

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less tegible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature



I WASHING

ui. a lu na

2003 SENATE AGRICULTURE

SCR 4016

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets stendards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature

10/23/03

Dete

### 2003 SENATE STANDING COMMITTEE MINUTES

### BILL/RESOLUTION NO. SCR 4016

Senate Agriculture Committee

☐ Conference Committee

Hearing Date 02/13/03

Tape Number	Side A	Side B	Meter #
1	x		40 - 651
	<u></u>		
ommittee Clerk Signature	•	no de la como	

Minutes:

Control of the State of State

Chairman Flakoll opened the hearing on SCR 4016. Five members were present, Senator Erbele was absent.

Senator Nichols introduced the resolution. It is primarily a housekeeping bill. It asks the legislative council to clean up title 4 of the Century Code, dealing with the Seed Commissioner and Seed Department. This will make the law more clean, consistent and logical.

Senator Seymour asked what is the definition of a study?

Senator Nichols said it is a request for the legislative council to study all of these aspects of the law. It is not intended to change policy but to update language.

Senator Klein asked if this was a directive?

Senator Nichols said the legislative council must be directed through a bill and this is a resolution.

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Page 2 Senate Agriculture Committee Bill/Resolution Number SCR 4016 Hearing Date 02/13/03

Senator Flakoll distributed Ken Bertsch's comments about the resolution. Mr. Bertsch is the State Seed Commissioner and was unable to attend the hearing. (written testimony)

Chairman Flakoll closed the hearing on SB 4016.

Senator Nichols confirmed that what Mr. Bertsch says in his e-mail is indeed what he intends with the resolution. He wants to update and improve the language.

Senator Klein asked if there is a problem we are trying to address?

Senator Nichols said he has visited with Anita Thomas with the legislative council. She indicated there are some inconsistencies that could make it difficult for the Seed Commissioner to determine his directives. Senator Nichols can't see any serious consequences of the study. Senator Flakoll said this is not a witch hunt.

It was moved by Senator Klein, seconded by Senator Urlacher and passed on a roll call vote that the Senate Agriculture Committee take a Do Pass action on SCR 4016. Voting yes were Senator Flakoll, Senator Klein, Senator Urlacher, Senator Nichols, and Senator Seymour. Senator Erbele was absent and not voting. No negative votes were cast. Senator Nichols will carry the bill to the floor.

Chairman Flakoll moved on to other business of the Senate Agriculture Committee.

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards and Nat (ANSI) for archival microfilm. Notice: If the filmed image above is less legible than this Notice, it is due to the quality of the

Operator's Signature

Marie Marie Robins Contraction of the con-

document being filmed.

1	Date:_	2/1	3/03	
Roll Call Vote #	· (7	)	/	_

# BILL/RESOLUTION NO.

Senate Agriculture				Com	mittee
Check here for Conference Com	mittee				
Legislative Council Amendment Nun	nb <del>er</del> _				
Action Taken Do Pass		15 x 44 4			
Motion Made By Sex	KP	Se	econded By Ser U	race	ler
Senators	Yes	No	Senators	Yes	No
Senator Tim Flakoll, Chair	V		Senator Ronald Nichols	1	
Senator Robert S. Erbele, V. Chair	A		Senator Tom Seymour	1	
Senator Jerry Klein	L				
Senator Herb Urlacher	V				
• • • • • • • • • • • • • • • • • • •					
	t				
Total (Yes) <u>5</u>		No	0		
Absent /		·····			
Floor Assignment	en		Nichols		· · · · · · · · · · · · · · · · · · ·
If the vote is on an amendment, briefly	y indica	te inten	t:		

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document below dispared. document being filmed.

Operator's Signature

his extension were live to assure it.

REPORT OF STANDING COMMITTEE (410) February 13, 2003 1:01 p.m.

Module No: SR-28-2574 Carrier: Nichols Insert LC: . Title:

REPORT OF STANDING COMMITTEE

SCR 4016: Agriculture Committee (Sen. Flakoli, Chairman) recommends DO PASS
(5 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). SCR 4016 was placed on the Eleventh order on the calendar.

(2) DESK, (3) COMM

Page No. 1

na merenangan samban merengan kanggan dalah saman dalah saman merenggan saman dalah saman dalah saman dalah sam

SR-28-2574

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature

10/23/03

Dete

2003 HOUSE AGRICULTURE SCR 4016

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and Mere filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

a wan was

10/23/03

Date

### 2003 HOUSE STANDING COMMITTEE MINUTES

#### **BILL/RESOLUTION NO. 4016**

House Agriculture Committee

☐ Conference Committee

Hearing Date March 14, 2003

Tape Number	Side A	Side B	Meter #
1		X	2176-end
2	X		0-80
	ure Elizaleth	DJ	
mmittee Clerk Signati	ure CUMILYTA	トスコルノ	

Minutes: Chair Nicholas: Opened hearing on SCR 4016

<u>Sen. Nichols</u>: This is a housekeeping measure in order to update and be consistent. Introduced constituents.

Jim Lee (Producer from Max, ND): Concerned because category of common seed has been eliminated with patent requirements. He would like to see restrictions for 4 years and then allow the seed to become "common seed." Right now many producers have to buy seed because of the drought and it is very expensive. Would like to see NDSU see released. It is also in the ND Farm Bureau policy book that they would like to see common seed returned.

Rep. Nicholas: Can the Seed Commissioner allow common seed? Lee was not sure. Some are patented and they would have to suspend the patent. NDSU still produces foundation see for producers.

**Rep. Nicholas:** This is a resolution so the emergency provision does not apply.

t the control of the

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature

Page 2 House Agriculture Committee Bill/Resolution Number 4016 Hearing Date March 14, 2003

Rep. Belter: You can't sell certified seed for spring wheat because no one wants it. Why step down for common seed? Rep. Nicholas said this is mainly for durum.

Rep. Onstad: Are you suggesting another category of seed to add the 4 yr. old NDSU seeds to be sold as common seed? Lee replied that yes, that is how it used to be.

John Fieldahl (Ward Co. Farm Bureau): He has unanimous support in his county. It is important to look at patent rights. NDSU is a land grant institution here to serve the citizens of ND. Some work NDSU does is for private industries and that would have to be treated differently. Would like to see revenue from the patents go back into research.

**Dennis Miller:** Supports with written testimony.

David Neheis: Read testimony from Mr. Miller.

Chair Nicholas: Passed out testimony from Ken Grafton.

Ken Bertsch (State Seed Commissioner): Written testimony. Need major housekeeping during the interim.

Rep. Onstad: What are your thoughts on the NDSU varieties becoming common seed? Bertsch said that technically you can't drop the certification requirement under Plant Variety Protection (PVP). You either put PVP on to protect germ plasm or you don't. You have to remove the protection. NDSU certifies because of their high quality work.

Rep. Boe: Is PVP in state statute? Bertsch said that is a federal law. State just regulates. ND helps protect varieties and does the Title V requirement. They also prohibit the sale of common seed.

Chair Nicholas: Closed discussion on SCR 4016

Operator's Signature

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for exchival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Tallraited

ા કેલ્પિક નાંત્રામાં લોક્ષા એ પ્રોલેક્સ સ્વારામાં તે<mark>લું કુમાનું મહુદો કુન</mark> માટે એક કેલ્પિક હોં જુને કું છે. સુધી

# 2003 HOUSE STANDING COMMITTEE MINUTES

BILL/RESOLUTION NO. SCR 4016

House Agriculture Committee

☐ Conference Committee

Hearing Date 3---21---03

Side A	Side B	Meter #
	В	5.3 TO 6.0
9111	n 18	Ellen
		Side A Side B B

Minutes:

CHAIRMAN NICHOLAS: Ok and then we have two SCR'S that would do interim studies.

REP. ONSTAD MOVED FOR A DO PASS

REP. KINGSBURY SECONDED THE MOTION

THE ROLL WAS 11 YES 0 NO ABSENT

CHAIRMAN NICHOLAS CARRIED THE RESOLUTION.

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (AMSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the december before filmed. document being filmed.

SCR 4016 3-21-03

Pate:
Roll Call Vote #:

# 2003 HOUSE STANDING COMMITTEE ROLL CALL VOTES BILL/RESOLUTION NO.

771-5			•	
7 7 1 1	Seco	onded By	NAS	٠,
Yes	No	Representatives	Yes	No
-				
			1	
]	,			
***************************************		/		
<u> </u>				
] ]			1 1	
			_	—–
	<del></del>			
	<del></del> }-			
		<del> </del>		
			115	اختصناكا
	No			
	7.464			
		0		
		Yes No	Yes No Representatives	Yes No Representatives Yes

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and Here filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. MOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature

William To State Control of the Cont

REPORT OF STANDING COMMITTEE (410) March 21, 2003 12:36 p.m.

Module No: HR-51-5417 Carrier: Nicholas Insert LC: Title:

REPORT OF STANDING COMMITTEE SCR 4016: Agriculture Committee (Rep. Nicholas, Chairman) recommends DO PASS (11 YEAS, 0 NAYS, 2 ABSENT AND NOT VOTING). SCR 4016 was placed on the Tenth order on the calendar.

(2) DESK, (3) COMM

The state of the s

Page No. 1

HR-51-6417

The micrographic images on this film are accurate reproductions of records delivered to Nodern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. HOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

2003 TESTIMONY

HCR 4016

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systums for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for archival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature

10/23/03

Dete



Ken Bertsch < kbertsch@state-seed. ndeu.nodek.edu>

To: "'tflakoll@state.nd.us'" <tflakoll@state.nd.us> co: Subject: FW: SCR 4016

02/11/2003 01:57 PM

Ken Bertsch ND State Seed Commissioner ND State Seed Department P O Box 5257 Fargo ND 58105-5257 (701) 231-5415 e-mail: kbertschestate-seed.ndsu.nodak.edu

SCR 4016

> ----Original Message----

> From: Ken Bertsch

> Sent: Tuesday, February 11, 2003 11:56 AM > To:

'tflakollestate.ns.us' > Cd: 'micholsestate.nd.us'

> Subject:

> Sen. Flakoll,

> I spoke to Sen. Nichols yesterday regarding the hearing on SCR 4016 > scheduled for Thursday of this week. I am unable to attend the hearing, > and was encouraged by Sen. Nichols to provide you with any comments > related to the resolution.

The Seed Commission is neutral on the legislation, since the outcome of an interim study is highly dependent on the approach of the interim > committee.

> I personally see the resolution as having potential for positive > discussion on the Seed Department chapters, if a committee focused on > improving and updating language, and seeking to have Century Code reflect > this agencies duties to the agriculture industry in the next century. I > assume (in talking to Sen. Nichols and Legislative Council) that the > intent of the resolution is to treat the interim study as a chapter > re-write, and to include Seed Department input into the "housekeeping" > process. The outcome should be to do a better and more efficient job of > providing services for/and regulating the seed industry, and avoiding > housekeeping during a legislative session. If that is the case, I can > support the resolution.

> My apologies for not being able to attend the hearing. I will be present > for the hearing on SB 2326 on Friday.

> Thank you, Ken

A STATE OF THE STA

> Ken Bertach > ND State Seed Commissioner > ND State Seed Department > P O Box 5257 > Fargo ND 58105-5257 > (701) 231-5415

> e-mail: kbertschestate-seed.ndsu.nodak.edu

Committee the Committee Co

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (ANSI) for erchival microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

Operator's Signature

emplories of an anti-process of the control of the



1313 18th St. N., P.O. Box 5257

Fargo, ND 58105-525 Phone: (701) 231-5400 Fax: (701) 231-5401 Web: pdseed.com

### Ken Bertsch State Seed Commissioner

## Testimony Senate Concurrent Resolution 4016

House Agriculture Committee March 14, 2003

Good morning Mr. Chairman and members of the House Agriculture Committee. My name is Ken Bertsch and I serve as State Seed Commissioner and Administrator of the State Seed Department. I would like to offer some brief comments in support of SCR 4016 which relates to the Department.

We have found over the past 3-4 years an increasing number of problem areas in Century Code governing the Seed Department. I have also had numerous discussions with Legislative Council and Attorney General's staff regarding this issue. The most prevalent problems are a function of having out-dated language in code, and exemplified by legislation addressed by this committee in SB 2326. Other examples are included in the text of this resolution, defined by words such as "duplicative", "inconsistent" and "illogically arranged".

Perhaps the most important goal of a study is outlined by the term "inapplicable to the manner in which agriculture is conducted in the 21st century". Much of the legislation involving the Seed Department in the last two sessions has been brought for the purpose of creating or changing laws to work in favor of today's agriculture industry. I believe that many positive ideas and changes to improve our statute could be developed through an interim study process that includes public input. If pursued for the purpose of making statutory improvements to provide better service and regulation of the seed industry, we support this resolution.

Thank you for your time and attention to this, and the other seed related issues before this committee during this legislative session.

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and user efflued in the regular course of business. The photographic process meets standards of the American National Standards Institute (AMSI) for archivel microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the

Operator's Signature

document being filmed.

10/93/03

Testimony in Support of SCR 4016

Dennis Miller 9467 63 St NE Lawton, ND 58345 701<del>-644-</del>2611 dimiller@polarcomm.com

My name is Dennis Miller. I am testifying in support of SCR 4016. I am past president of NDCISA but speak as a seed grower. Some of the information I will provide has come to me while I served on the board of directors of NDCISA.

I have a MS in Agronomy from NDSU and feel indebted to NDSU for my education and to the State Seed Dept. for the services they have provided that have enhanced my profitability as a farmer. I feel, however, I have experienced inconsistencies with some services provided by the State Seed Dept. and have heard many stories of similar inconsistencies.

I began growing certified seed when I started farming in 1975. We always take caution to clean our equipment and facilities to hopefully eliminate chances of admixtures that would cause rejection of samples.

I have had experiences that bring question to the validity of State Seed Lab test results. In about 1989, I grew Registered durum for seed. We had not grown HRSW on the farm for & years prior to this. I sold the seed to a local elevator with the understanding that it would pass certification. After conditioning at a separate facility to the purchaser, the sample failed to pass because of admixture of 6 HRSW per pound. Upon retest, the sample showed what I considered to be an accurate assessment of my seed. No HRSW admixture. The result was that I lost the sale that cost me \$12,000 in added profit. A grower in western ND had a similar experience within the last few years.

I have had numerous other lots of seed fail initial certification only to pass the retest. These delays are a nuisance and many times cause loss of sales. Also, my reputation as a reliable seed grower is called into question.

I have complained to those in charge at the State Seed Dept. In one case, the response I got was that the employees that check the samples were told to look especially hard for admixtures because of the large quantity of seed that was available. Translated to farmer language, this means that seed purity can change depending on the circumstance.

Stories such as these abound.

document being filmed.

My most recent experience was with oats this year.

The purity issue has become an almost insurmountable obstacle which will most likely force me

The micrographic images on this film are accurate reproductions of records delivered to Hodern information Systems for microfilming and the midrogrammid images on this firm are sourcest reproductions of records delivered to modern information systems for midrotisming and were filled in the regular course of business. The photographic process meets standards of the American National Standards in the regular course of business. The photographic process meets standards of the American National Standards as a section of the American National Nation (AMSI) for archivel microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the

### Miller-2

to quit being a seed increase grower. Our County Agent has said he feels the same way about seed increase in our county. The instances of questionable results from the State Seed Lab needs looking into to clear up the rumors that abound within the seed industry.

I ask the House Ag committee to recommend a do pass on SCR 4016 so this important area of value added agriculture can be chosen for study during the interim.

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (AMSI) for archival microfilm. MOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

THE PROPERTY OF THE PROPERTY O

Operatoria Signatura

**SCR 4016** 

The Importance of Plant Variety Protection to North Dakota Agriculture.

Ken Grafton, Director, North Dakota Agricultural Experiment Station, Fargo, ND Tel (701)231-6693

The Plant Variety Protection (PVP) Act, passed into Federal law in December of 1970 and amended in 1994, provides legal protection of intellectual property rights to developers of new varieties of plants. The PVP Act is administered by the U.S. Department of Agriculture. This federal agency, upon thorough review of information proving that a variety is distinct from all other varieties of that crop, awards a Certificate of Protection to the developer. The term of protection is 20 years for most crops and 25 years for trees, shrubs, and vines. The owner has exclusive rights to multiply and market the seed of that variety, and has the ability to deny someone from selling or marketing the variety. However, the producer can grow any legally purchased and protected variety and save seed for future planting on their own land holdings.

Plant Variety Protection allows owners of new varieties to maintain control over the purity and marketing of that variety. The title V option (Certification) of the PVPA restricts sale of seed by variety name to a class of certified seed. Owners of a PVP variety have the authority to maintain safeguards regarding seed production and management, allowing the producer the opportunity to be assured that he is purchasing the highest quality seed possible. Enforcement if PVP is important in order to assure that high quality seed is available for future markets.

Benefits are realized by the North Dakota agricultural producer in knowing that he is obtaining the highest quality seed of the desired variety. Numerous studies have been conducted that show the importance of high quality seed in determining yield. The PVP, in conjunction with some level of enforcement, provides those assurances to the seed industry.

As a plant breeder, I have observed slight changes in varieties over time – this may be due to outcrossing or to some level of seed admixture (i.e., not cleaning out the combine properly). While plant breeders and seedsmen take great care in minimizing such changes, slight shifts do occur. If varieties are not protected, the ability to reselect and re-establish the variety in seed channels becomes almost impossible; this could result in the demise of a popular variety.

The PVP Act provides protection for a period of 20 years for most varieties. This protection limit, in most cases, exceeds the lifespan of the variety. However, in the case

The micrographic images on this film are accurate reproductions of records delivered to Hodern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute (AMSI) for archivel microfilm. NOTICE: If the filmed image above is less legible than this Notice, it is due to the quality of the document being filmed.

of extremely popular and long-lives varieties, the PVP will allow future agricultural producers the same opportunity as today's grower to purchase high quality seed of that useful, desired variety.

Protecting NDSU released crop varieties and inbred lines assures ND of obtaining the benefits of the public development program. Not taking advantage of this protection strategy or abandoning protection before the 20 year award term would be detrimental to our producers and agricultural industry.

Seed certification is a program to maintain and make available to the public high quality seeds and propagating materials of genetically distinct crop varieties. Under this program (administered by the State Seed Department of ND), certified seed is produced by outstanding farmers and seed producers using careful quality control, pedigreed planting stock, field inspections during the growing season and seed inspections following harvest. Certification is an officially recognized method for maintaining varietal identity of seed on the open market.

Protecting NDSU varieties establishes ownership and stewardship of valuable intellectual property for the citizens and agricultural industry of ND. PVP protection does not prevent using protected varieties in cross breeding and the legitimate development of new varieties by others, which could be an advantage to our agricultural industry, nor does it prohibit producers from saving seed of their production for planting back on their own farm. PVP protection prevents others from renaming and claiming ownership or related abuses. PVP protection also prohibits the export of seed for propagation to other countries without our consent. This protects our public program from other countries obtaining and using our varieties to their benefit without compensation to ND.

### Listed below are some benefits of PVP to the North Dakota Agricultural Producer.

1. Assures producer access to seed of high genetic purity.

tification provides the producer with access to seed of excellent varieties with good assurance of high genetic purity. This helps avoid unnecessary losses in yield from planting seed of unknown or contaminated varieties. Such off-types are likely to yield plants of different maturity, susceptibility to diseases and insects, inferior in quality or less productive. In addition, genetic purity assures producer markets that demand the quality attributes of a released variety.

2. Assures producer access to seed of high physical purity.

high purity requirements of certified seed provides the producer with
assurances against the introduction of weeds, diseases or other crop seeds that can
reduce yield, quality, value and therefore decrease the financial return. A

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and were filmed in the regular course of business. The photographic process meets standards of the American Mational Standards Institute (AMSI) for archival microfilm. MOTICE: If the filmed image above is less legible than this Motice, it is due to the quality of the document being filmed.

Operatoria Signatura

10)93/03

ate

compromise in high purity can also burden the producer with additional expenses to control diseases or weeds, an effort and expense that might continue for many years.

- 3. Provides advantages to seeds producers in their effort to distribute high quality seed.
- ad seed producers take pride in their efforts to supply high quality seed to the agricultural community. The certified seed program supports this effort by having quality standards that ensure the production of seed with high genetic and physical purity.
  - 4. Provides value to the agricultural community.

v crop varieties have increased yield, increased insect and disease resistance and quality attributes that provide financial advantages to the producer. It is often difficult or impossible to visually look at seed and determine genetic or physical purity and the consequences are often a loss of value in the produced crop. The certified seed program assures the producer of the advantages of the NDSU plant improvement efforts.

The micrographic images on this film are accurate reproductions of records delivered to Modern Information Systems for microfilming and use of images of the American National Standards Institute were filmed in the regular course of business. The photographic process meets standards of the American National Standards Institute were filmed in the regular course of business. The photographic process meets standards of the American National Standards in the filmed in the regular course of business. The photographic process meets standards of the American National Standards in the filmed in the regular course of business. The photographic process meets standards of the American National Standards in the filmed in the regular course of business. The photographic process meets standards of the American National Standards in the filmed in the regular course of business. The photographic process meets standards of the American National Standards in the filmed in the regular course of business. The photographic process meets standards of the American National Standards in the filmed in the regular course of business. The photographic process meets standards of the American National Standards in the filmed in th

comparison comparison and comparison of the comp