Farmer Rancher Grant Program

Final Report Form

PROJECT IDENTIFICATION

- Name: Ann Thewis
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- City, State, Zip Code: Cochrane, Wisconsin 54622
- Phone: 608-323-7035 Website:
- Project Title: Thewis Ridge Currant Company, LLC - Interaction Between Yields and Mulch
- Project Number: FNC 09-768
- Project Duration: March 2010 - March 2012
- Date of Report: March 20, 2012

PROJECT BACKGROUND

We are growing 2.2 acres of black currants. We have two different varieties and compared different types of mulch with yield. We had our first harvest in July 2011.

Our family farm has followed many conservation practices, including: contour strips, rotation of crops, dams to control erosion, planting of wind breaks, and use of good tillage practices. These practices began with Gary's father in the early 1950s and have continued with the next three generations.

PROJECT DESCRIPTION

GOAL: To compare four mulches (wood shavings, fabric cloths, grass clippings, and black plastic) for black currant on a highly erodible area on our farm to evaluate yield, weed control, disease presence, and soil loss.

PROCESS

We chose two acres of tillable soil in a highly erodible area of land on our farm to plant 2.2 acres of black currants. Todd Mau of the Buffalo County Natural Resources Conservation Service (NRCS) laid out the field in contour strips to reduce erosion. Two different varieties were planted and evaluated for yield and quality. Yields were determined by picking fruit from a sample of plants from each of the four different mulches. They were weighed and recorded.

The different mulches (wood shavings, fabric cloth, grass clippings, and black plastic) were evaluated. Results showed that the black plastic and fabric cloth controlled weeds best. The plants showing the best yields were mulched with the fabric cloth.

The two varieties of bushes, Willoughby and Titania, were chosen for their quality of juice for making wines and juice for jams. [see Attachments P and Q]

PEOPLE

UW Extension:

- Carl Dulay: Assisted in writing the grant and provided ongoing help and advice throughout the project; Helped stake out and measure the yields from the different varieties and different mulches
- Rebecca Harbut, Small Fruit Specialist: Presented information at both Field Days
- Ruth Genger, UW Madison Dept. of Plant Pathology: Diagnosed plant diseases in our crop
- Brian Hudelson, UW Madison Dept. of Plant Pathology: Completed analysis of crop samples

NRCS - Todd Mau: Helped with staking out the rows on contour to prevent erosion

Bruce Cornish, manager of Garden Valley Cooperative: Advised on the use of Round-Up before planting

Bob Schmidtkneckt: Assisted in a plan for the yearly spring fertilization of the plants

Danzinger Winery: Supported the project with advice and purchased the 1st day's harvest in 2011. They donated the wine for the Field Day in August 2011. The black currant wine was made from our fruit.

Gary Pronschinske: A member of the 2Cycle Engine Club organized a stop in September 2011 with the 50 club members on old and new tractors. Gary Thewis gave a history of the farm and the black currants. Some visitors expressed interest in growing the fruit.

RESULTS

We found that plastic and fabric cloth were the best materials to keep weeds in check. At first harvest the yields for these two mulches was higher. This is not a true test as the plants do not reach full maturity until year four or five. The black currants that showed the most new growth and general good health were in the rows containing the plastic and cloth fabric mulches.

VARIETY	MULCH TYPE	YIELD - POUNDS/ACRE
Willoughby	Fabric	1,307
Willoughby	Grass Clippings	828
Willoughby	Wood Chips	1,055
Willoughby	Silo Plastic	827
AVERAGE YIELD		**1,004**
Titania	Grass Clippings	1,176
Titania	Wood Chips	1,655
Titania	Fabric	1,292
AVERAGE YIELD		**1,374**

[see Attachment H]

All rows showed good general health and growth. Black currants are very hardy plants. We hope this early spring will prove that point. The risk of frost into April and May is very high.

While yields from the wood chip mulch look impressive, we found there to be a significant issue. Rows with wood chips and grass clippings were high maintenance because of the constant need to keep adding bark and grass to the rows. There was much more competition with weeds in these rows as well. We had a good supply of wood chips when we first started but have found that the supply is becoming harder to come by. It is also much more expensive; ranging from "free" to $1200 per semi load. This was not something we could have forseen. Mulch depth for the wood chips and grass seemed to be adequate at 8-10 inches.

I would use the cloth fabric or plastic as my first choice when we plant again in April, 2012. I will be planting only the Titania variety of black currants this year due to the better yield and the variety's upright growth.

We have had no problems with soil erosion. Planting on contour and the use of the mulches have kept erosion to a minimum even with the very heavy rains in the fall of 2010.

Ruth Genger, UW Madison plant pathologist, did an extensive check of our plants after the field day in August, 2011. She took some samples of branches that looked like there many have been some disease or insect damage on them. The results were not conclusive, but it definitely will be something we will be keeping an eye on in the future.

[see Attachment K and O]

We are looking forward to our plants growing and maturing in the years to come.

DISCUSSION

We learned that taking a risk on planting a little known fruit helped diversify and add to the value of our farm. The project was labor intensive. The planting, weeding, and harvesting were (and will continue to be) hard work. Labor will be one of the biggest issues.

We did find that even though many, many hours are involved the family rewards are great.

Fabric was the best mulch, plastic also worked well. Wood chips work well if you have 8-10 inches to apply.

Currants have a high disease resistance so this has not been an issue to this point. Deer have not been an issue as they do not like the odor from the leaves. Thus far rabbits and mice have also not been an issue.

Mark and Kristie Gering of Chippewa Falls, Wisconsin attended our 1st Field Day in August of 2010. They have since gone on to plant several thousand black currants on their farm.

PROJECT IMPACTS

The economic impact is unknown at this point as we are not yet at maximum production levels. These plants were only planted 2 years ago.

Black currants are an environmentally friendly crop. They are a perennial with low fertilizer requirements and high disease resistance.

OUTREACH

- August 2010 - Field Day: 50 people in attendance [see Attachments A and I]
- October 2010 - Arcadia Historical Society County Tour: Approximately 35 people stopped on this self-guided tour around the Glencoe and Waumandee area. [see Attachment B1and B2]
- March 2011 - Regional Small Fruit Workshop - 85 people registered [see Attachments C and D]
- August 2011 - Field Day: 50 people in attendance; Agriculture teacher from Mondovi and brought four students [see Attachments E, F, J]
- September 2011 - 2Cycle Engine Club visit: 50 members participated [see Attachment G, Trempealeau County Times, Sept. 8, 2011]
- December 2011 - Fruit update for Western District Ag Extension Agents
- Participating in UW-Extension Small Fruits Monitoring and Research Project in 2012 and 2013. An electronic newsletter will be developed using these results.
- Creation of brochure “Why Black Currants?” [see Attachment L1 and L2]
- News article “Preserving Wisconsin’s Heritage” [see Attachment M1 and M2, La Crosse Tribune, Farm Outlook supplement, Fall 2010]
- Great River Road Wine Trail [see Attachment N]