

US EPA ARCHIVE DOCUMENT

Section G: Proposed Experimental Program

Experimental Use Permit Request  
For  
Cry34/35Ab1 Insecticidal Crystal Protein as  
Expressed in Maize

October 17, 2002

Revised:  
January 15, 2003

Revised:  
January 21, 2003

Submitted By:

Mycogen Seeds c/o Dow AgroSciences LLC  
9330 Zionsville Road  
Indianapolis, IN 46268

## STATEMENT OF NO DATA CONFIDENTIALITY CLAIMS

No claim of confidentiality is made for any information contained in this study on the basis of its falling within the scope of FIFRA § 10(d) (1) (A), (B), or (C).

These data are the property of Dow AgroSciences LLC, and as such, are considered to be confidential for all purposes other than compliance with FIFRA §10. Submission of these data in compliance with FIFRA does not constitute a waiver of any right to confidentiality that may exist under any other statute or in any other country.

Company: Dow AgroSciences LLC

Company Agent: \_\_\_\_\_

Penny L. Hunst  
Registration Manager

Date: January 21, 2003

**Cry34/35Ab1 Insecticidal Crystal Protein as Expressed in Maize****TABLE OF CONTENTS**

	<u>Page</u>
Statement of No Confidentiality Claims	2
Submission Table of Contents	3
Section G: Title Page	4
Section G: Proposed Experimental Program	5-6
Cry34/35Ab1 Maize Breeding and Observation Nursery Protocol	7-8
Cry34/35Ab1 Maize Agronomic Observation Trials Protocol	9-10
Liberty® Herbicide Tolerance Study Protocol	11-12
Cry34/35Ab1 Maize Efficacy Trial Protocol	13-14
Insect Resistant Management Studies Protocol	15-16
Cry34/35Ab1 Maize Demonstration Trials Protocol	17-18
Confidential Attachment	19-22

## **SECTION G: PROPOSED EXPERIMENTAL PROGRAM**

## Section G: Proposed Experimental Program

### 1. Participants

The experimental use program will be under the overall management of the following scientist:

Jim Bing, Ph.D.  
Manager Field Entomology  
& Trait Development  
Dow AgroSciences LLC

### 2. Target Pest and Overview of Experimental Program

The target pests to be evaluated in the proposed experimental program are *Diabrotica virgifera virgifera*, western corn rootworm (WCRW) and *Diabrotica berberis*, northern corn rootworm (NCRW). Both insects are major pests of maize in North America. The development of transgenic maize expressing the *B.t.* Cry34/35Ab1 binary insecticidal crystal protein (ICP) will provide growers with a simple, highly effective, and environmentally benign means of controlling both rootworms. Laboratory tests and small plot trials with transgenic *B.t.* Cry34/35Ab1 maize have shown that Cry34/35Ab1 ICP has activity on corn rootworms (*Diabrotica* sp.). Further field testing across sixteen states will continue to evaluate the efficacy of the Cry34/35Ab1 binary ICP. Additional objectives under the EUP experimental program include, conversion to commercial varieties, observation of agronomic potential, studies in resistant management and research into other commercial determinants. The proposed field protocols for these objectives are listed below in summary format. A complete description of each field protocol can be found on pages 6 through 17.

EUP Protocols	Acres	Lbs. of Seed
Cry34/35Ab1 Maize Breeding and Observation Nursery:	144	2880
Cry34/35Ab1 Maize Agronomic Observation Trials:	177	5200
Liberty <sup>®</sup> Herbicide Tolerance Study:	8	120
Cry34/35Ab1 Maize Efficacy Trial:	53	700
Insect Resistance Management Studies:	6	80
Cry34/35Ab1 Maize Demonstration Trials:	6.5	210
<b>Totals</b>	<b>393.5</b>	<b>6558</b>

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### 3. States and Acreage

PROPOSED EXPERIMENTAL USE PROGRAM  
FOR PLANTINGS FROM MARCH 2003 THROUGH MARCH 2004

States	Total Acres	Total Location	Max. GM Plants	Max. Cry34Ab1 Protein in Seed Planted (grams)	Max. Cry35Ab1 Protein in Seed Planted (grams)
MN	31.00	13	775,000	10.98	0.29
IA	46.50	20	1,162,500	16.47	0.43
SD	9.00	6	225,000	3.19	0.08
ND	6.00	2	150,000	2.12	0.06
WI	26.00	11	650,000	9.21	0.24
NE	27.00	13	675,000	9.56	0.25
IL	53.00	19	1,325,000	18.77	0.49
IN	43.00	20	1,075,000	15.23	0.40
PR	14.00	3	350,000	4.96	0.13
HI	104.00	3	2,600,000	36.83	0.96
KS	6.00	3	150,000	2.12	0.06
MO	12.00	5	300,000	4.25	0.11
MI	5.00	1	125,000	1.77	0.05
OH	6.00	4	150,000	2.12	0.06
CO	5.00	1	125,000	1.77	0.05
TX	1.00	2	25,000	0.35	0.01
<b>Totals</b>	<b>393.5</b>	<b>124</b>	<b>9837500</b>	<b>139.34</b>	<b>3.62</b>

## Cry34/35Ab1 Maize Breeding and Observation Nursery

### Objective

Through backcrossing, selfing, and observation of phenotype: convert non-genetically modified or genetically modified inbred lines to genetically modified Cry34/35Ab1 maize lines expressing the binary insecticidal crystal protein (ICP), produce experimental yield trial quantities of seed for small plot testing, and maintain these lines through seed production.

### Description

Using various experimental plot designs, Cry34/35Ab1 maize lines may be crossed with non-genetically modified or genetically modified corn lines or selfed. Plants may be treated with Liberty<sup>®</sup> herbicide, and/or infested with Western and Northern Corn Rootworms or other corn insects, and/or sampled for various laboratory analyses to determine phenotype and segregation patterns.

### Genotypes and Vectors

Test materials will consist of corn of varying genetic constitution containing:

<u>Vector</u>	<u>Events</u>
17662	E4497.45.2.16
	E4497.59.1.10
	E4497.45.2.14
	E4497.59.1.32
	E4497.42.1.18
	E4497.59.1.22
	E4497.62.1.7

### Locations

<u>State</u>	<u>Number of locations</u>	<u>State</u>	<u>Number of locations</u>
PR	1	NE	1
IA	3	IL	2
MN	1	IN	2
WI	1	HI	1

A "location" may be comprised of a research or breeding facility or a farm and the growing fields being utilized by such farm or facility.

### Acreage per Location

Acres of EUP test plants expressing the binary ICP: up to 20 per planting.

Total acres of EUP test plants: up to 144, not including any required areas for buffers or isolation distances.



### **Schedule**

Planting dates: 4/1/03 - 3/30/04

Harvest dates: 6/1/03 – 7/30/04

### **Border rows**

The EUP test plants or the trial site will be surrounded by one or more border rows of maize.

### **Isolation**

EUP test plants will be isolated in accordance with USDA-APHIS Performance Standards for regulated corn trials. Isolation methods may include utilizing one or more of the following: (1) EUP test plants will be located at least 660 feet from other parties' sexually receptive corn; (2) the tassels of the EUP test plants will be bagged during pollen shed or until tassel is removed from the plant; (3) temporal isolation, i.e., where the flowering period for the EUP test plants will not coincide with the presence of other parties' sexually receptive plants within 660 feet of the EUP test plants; or (4) detasseling of the EUP test plants prior to onset of anthesis. Open flowering EUP test plants may be located within 660 feet of sexually receptive corn provided such other corn is used only for further experimental purposes and/or destroyed.

### **Sampling**

Plant tissue and/or whole plant samples may be taken several times during the growing season and sent to Pioneer Hi-Bred, Dow AgroSciences, or other laboratories for analyses.

### **Harvest Procedures**

Plots will be harvested by hand or by machine. If hand harvested, ears will be securely placed in cloth or mesh bags constructed to prevent the loss of seed. If machine harvested, the harvest machine will be thoroughly cleaned prior to exiting from the plot area.

### **Final Disposition**

Any remaining vegetative material will be tilled into the soil or otherwise destroyed. Unwanted seed and plant material may be cultivated into a monitored site to ensure complete devitalization. Seed and plant material produced in these trials may be used for analyses or saved for further research or plantings. Unwanted experimental seed will be destroyed.

### **Volunteer Plants**

Use of GPS coordinates, stakes, markers, or other methods will be used to identify the area where the transgenic plants are grown, and such an area will be subsequently monitored for volunteers for an appropriate period of time. Volunteers will be terminated by hand weeding, disking, spraying a herbicide or other method.

## Cry34/35Ab1 Maize Agronomic Observation Trials

### Objective

Assess agronomic and phenotypic effects of insertion of the binary insecticidal crystal protein (ICP) in genetically modified Cry34/35Ab1 maize lines.

### Description

Using various experimental plot designs, Cry34/35Ab1 maize lines may be crossed with non-genetically modified or genetically modified corn lines or selfed. Cry34/35Ab1 maize lines will be observed for yield and other agronomic and phenotypic effects of insertion of the ICP. Plants may be treated with Liberty<sup>®</sup> herbicide, and/or infested with Western and Northern Corn Rootworms or other corn insects, and/or sampled for various laboratory analyses to determine phenotype and segregation patterns.

### Genotypes and Vectors

Test material will consist of corn of varying genetic constitution containing:

<u>Vector</u>	<u>Events</u>
17662	E4497.45.2.16
	E4497.59.1.10
	E4497.45.2.14
	E4497.59.1.32
	E4497.42.1.18
	E4497.59.1.22
	E4497.63.1.7

### Locations

<u>State</u>	<u>Number of locations</u>	<u>State</u>	<u>Number of locations</u>
CO	1	WI	5
NE	5	IL	8
KS	1	IN	5
SD	2	MI	1
MO	2	OH	2
IA	7	ND	2
MN	8		

A "location" may be comprised of a research or breeding facility or a farm and the growing fields being utilized by such farm or facility.

### Acres per Location

Acres of EUP test plants: up to 40 acres per planting.

Total acres of EUP test plants: up to 177 acres, not including any required areas for buffers or isolation distances.

### **Schedule**

Planting dates: 4/1/03 - 3/30/04

Harvest dates: 6/1/03 – 7/30/04

### **Border rows**

The EUP test plants or the trial site will be surrounded by one or more border rows of maize.

### **Isolation**

EUP test plants will be isolated in accordance with USDA-APHIS Performance Standards for regulated corn trials. Isolation methods may include utilizing one or more of the following: (1) EUP test plants will be located at least 660 feet from other parties' sexually receptive corn; (2) the tassels of the EUP test plants will be bagged during pollen shed or until tassel is removed from the plant; (3) temporal isolation, i.e., where the flowering period for the EUP test plants will not coincide with the presence of other parties' sexually receptive plants within 660 feet of the EUP test plants; or (4) detasseling of the EUP test plants prior to onset of anthesis. Open flowering EUP test plants may be located within 660 feet of sexually receptive corn provided such other corn is used only for further experimental purposes and/or destroyed.

### **Sampling**

Plant tissue and/or whole plant samples may be taken several times during the growing season and sent to Pioneer Hi-Bred, Dow AgroSciences, or other laboratories for analyses.

### **Harvest Procedures**

Plots will be harvested by hand or by machine. If hand harvested, ears will be securely placed in cloth or mesh bags constructed to prevent the loss of seed. If machine harvested, the harvest machine will be thoroughly cleaned prior to exiting from the plot area.

### **Final Disposition**

Any remaining vegetative material will be tilled into the soil or otherwise destroyed. Unwanted seed and plant material may be cultivated into a monitored site to ensure complete devitalization. Seed and plant material produced in these trials may be used for analyses or saved for further research or plantings. Unwanted experimental seed will be destroyed.

### **Volunteer Plants**

Use of GPS coordinates, stakes, markers, or other methods will be used to identify the area where the transgenic plants are grown, and such an area will be subsequently monitored for volunteers for an appropriate period of time. Volunteers will be terminated by hand weeding, disking, spraying a herbicide or other method.

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## Liberty<sup>®</sup> Herbicide Tolerance Study

### Objective

Evaluate the effect of Liberty herbicide application on Cry34/35Ab1 maize lines.

### Description

Using various experimental plot designs, Cry34/35Ab1 maize lines may be crossed with non-genetically modified or genetically modified corn lines or selfed. Cry34/35Ab1 maize lines will be evaluated for resistance to applications of Liberty herbicide. Plants may be evaluated for yield, and for effects of the herbicide on plant development and agronomic traits.

### Genotypes and Vectors

Test materials will consist of corn of varying genetic constitution containing:

<u>Vector</u>	<u>Events</u>
17662	E4497.42.1.34
	E4497.45.2.16
	E4497.59.1.10
	E4497.45.2.14
	E4497.59.1.32
	E4497.42.1.18
	E4497.59.1.22
	E4497.63.1.7

### Locations

<u>State</u>	<u>Number of locations</u>	<u>State</u>	<u>Number of locations</u>
PR	1	IA	1
WI	1	IL	1
HI	1	IN	2
NE	1		

A "location" may be comprised of a research or breeding facility or a farm and the growing fields being utilized by such farm or facility.

### Acreage per Site

Acres of EUP test plants: up to 2 per planting

Total acres of EUP test plants: up to 8 not including any required areas for buffers or isolation distances.

### Schedule

Planting dates: 4/1/03 - 3/30/04

Harvest dates: 6/1/03 – 7/30/04

### **Border rows**

The EUP test plants or the trial site will be surrounded by one or more border rows of maize.

### **Isolation**

EUP test plants will be isolated in accordance with USDA-APHIS Performance Standards for regulated corn trials. Isolation methods may include utilizing one or more of the following: (1) EUP test plants will be located at least 660 feet from other parties' sexually receptive corn; (2) the tassels of the EUP test plants will be bagged during pollen shed or until tassel is removed from the plant; (3) temporal isolation, i.e., where the flowering period for the EUP test plants will not coincide with the presence of other parties' sexually receptive plants within 660 feet of the EUP test plants; or (4) detasseling of the EUP test plants prior to onset of anthesis. Open flowering EUP test plants may be located within 660 feet of sexually receptive corn provided such other corn is used only for further experimental purposes and/or destroyed.

### **Sampling**

Plant tissue and/or whole plant samples may be taken several times during the growing season and sent to Pioneer Hi-Bred, Dow AgroSciences, or other laboratories for analyses.

### **Harvest Procedures**

Plots will be harvested by hand or by machine. If hand harvested, ears will be securely placed in cloth or mesh bags constructed to prevent the loss of seed. If machine harvested, the harvest machine will be thoroughly cleaned prior to exiting from the plot area.

### **Final Disposition**

Any remaining vegetative material will be tilled into the soil or otherwise destroyed. Unwanted seed and plant material may be cultivated into a monitored site to ensure complete devitalization. Seed and plant material produced in these trials may be used for analyses or saved for further research or plantings. Unwanted experimental seed will be destroyed.

### **Volunteer Plants**

Use of GPS coordinates, stakes, markers, or other methods will be used to identify the area where the transgenic plants are grown, and such an area will be subsequently monitored for volunteers for an appropriate period of time. Volunteers will be terminated by hand weeding, disking, spraying a herbicide or other method.

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## Cry34/35Ab1 Maize Efficacy Trial

### Objective

Assess the efficacy of genetically modified Cry34/35Ab1 maize lines expressing the binary insecticidal crystal protein (ICP) in controlling *Diabrotica virgifera virgifera*, western corn rootworm; *Diabrotica berberis*, northern corn rootworm; and/or other coleopteran insects.

### Description

Using various experimental plot designs, Cry34/35Ab1 maize lines may be crossed with non-genetically modified or genetically modified corn lines or selfed. Cry34/35Ab1 maize lines alone, or crossed with other genetically modified corn lines, will be planted in up to four replications of a randomized design. Each line may be represented both by a segregate without the ICP and a segregate with the ICP. Experimental units (rows) will contain up to 100 plants. Plants may be infested with western and northern corn rootworms and/or other coleopteran insects, and/or rely on natural infestations.

### Genotypes and Vectors

Test materials will consist of corn of varying genetic constitution containing:

<u>Vector</u>	<u>Events</u>
17662	E4497.42.1.34
	E4497.45.2.16
	E4497.59.1.10
	E4497.45.2.14
	E4497.59.1.32
	E4497.42.1.18
	E4497.59.1.22
	E4497.63.1.7

### Locations

<u>State</u>	<u>Number of locations</u>	<u>State</u>	<u>Number of locations</u>
MN	3	IL	7
IA	6	IN	8
WI	3	PR	1
NE	5	HI	1
SD	2	KS	2
MO	3	OH	2
TX	2		

A "location" may be comprised of a research or breeding facility or a farm and the growing fields being utilized by such farm or facility.

### Acreage per Site

Acres of EUP test plants: up to 3 acres per planting.

Total Acres of EUP test plants: up to 53 acres, not including and required areas for buffers or isolation distances.

### **Schedule**

Planting Dates: 4/1/03 – 8/1/04

Harvest Dates: 8/15/03 – 11/15/04

### **Border rows**

The EUP test plants or the trial site will be surrounded by one or more border rows of maize.

### **Isolation**

EUP test plants will be isolated in accordance with USDA-APHIS Performance Standards for regulated corn trials. Isolation methods may include utilizing one or more of the following: (1) EUP test plants will be located at least 660 feet from other parties' sexually receptive corn; (2) the tassels of the EUP test plants will be bagged during pollen shed or until tassel is removed from the plant; (3) temporal isolation, i.e., where the flowering period for the EUP test plants will not coincide with the presence of other parties' sexually receptive plants within 660 feet of the EUP test plants; or (4) detasseling of the EUP test plants prior to onset of anthesis. Open flowering EUP test plants may be located within 660 feet of sexually receptive corn provided such other corn is used only for further experimental purposes and/or destroyed.

### **Sampling**

Plant tissue and/or whole plant samples may be taken several times during the growing season and sent to Pioneer Hi-Bred, Dow AgroSciences, or other laboratories for analyses.

### **Harvest Procedures**

Plots will be harvested by hand or by machine. If hand harvested, ears will be securely placed in cloth or mesh bags constructed to prevent the loss of seed. If machine harvested, the harvest machine will be thoroughly cleaned prior to exiting from the plot area.

### **Final Disposition**

Any remaining vegetative material will be tilled into the soil or otherwise destroyed. Unwanted seed and plant material may be cultivated into a monitored site to ensure complete devitalization. Seed and plant material produced in these trials may be used for analyses or saved for further research or plantings. Unwanted experimental seed will be destroyed.

### **Volunteer Plants**

Use of GPS coordinates, stakes, markers, or other methods will be used to identify the area where the transgenic plants are grown, and such an area will be subsequently monitored for volunteers for an appropriate period of time. Volunteers will be terminated by hand weeding, disking, spraying a herbicide or other method.

**Volunteer Plants**

Use of GPS coordinates, stakes, markers, or other methods will be used to identify the area where the transgenic plants are grown, and such an area will be subsequently monitored for volunteers for an appropriate period of time. Volunteers will be terminated by hand weeding, disking, spraying a herbicide or other appropriate method.



## Cry34/35Ab1 Insect Resistance Management Trial

### Objective

These studies will provide information for the development of IRM strategies for genetically modified Cry34/35Ab1 maize lines expressing the binary insecticidal crystal protein (ICP). Specific experiments will focus on the determination of high dose against western and northern corn rootworms.

### Description

Using various experimental plot designs, Cry34/35Ab1 maize lines may be crossed with non-genetically modified or genetically modified corn lines or selfed. Lines of each transformation event will be planted in up to four replications of a randomized design. Each line may be represented both by a segregate with the binary ICP genes and a segregate without the binary ICP genes. Experimental units will contain up to 3,000 plants. Plants may be artificially infested with western and northern corn rootworms or a natural infestation will be used. Data on the number of adults emerging from Cry34/35Ab1 plants versus non- Cry34/35Ab1 plants will be collected at various times during the growing season.

### Genotypes and Vectors

Test materials will consist of corn of varying genetic constitution containing:

<u>Vector</u>	<u>Events</u>
17662	E4497.42.1.34
	E4497.45.2.16
	E4497.59.1.10
	E4497.45.2.14
	E4497.59.1.32
	E4497.42.1.18
	E4497.59.1.22
	E4497.63.1.7

### Locations

<u>State</u>	<u>Number of locations</u>	<u>State</u>	<u>Number of locations</u>
IA	2	IN	2
SD	2		

A "location" may be comprised of a research or breeding facility or a farm and the growing fields being utilized by such farm or facility.

### Acreage per Site

Acres of EUP test plants: up to 2 acres per planting.

Total Acres of EUP test plants: up to 6 acres, not including any required areas for buffers or isolation.

### **Schedule**

Planting Dates: 4/1/03 – 8/1/04

Harvest Dates: 8/15/03 – 11/15/04

### **Border rows**

The EUP test plants or the trial site will be surrounded by one or more border rows of maize.

### **Isolation**

EUP test plants will be isolated in accordance with USDA-APHIS Performance Standards for regulated corn trials. Isolation methods may include utilizing one or more of the following: (1) EUP test plants will be located at least 660 feet from other parties' sexually receptive corn; (2) the tassels of the EUP test plants will be bagged during pollen shed or until tassel is removed from the plant; (3) temporal isolation, i.e., where the flowering period for the EUP test plants will not coincide with the presence of other parties' sexually receptive plants within 660 feet of the EUP test plants; or (4) detasseling of the EUP test plants prior to onset of anthesis. Open flowering EUP test plants may be located within 660 feet of sexually receptive corn provided such other corn is used only for further experimental purposes and/or destroyed.

### **Sampling**

Plant tissue and/or whole plant samples may be taken several times during the growing season and sent to Pioneer Hi-Bred, Dow AgroSciences, or other laboratories for analyses.

### **Harvest Procedures**

Plots will be harvested by hand or by machine. If hand harvested, ears will be securely placed in cloth or mesh bags constructed to prevent the loss of seed. If machine harvested, the harvest machine will be thoroughly cleaned prior to exiting from the plot area.

### **Final Disposition**

Any remaining vegetative material will be tilled into the soil or otherwise destroyed. Unwanted seed and plant material may be cultivated into a monitored site to ensure complete devitalization. Seed and plant material produced in these trials may be used for analyses or saved for further research or plantings. Unwanted experimental seed will be destroyed.

### **Volunteer Plants**

Use of GPS coordinates, stakes, markers, or other methods will be used to identify the area where the transgenic plants are grown, and such an area will be subsequently monitored for volunteers for an appropriate period of time. Volunteers will be terminated by hand weeding, disking, spraying a herbicide or other method.

## Cry34/35Ab1 Maize Demonstration Trial

### Objective

Demonstrate the efficacy of genetically modified Cry34/35Ab1 maize lines expressing the binary insecticidal crystal protein (ICP) in controlling western and northern corn rootworms and/or other coleopteran insect feeding.

### Description

Using various experimental plot designs, Cry34/35Ab1 maize lines may be crossed with non-genetically modified or genetically modified corn lines or selfed. Lines of each transformation event of Cry34/35Ab1 maize lines will be planted in plots of up to 5 rows by 30 feet in length. Each line may be represented both by a segregate without the ICP and a segregate with the ICP. Experimental units (rows) will contain up to 300 plants. Plants may be infested with western and northern corn rootworms and/or other coleopteran insects, and/or rely on natural infestations.

### Genotypes and Vectors

Test materials will consist of corn of varying genetic constitution containing:

<u>Vector</u>	<u>Events</u>
17662	E4497.42.1.34
	E4497.45.2.16
	E4497.59.1.10
	E4497.45.2.14
	E4497.59.1.32
	E4497.42.1.18
	E4497.59.1.22
	E4497.63.1.7

### Locations

<u>State</u>	<u>Number of locations</u>	<u>State</u>	<u>Number of locations</u>
MN	1	IN	1
IA	1	NE	1
WI	1	IL	1

### Acreage per Site

Acres of EUP test plants: up to 1.5 acres per planting.

Total Acres of EUP test plants: up to 6.5 acres, not including any required areas for buffers or isolation distances.

### Schedule

Planting Dates: 4/1/03 – 8/1/04

Harvest Dates: 8/15/03 – 11/15/04

### **Border rows**

The EUP test plants or the trial site will be surrounded by one or more border rows of maize.

### **Isolation**

EUP test plants will be isolated in accordance with USDA-APHIS Performance Standards for regulated corn trials. Isolation methods may include utilizing one or more of the following: (1) EUP test plants will be located at least 660 feet from other parties' sexually receptive corn; (2) the tassels of the EUP test plants will be bagged during pollen shed or until tassel is removed from the plant; (3) temporal isolation, i.e., where the flowering period for the EUP test plants will not coincide with the presence of other parties' sexually receptive plants within 660 feet of the EUP test plants; or (4) detasseling of the EUP test plants prior to onset of anthesis. Open flowering EUP test plants may be located within 660 feet of sexually receptive corn provided such other corn is used only for further experimental purposes and/or destroyed.

### **Sampling**

Plant tissue and/or whole plant samples may be taken several times during the growing season and sent to Pioneer Hi-Bred, Dow AgroSciences, or other laboratories for analyses.

### **Harvest Procedures**

Plots will be harvested by hand or by machine. If hand harvested, ears will be securely placed in cloth or mesh bags constructed to prevent the loss of seed. If machine harvested, the harvest machine will be thoroughly cleaned prior to exiting from the plot area.

### **Final Disposition**

Any remaining vegetative material will be tilled into the soil or otherwise destroyed. Unwanted seed and plant material may be cultivated into a monitored site to ensure complete devitalization. Seed and plant material produced in these trials may be used for analyses or saved for further research or plantings. Unwanted experimental seed will be destroyed.

### **Volunteer Plants**

Use of GPS coordinates, stakes, markers, or other methods will be used to identify the area where the transgenic plants are grown, and such an area will be subsequently monitored for volunteers for an appropriate period of time. Volunteers will be terminated by hand weeding, disking, spraying a herbicide or other method.