is herbicide-resistant sunflowers called “Clearfield” varieties, which are indicated with a CL in the table below. Over 30 varieties of sunflowers have been tested in Missouri in the last few years. The best yielding ones are shown in the table below. Additional variety testing will be conducted in 2004. Although most varieties are similar in height and maturity, it pays to pick a better yielding variety.

<u>Variety</u>	Central May 19 <u>2003</u>	Southeast May <u>2003</u>	Southeast July 15 <u>2001</u>	Central June 28 <u>2001</u>	Central May 31 <u>2000</u>	Central July 10 <u>2000</u>
	<i>Yield in pounds per acre</i>					
Monsanto 3830	2287	2456	—	—	—	—
Monsanto DK 3880 CL	2130	2129	—	—	—	—
Monsanto DK 3900	2650	2662	1612	1995	2701	1454
Mycogen (Cargill) 260	—	—	—	—	2548	1235
Mycogen (Cargill) 270	2426	2432	1786	2109	2875	1653
Mycogen 8377 NS	2910	1984	2134	2258	—	—
Mycogen 8N429 CL	2565	2141	—	—	—	—
Mycogen 8488	—	—	2178	1765	2526	1471
Pioneer 63A70	—	—	2134	1754	2770	1813
Pioneer 63M91	—	—	1263	1719	2635	1508
Triumph 636	2838	2456	1960	1651	—	—
Triumph 645	2698	2420	—	—	—	—
Triumph 652	—	—	—	—	3049	1858
Triumph 665	2596	2371	1568	1800	—	—
Triumph 667	2154	2360	—	—	—	—

Notes

1. These replicated yield trial results are from the University of Missouri variety test program, with funding support from the Jefferson Institute.
2. “Central” refers to test results from Bradford Research & Extension Center located near Columbia, MO, and “South-east” refers to the Delta Research Center near Portageville, MO.

Calendar of Events

February 4 - 5, 2004

Show-Me Ag Classic
Columbia, MO

February 26, 2004

Sunflower Information Meeting
Butler, MO

February 13 - 15, 2004

MO Farm Bureau Young Farmers &
Ranchers Leadership Conference
Osage Beach, MO

February 21 - 23, 2004

Western Farm Show
Kansas City, MO

March 3, 2004

Sunflower Information Meeting
Dexter, MO

March 3, 2004

Sunflower Information Meeting
Charleston, MO

March 3, 2004

Sunflower Information Meeting
Jackson, MO

March 14 - 20, 2004

National Agriculture Week



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The Thomas Jefferson Agricultural Institute is a 501(c)3 non-profit education and research center based in Columbia, MO. For more information, contact us at (573) 449-3518 or by email at: info@jeffersoninstitute.org.



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Special Sunflower Edition!

