MINUTES

MONTANA SENATE
51st LEGISLATURE - REGULAR SESSION

COMMITTEE ON AGRICULTURE

Call to Order: By Chairman Tom Beck, on April 7, 1989, at 12:30 P.M.

ROLL CALL

Members Present: Senator Hubert Abrams, Senator Gary Aklestad, Senator Esther Bengtson, Senator Gerry Devlin, Senator Jack Galt, Senator Jergeson, Senator Gene Thayer, Senator Bob Williams, Chairman Tom Beck

Members Excused: None

Members Absent: None

Staff Present: Doug Sternberg, Legislative Council

Announcements/Discussion: None

HEARING ON HOUSE BILL 398

Presentation and Opening Statement by Sponsor:
Representative Vernon Westlake, House District 76, stated, "This bill is a request by the certified potato seed growers association for an appropriation of $160,000 from the renewable resource development fund. The Resource Development Fund has $1.1 million outstanding bonds projected for the upcoming biennium. There is a requirement in it for a debt service of about $230. That leaves a balance of about $870 million in the fund for this kind of a request. I also want to acknowledge that Doug (Sternberg) was the gentleman who drew up the bill.

Now the only problem that we see in this thing at all and it isn't a problem because Frances did quite a bit of research for us when it was down in the House Appropriations. In fact, you will notice that on the bill there has been an addition of language on lines 10, 11, 12, 13 on page 2. This was a requirement by the law firm that examines all of the bonding powers and outstanding bonds.

Even though there is surplus funds available in this account, this still has to be contingent upon that

particular condition, so we agreed to that. With that, we feel like that we have a very good possibility of the money being available.

I just want to make a short explanation; this is not general fund money. This money is in existence or will be before the biennial is over...The funds in this request are to provide additional facilities in the plant culture center at Montana State University to accelerate the capacity to produce certified virus-free potato seed.

I believe that this is a great opportunity for the legislature to support a project to bring many new dollars into Montana economy. The demand for Montana certified virus-free seed is practically unlimited. The problem is that growers are limited by the existing process of producing the foundation seed needed to raise certified virus-free potato seed.

I think that we have the answer to this limiting factor with us today...Dr. Sun, who will explain utilizing the greenhouse facility at MSU. Many of us have had the privilege of touring the greenhouse; I am convinced that this project could take full advantage of the existing technical capabilities at the University. This project would definitely increase economic growth in a private sector of this state. I have asked Dr. Sun and several members of the Certified Seed Growers Association to testify today. They are better qualified than I to provide the facts in regard to this research project."

List of Testifying Proponents and What Group They Represent:

Mike Sun representing Montana State University
Jack Lake representing Lake Farms
John Venhizen representing Montana Potato Improvement Association
Susan Lake representing Lake Farms
John N. Schutter representing Schutter Seed Farm, Inc.

List of Testifying Opponents and What Group They Represent:

None

Testimony:
Proponents:

Mike Sun-See exhibit 2. Mr. Sun used a slide show for his testimony.

Jack Lake did not testify. He handed in written testimony.

John Venhizen did not testify. He handed in written testimony.

Susan Lake did not testify. She handed in written testimony.

John Schutter did not testify. He handed in written testimony.

Questions From Committee Members: Senator Jergeson-"Senator Story talked to me about this funding process, but it doesn't appear that this is coming out of the general fund...Possibly if this bill passes it could mean that it would go to the bottom of the list...We have to do some things down in Finance and Claims to get the some 400 and some dollars, and we did this morning, and we had to go to a different method."

Closing by Sponsor: Representative Westlake closed

The hearing on HB 398 was closed. Executive action on HB 398 will be taken at a later date.

ADJOURNMENT

Adjournment At: 1:00 P.M.

Tom Beck

TOM BECK, Chairman

TB/jj

ROLL CALL

AGRICULTURE COMMITTEE

DATE 4/7/89

51st LEGISLATIVE SESSION 1989

NAME	PRESENT	ABSENT	EXCUSED
SENATOR HUBERT ABRAMS	✓		
SENATOR GARY AKLESTAD	✓		
SENATOR ESTHER BENGTSON	✓		
SENATOR GERRY DEVLIN	✓		
SENATOR JACK GALT	✓		
SENATOR GREG JERGESON	✓		
SENATOR GENE THAYER	✓		
SENATOR BOB WILLIAMS	✓		
SENATOR TOM BECK	✓		

Each day attach to minutes.

EX 1
DATE 4/7/89
BILL NO. HB 398

The Big Sky Country

MONTANA HOUSE OF REPRESENTATIVES

REPRESENTATIVE VERNON L. WESTLAKE
HOUSE DISTRICT 76
HOUSE ADDRESS:
CAPITOL STATION
BOX 122
HELENA, MONTANA 59620

COMMITTEES:
AGRICULTURE LIVESTOCK & IRRIGATION
HIGHWAYS & TRANSPORTATION
STATE ADMINISTRATION

APRIL 6, 1989

TESTIMONY

SENATE AGRICULTURE COMMITTEE:

SENATOR TOM BECK - CHAIRMAN
SENATOR GERRY DEVLIN - VICE-CHAIRMAN

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE.

I AM VERNON WESTLAKE, REPRESENTATIVE HOUSE DISTRICT #76, IN GALLATIN COUNTY.

I AM HERE TODAY FOR CONSIDERATION OF HOUSE BILL 398. THIS BILL IS A REQUEST BY THE CERTIFIED POTATO SEED GROWERS ASSOCIATION FOR AN APPROPRIATION OF $160,000 FROM THE RENEWABLE RESOURCE DEVELOPMENT BOND FUND. THE FUNDS ARE TO PROVIDE ADDITIONAL FACILITIES IN THE PLANT CULTURE CENTER AT MONTANA STATE UNIVERSITY TO ACCELERATE THE CAPABILITY TO PRODUCE CERTIFIED VIRUS-FREE POTATO SEED.

I BELIEVE THIS IS A GREAT OPPORTUNITY FOR THE LEGISLATURE TO SUPPORT A PROJECT TO BRING MANY NEW DOLLARS INTO MONTANA'S ECONOMY. THE DEMAND FOR MONTANA CERTIFIED VIRUS-FREE SEED IS

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PRACTICALLY UNLIMITED. THE PROBLEM IS, GROWERS ARE LIMITED BY THE EXISTING PROCESS OF PRODUCING THE FOUNDATION SEED NEEDED TO RAISE CERTIFIED VIRUS-FREE SEED.

WE HAVE THE ANSWER TO THIS LIMITING FACTOR WITH US TODAY: DR. SUN, TO EXPLAIN UTILIZING THE GREEN HOUSE FACILITY AT MSU. MANY OF US HAD THE PRIVILEGE OF TOURING THE GREEN HOUSE AND I AM CONVINCED THIS PROJECT COULD TAKE FULL ADVANTAGE OF THE EXISTING TECHNICAL CAPABILITIES AT THE UNIVERSITY THAT WOULD DEFINITELY INCREASE ECONOMIC GROWTH IN A PRIVATE SECTOR OF MONTANA.

I HAVE ASKED DR. SUN AND SEVERAL MEMBERS OF THE CERTIFIED SEED GROWERS ASSOCIATION TO TESTIFY TODAY. THEY ARE BETTER QUALIFIED THAN I TO PROVIDE THE FACTS IN REGARD TO THIS RESEARCH PROJECT. WITH THE CHAIRMAN'S PERMISSION, MAY THESE PEOPLE PRESENT THEIR TESTIMONY.

THANK YOU, MR. CHAIRMAN. I WILL TRY TO ANSWER QUESTIONS AND MAY I RESERVE THE RIGHT TO CLOSE.

VERNON WESTLAKE, REPRESENTATIVE

VW/EB

HB 398

Research Grant Proposal to the Montana State Legislature

EX 2
DATE 4/7/89
BILL NO. HB 398

APPLICATION OF BIOTECHNOLOGY TO THE PRODUCTION OF SEED POTATOES AND OTHER AGRICULTURAL COMMODITIES

Objective

To set up a system for applying genetic engineering technology to agricultural production.

Introduction

Genetic engineering technology (GET) is injecting a new knowledge into the agricultural sciences. GET alters genes by rearranging genes and/or introducing foreign genes to achieve desired characteristics with the ultimate goal of creating a perfect plant.

Foreign genes can come from any organisms and can even be man-made. Very significantly, these genes express similar functions in different plant species. For example, the gene resistant to bacteria isolated from the chinese moth showed the same resistance to bacteria in tomatoes and potatoes. Man-made genes such as the one resistant to potato virus Y also express the same function in tomatoes and potatoes. Genetic engineering technology has broken through the boundary of traditional in-species breeding and is creating unprecedented and tremendous ways for improving the quality of agricultural commodities.

Since Montana is an agricultural state, application of GET to agricultural production becomes very attractive and, perhaps, the most important venture needed to be pursued.

To be successful in applying GET to agricultural production requires four elements: (1) the ability to make genes and/or find sources of genes; (2) the ability to insert the desired genes into the target plants; (3) the ability to increase rapidly the gene-altered plants to supply markets, and (4) dedicated producers who are willing to invest and have the necessary working knowledge.

The Potato Laboratory of Montana State University and Montana seed potato industry together have the four elements needed to apply GET to seed potato production. Currently 3 different genes are being ~~tested~~ tried to transform to Montana seed potatoes:

1. a gene resistant to cold which may increase potato and other crop resistance to cold around 26°F;

2. a gene resistant to bacteria and fungus;

3. a gene that will produce high protein content.

These research work have been funded by Montana seed potato growers. However, the funding is limited and the research remains in a small scale. To apply these work to actual seed potato production, more work and more fund are needed.

The present grant proposal requests for $160,000. The fund will be used to

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purchase needed equipments, to built a tissue culture room, and hire a lab technician. It is the goal of this research that the results can not only be used to Montana seed potato production but also to be applied to the production of other agricultural commodities.

Research Approaches:

1. To Set Up A Gene Receiving Center: Making genes is the most difficult and the most expensive part of genetic the engineering work. Fortunately, many university and many private companies are doing it. These genes are often available for the public. It can be advantageous to us if we can built a gene receiving center to accept genes of our needs. To do it, we need to purchase an incubator, a low temperature freezer and a freeze drying machine.

2. To Establish A System To Do Gene Transformation Work: Once we receive needed genes, we can increase them and transform them into target plants.

3. To Test The Performance Of The Transformed Plants: This can be done in the greenhouse of the Plant Growth Center, MSU. The said greenhouses meet the Federal requirements for testing gene altered plants.

4. To Build A Tissue Culture Room For Massive Increase Of The Transformed Plants: Tissue culture method is a most widely used to increase disease-free stock for commercial purpose, and it is needed to rapidly increase the gene-altered plants to supply the producers and the markets.

5. To Educate The Growers To grow The Gene Altered Plants.

Proposed Budgets

Year One:

1. One tissue culture room	$55,000
2. Chemicals	$10,000
3. Equipments	$15,000
4. One technician or one post-doctor (salary and benefits)	$25,000
Sub-total :	$105,000

Year Two:

1. Equipments	$20,000
2. Chemicals	$10,000
3. Salary for a technician or a post-doctor	$25,000
Sub-total :	$55,000

Grand -total for two years: $160,000

SENATE AGRICULTURE
EXHIBIT NO. 3
DATE 4/7/89
BILL NO. HB 398

Mr. Chairman and Members of the Committee;

My name is John Venhuizen. I am a potato grower in the Manhattan area and I am currently the President of the Montana Potato Improvement Association.

The seed potato industry generates 15 to 20 million dollars annually, most of which comes from out of state. Because our market is out of state we have a freight disadvantage for our product and also face protectionism from other state programs. Therefore, it is mandatory for our industry that our product remain at the forefront in terms of quality. We have to have a better product than our competitors if we are to keep our industry intact. At the present time Montana seed potatoes are being sold into Washington, Oregon, Idaho, North Dakota, South Dakota, Nebraska, Minnesota, wisconsin, Michigan and Colorado. I believe that a 15 to 20 million dollar industry with this kind of impact is very important to the health of the state economy.

The Montana Seed Potato Certification Program is entirely self supporting. Growers pay for lab use and rent, supplies, research, personnel, and everything else connected with the work of potato certification. In 1981 the Legislature gave a grant of $50,000 to further research with seed potatoes. This money led to the development and implementation of the meristem and tissue culture program which is the backbone of our program today. It ensures that Montana seed growers have a disease free stock on which to base their seed potato production.

At this point we need your help in further research. We feel this research will also flow over into other crops and programs-not just potatoes. We feel that funding of genetic research of this type is absolutely necessary for our industry to remain at the forefront where it is today. I urge your support of this bill. Thank you.

John L. Venhuizen

John L. Venhuizen
President, Montana Potato Improvement Association

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SENATE AGRICULTURE
EXHIBIT NO. 4
DATE 4/7/89
BILL NO. HB 398

Mr Chairman members of the committee my name is Susan Lake Our family raises certified seed grains & potatoes in Lake County.

In the past seed potatoe growers raised their seed under constant threat that the seed they sold might have a disease that would being financial ruin to themselves and the people to which they sold their product. From these times some growers lost their farms while others are still recovering from lawsuits.

Today then modern techology made available to us by progressive programs run by Dr. Mike Sun of MSU & funded by the state we can produce virtually disease free potatoes. We know we provide a quality product and our MT Seed Industry now holds one of the best reputations in the United States.

Still there is much to be done.

Plant genetic engineering may be the only way we can meet growing pressures on our markets. This techology can provide higher quality ag products, more disease resistant strains, and possibly more importantly reduce the need for the chemical controls we rely on today. Genetic Engineering may be one way of keep MT agriculture strong & benefitting All Montanans, both economically and environmentally.

Thank ya

Susan Lake

SENATE AGRICULTURE
EXHIBIT NO. 4A
DATE 4/7/89
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Mr. Chairman members of the Committee

my name is Jack Lake

I urge your support of house bill 398. genetic engineering is the future. while Montana has a good reputation for quality seed we need to stay on top and keep up with the times.

MSU, with its new plant growth facility would easily accomodate Genetic Engineering. The dividends of such a program could pay off many times over for Ag producers and continue MSU's reputation as a top Ag institution.

SENATE AGRICULTURE
EXHIBIT NO. 5
DATE 4/7/89
BILL NO. HB 398

The Honorable member of the Stat Ag. Committee

Thank you for the opportunity to speak for the Mont Seed Pot Growers in regard of funding for Pot Genetic engineering.

This research is rather new, very intrigueing and may prove to be the most important research ever done, with vast benefits to the Montana economy. The approach of fighting potato diseases with biological means is far better and superior as using chemicals, wich the growers are using at present, especialy from an environmental standpoint.

Montana as Seed Pot producer is regarded as Nº 1. Credit goes to Mont St University and Dr. Mike Lum, who has done a marvelous job, upgrading the quality of seed produced. 2nd Also to the State Legislature, who made money available for the new plant growth center and since we have the geological location in isolated valley's to grow seed potatoes.

We, as Mont Seed Growers sure want to stay ahead and even get better if possible for we have fierce competition such as Alberta, Canada - Idaho and Oregon.

We ask the committe to respond favorably to our request.

Sincerely,

John N. Schutter
Schutter Seed Farms
Manhattan Mt 59741

SCHUTTER SEED
FARM, INC.
3627 WOODEN SHOE ROAD
MANHATTAN, MT 59741

DATE 4/7/89

COMMITTEE ON Agriculture

VISITORS' REGISTER

NAME	REPRESENTING	BILL #	Check One: Support	Check One: Oppose
M. Jolene Jackson	Jackson Ranch	HB 398	✓	
Duane Lake	Lake Farms	HB 398	✓	
Eileen Carpenter	M.S.U.	HB 398	✓	
Jack Lake	Lake Farms	HB 398	✓	
John Tobal	Tobal Farms	HB 398	✓	
John N Boettcher	Schutter Bird Farm	HB398	✓	

(Please leave prepared statement with Secretary)