

# Report of the Plant Diagnostic Laboratory At North Dakota State University

January 1 through December 31, 2008

Available on-line at <http://www.ag.ndsu.nodak.edu/diaglab/reports.htm>

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**NDSU** College of Agriculture, Food  
Systems, and Natural Resources  
NORTH DAKOTA STATE UNIVERSITY  
**NDSU Extension Service**

**Report of the Plant Diagnostic Laboratory at North Dakota State University**

October 1, 2005 through December 31, 2006

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## **Lab Personnel and Other Information**

Kasia Kinzer (MS, Plant Pathology) is the plant diagnostician, Montgomery 'Monty' Botschner (BS, Biotechnology) is the lab technician, and Aimee Thapa (BS, Horticulture) is the summer assistant for the NDSU Plant Diagnostic Lab.

### ***National Plant Diagnostic Network***

NDSU Plant Diagnostic Lab is a member of the Great Plains Diagnostic Network (GPDN), a region of the National Plant Diagnostic Network (NPDN). The National Plant Diagnostic Network was established in partnership with the Cooperative State Research, Education, and Extension Service (CSREES). It focuses on the plant disease and pest aspects of the Animal & Plant Disease and Pest Surveillance & Detection Network. The NPDN is a collective of Land Grant University plant disease and pest diagnostic facilities from across the United States. The NPDN was formed in 2002 to enhance the ability of plant pest diagnosticians around the country to more quickly diagnose potential biological threats to agriculture. These threats to agriculture or urban landscapes may be intentionally or accidentally introduced. A network of registered NPDN First Detectors is continually expanding, to enhance early detection of unusual plant problems. First Detectors learn how to collect and package samples, and where to send them. Suspicious samples are submitted to an NPDN diagnostic lab for verification. A communication plan is in place to deal with verification of organisms that are considered to be high consequence.

The NPDN encourages plant diagnostic labs at land grant universities around the country to use a secure, on-line database that is administered from a central location. This database is known as the Plant Disease Identification System (PDIS). The NDSU Plant Diagnostic Lab has been using this database since May 2006. To continue receiving funding from the NPDN, the NDSU Plant Diagnostic Lab is required to upload routine diagnoses to a national repository of diagnostic data.

One advantage of the PDIS database is that sample information can be digitally submitted by registered users (such as extension agents and state specialists) to the NDSU Plant Diagnostic Lab, and digital images can be uploaded to the database from remote sites. A publicly-available digital image library, populated only with images that have been peer-reviewed, is also available to browse. The NDSU Plant Diagnostic Lab will continue to provide training and support to Extension agents and staff who want to submit and track samples using this secure, user-friendly database. A new, more intuitive and user-friendly version of PDIS (PDIS 2.0) is scheduled to be released in April 2009.

### ***Activities of the NDSU Plant Diagnostic Lab***

- Provide economical diagnostic services to agricultural professionals, the horticulture industry, homeowners, and individuals
- Maintain USDA-accreditation for testing for potato bacterial ring rot in seed potatoes (obtained in Spring 2005) for North Dakota seed certification and to satisfy Canadian export requirements
- Provide limited seed health-related testing services for growers, certain phytosanitary and survey testing services for the North Dakota Department of Agriculture, and special testing services for research personnel (The North Dakota State Seed Department is the primary entity for seed health testing)
- Teach the labs of Introductory Plant Pathology each Fall semester
- Support the Master Gardener program and other horticultural community programs

- Support the agricultural industry by offering seminars and training as requested
- Continue to fulfill requirements to be in compliance with the 2002 Bioterrorism Act

## **2008 – The Year in Review:**

### **Goals for 2008**

- Diagnostic training for the NDSU plant diagnostician and technician was offered through USDA and the GPDN. Two of these workshops, Potato Cyst Nematode Identification, and Ralstonia Identification, were offered in Beltsville, Maryland in February and March, 2008. Kasia Kinzer attended both of these identification training workshops.
- The use of conventional PCR and real-time PCR to supplement diagnosis of additional organisms, when applicable, increased in 2008.
- The USDA certification of the NDSU Plant Diagnostic Lab to perform potato seed tuber testing for the bacterial ring rot pathogen (*Clavibacter michiganensis* subsp. *sepedonicus*) was maintained in 2008.
- Improving the accuracy and speed of diagnosis while remaining cost-effective is an on-going goal that will continue in 2009.
- Periodic reports were made available on-line during the summer months only. Annual reports are also available at <http://www.ag.ndsu.nodak.edu/diaglab/>
- Instruction of Introductory Plant Pathology labs in fall 2008 improved in at least two ways – by organizing teaching material in a more logical manner and by including at least two additional, more relevant lab exercises.

### **Goals for 2009**

- Maintain USDA certification for screening potato seed tubers for bacterial ring rot for export to Canada.
- Offer First Detector training events for county agents and other agricultural professionals who desire to become registered first detectors in the National Plant Diagnostic Network.
- Initiate First Detector Educator training events to enable county agents to offer First Detector training to members of their respective counties, including master gardeners, agriculture professionals, and others.
- Continue to offer training to county extension personnel who would like to use PDIS to submit sample information and digital images.
  - A new, more intuitive version of PDIS is scheduled to be released April 2009
- Increase the use of conventional PCR and real-time PCR to supplement diagnosis of additional organisms, when applicable.

Special tests not listed below may be available by arrangement. Contact the lab at 701.231.7854 or by email (NDSU.PDL@ndsu.edu). Fees in bold are either increases from 2008 or for new items. Fees are valid through December 31, 2009.

## NDSU Plant Diagnostic Lab Fees

- Routine diagnosis (includes routine culture, when required), ND Resident ..... \$15
  - Out of State surcharge ..... additional \$10
  - Non-routine culture ..... additional **\$15**
- ELISA (serological test) – contact lab for availability ..... **\$35**  
 Per additional sample, same organism..... **\$5**
- Dutch elm disease test ..... \$30
- Plant or insect identification ..... \$15
- Home mold identification ..... **\$30**
- Nematode – soil; sieve method; egg/stage 2 juveniles for SCN ..... \$25
- Nematode – soil; sugar centrifugation technique; multiple genera ..... \$35
- Soil Bioassays ..... \$110 minimum
  - Rhizomania (BNYVV)
  - Root rot index (Aphanomyces, others)
- IFA for ash yellows phytoplasma (for research samples only) ..... **\$35**
- Potato tuber rot evaluation ..... \$35
- PCR (gene-based analysis) – contact lab for availability ..... **\$35**

## NDSU Seed Health/Phytosanitary Testing Fees

### Dry Edible Beans

- “Dome Test” for Bacterial Blight pathogens (3-5 lb. minimum sample) ..... \$50
- Anthracnose testing (3-5 lb. minimum sample) ..... \$50
- “Dome” + Anthracnose (5-8 lb minimum sample) ..... \$90

### Potato

- Late Blight tuber screen (min. 400 tubers) ..... \$75
- Bacterial Ring Rot of Potatoes for Export (minimum 400 tubers required; ELISA/IFA, positives verified with real-time PCR) ..... **\$150**
- ELISA virus testing on tuber sprouts (min. 600 tubers, 2 sprouts/tuber and 2 tubers per ELISA well)
  - PVY, 300 wells at \$2/well: ..... **\$600**
    - With PVY validation/strain characterization (PCR), \$2.50/well **\$750**
  - Additional viruses: ..... **\$35 per plate**, each virus
- Potato tissue culture 6-virus/1-bacteria screen (PVA, PVM, PVS, PVX, PVY, PLRV, and *Clavibacter michiganensis* subsp. *sepedonicus*; *Erwinia atroseptica*/syn: *Pectobacterium atrosepticum* by request) ..... \$15/per plantlet
- PSTV (available by special arrangement; contact lab for pricing) ..... varies

### Pulse crops - Lentils / Chickpeas (Garbanzos) / Field Peas

- Ascochyta screening (3-5 lb. minimum sample) ..... pea/lentil: \$65  
 chickpea: \$95
- Anthracnose screening (2-3 lb. minimum sample) ..... \$50
- Nematode seed wash ..... \$25

### Small Grains

- Black Point screen (2-3 lb. minimum sample) ..... **\$75**
- Bunt seed wash (per ISTA method; submitted sample: min. 1000 grams; sub-sample: min. 50 grams) ..... \$75

### Sunflower

- Nematode seed wash ..... \$25

## Fee Waivers for Extension Personnel

Samples referred (or submitted) to the lab by extension personnel can qualify for a fee waiver. Each county extension office and Research and Extension Center receives four fee waivers annually. These waivers can be used to waive the following fees: routine diagnosis, culture, Dutch elm disease test, herbicide injury evaluation (visual only; NDSU no longer offers chemical residue analysis on a routine basis), plant/insect identification, home mold identification, nematode test, or routine virus test. **Note:** The fee waiver cannot be applied to seed health testing/phytosanitary testing, the potato spindle tuber viroid test, and certain other special tests. If you have any questions, please contact the lab.

Fee waiver coupons for 2009 will be mailed to county and REC offices in late May. Please prepare ND residents for the \$15 fee if they are referred to the Plant Diagnostic Lab without a fee waiver. 2008 fee waivers can be used until the new ones arrive.

## A Guide for Estimating Turn-Around Time

Many of the samples that come into the lab have uncommon or unusual symptoms that are not routinely encountered by experts. As a result, more time is spent on these samples in attempts to determine the cause of the symptoms. Culturing is typically required to help determine or confirm the possible cause(s) of symptoms observed. Extensive culturing increases the turn-around time for results, and sometimes the cause of symptoms remains inconclusive even after considerable effort. For challenging samples, the guide below does not apply.

### Estimated turnaround times for routine samples:

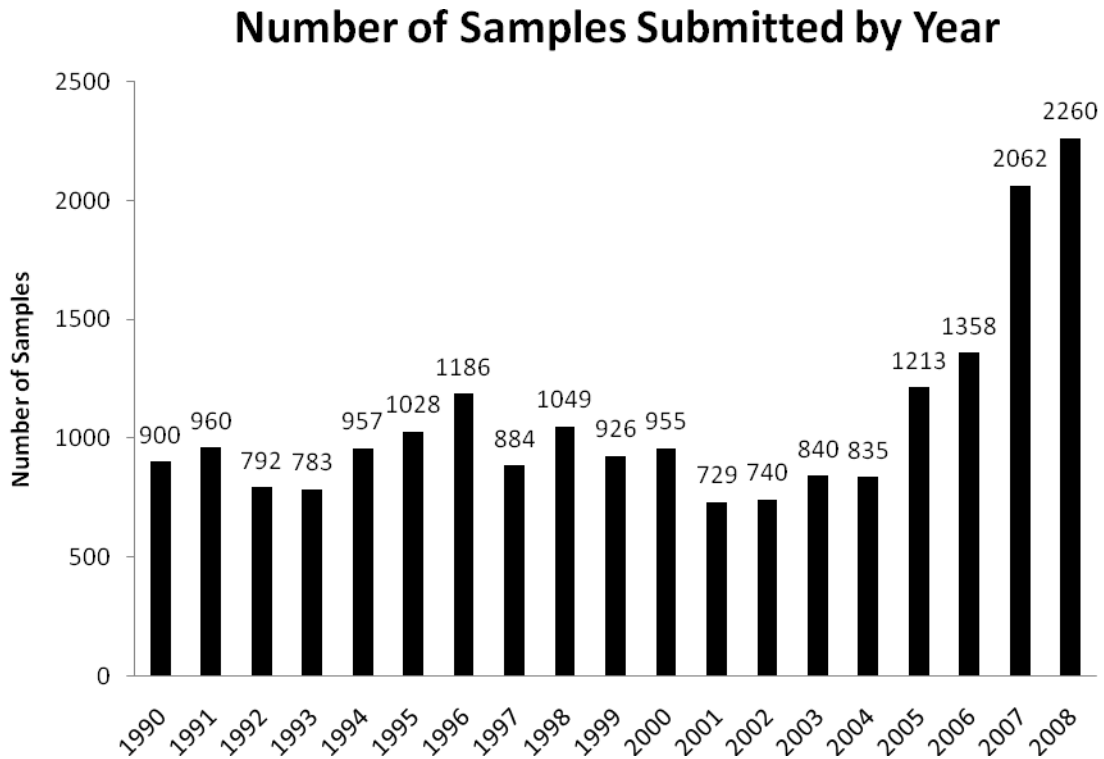
Sample Type	Estimated turnaround time
Field Crops	1-7 days
Tree/Shrub	5-7 days
ELISA testing	1-4 days
PCR testing	1-7 days
Culturing	2-4 weeks
Nematode	1-7 days
Fruits/Vegetables	1-14 days
Ornamentals	1-14 days
Turf/Lawn	1-14 days
Plant/Insect ID	1-7 days
Mold ID	2 weeks
Seed Health	24 hours to several weeks
Phyosanitary	24 hours to several weeks

These are just guidelines and they are based on one sample. If multiple samples are received from the same submitter, these estimates would need to be adjusted accordingly. Actual turnaround time depends on several factors, such as number of samples; availability of expert consultants; knowledge of the crop; type of problem suspected; priority (triage; e.g. samples that require immediate corrective actions vs. samples with no such immediate need); and so on. The lab generally adopts a 'first-come-first-served' policy, but under certain circumstances, some samples, particularly commercial ones or those suspected to be infected by a 'high risk' pest (as defined by the National Plant Diagnostic Network), may be given priority, especially if a very narrow window of time for treatment exists.

## Lab Statistics

### ***Total samples Received by Year, 1990 through 2008***

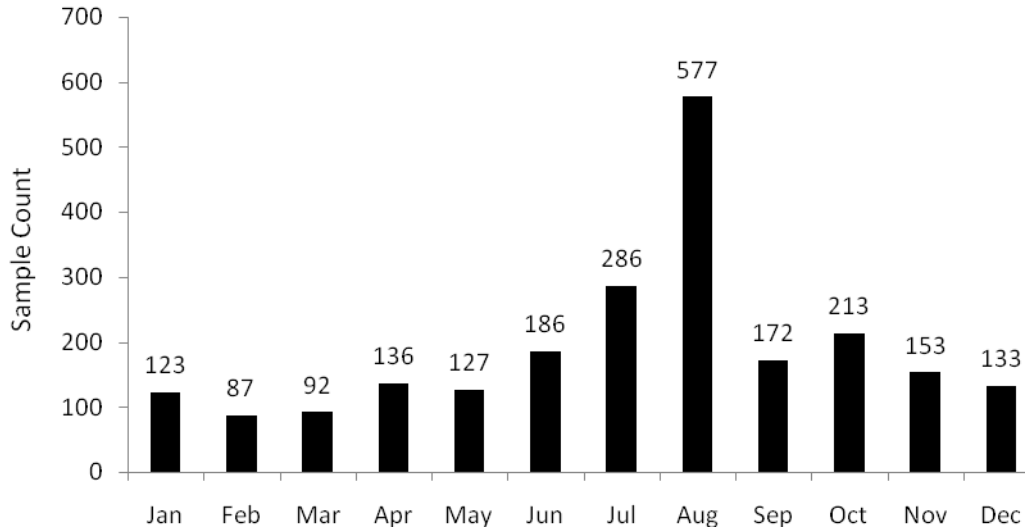
A historical perspective of samples received by the lab is presented in the graph below. The 19-year average is 1076 samples per year. Total sample number received per year has been on the rise for the past four years. This trend is primarily due to an increase in the number of research and phytosanitary samples processed and to improved sample tracking methods.



### **Monthly Sample Submission 2008**

Monthly submission rates of samples to the Plant Diagnostic Lab vary by time of year. Plant diagnostic services comprise the bulk of the samples submitted during the summer months, and the fees are kept low to encourage use of the lab by the general public. Seed health testing, phytosanitary testing services, and research samples dominate during the winter months.

### **Sample Submissions by Month, 2008**





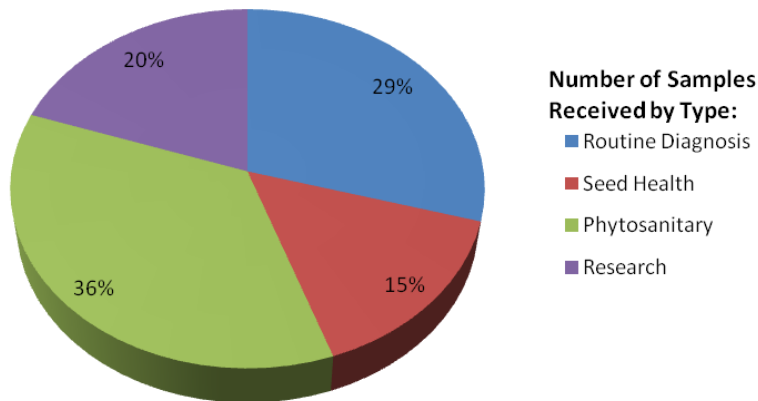
**Number of Routine Diagnoses Samples by location 2008 –  
Excluding Phytosanitary, Research, and Seed Health samples**

Samples received by location		
State or Country	County	# samples
North Dakota	Not Reported	10
North Dakota	Adams	0
North Dakota	Barnes	8
North Dakota	Benson	3
North Dakota	Bottineau	7
North Dakota	Bowman	7
North Dakota	Burke	0
North Dakota	Burleigh	30
North Dakota	Cass	154
North Dakota	Cavalier	2
North Dakota	Dickey	18
North Dakota	Divide	2
North Dakota	Dunn	2
North Dakota	Eddy	0
North Dakota	Emmons	9
North Dakota	Foster	9
North Dakota	Golden Valley	5
North Dakota	Grand Forks	21
North Dakota	Grant	2
North Dakota	Griggs	8
North Dakota	Hettinger	14
North Dakota	Kidder	5
North Dakota	Lamoure	4
North Dakota	Logan	8
North Dakota	McHenry	8
North Dakota	McIntosh	4
North Dakota	McKenzie	4
North Dakota	McLean	13
North Dakota	Mercer	5
North Dakota	Morton	9
North Dakota	Mountrail	7
North Dakota	Nelson	2

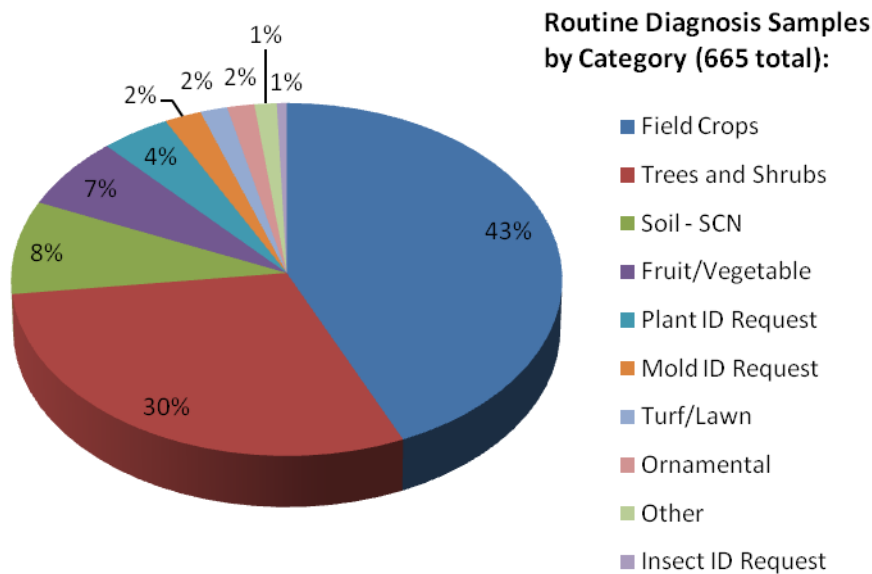
Samples received by location		
State or Country	County	# samples
North Dakota	Oliver	0
North Dakota	Pembina	9
North Dakota	Pierce	1
North Dakota	Ramsey	6
North Dakota	Ransom	5
North Dakota	Renville	5
North Dakota	Richland	57
North Dakota	Rolette	1
North Dakota	Sargent	3
North Dakota	Sheridan	5
North Dakota	Sioux	0
North Dakota	Slope	0
North Dakota	Starke-Billings	13
North Dakota	Steele	2
North Dakota	Stutsman	3
North Dakota	Towner	2
North Dakota	Traill	7
North Dakota	Walsh	22
North Dakota	Ward	15
North Dakota	Wells	10
North Dakota	Williams	0
Arizona	NA	1
Colorado	NA	1
Georgia	NA	1
Iowa	NA	2
Illinois	NA	1
Kansas	NA	2
Minnesota	NA	92
Massachusetts	NA	1
Nebraska	NA	2
New Jersey	NA	1
South Dakota	NA	9
Wyoming	NA	2

### Number of Samples Received By Sample Category 2008

A total of 2,260 samples were submitted in 2008. Samples submitted for phytosanitary testing formed the largest group, with 806 samples (792 of these specifically for a nematode seed test). Seed health samples remained fairly steady, with 344 received in 2008. The number of samples submitted for routine diagnoses was 665, and a total of 812 diagnoses were applied to these samples.



Of the samples submitted for routine diagnosis, the number of crop-related samples received in 2008 was 288, compared to 253 in 2007; 281 in 2006; 382 in 2005; and 392 in 2004. The fluctuation in these numbers from year to year likely reflects variation in disease pressure. The Trees and Shrub category consistently makes up a significant portion of sample submissions. In 2008, the tree/shrub category (198 samples) comprised 29.7% of routine diagnosis samples.



**Number of Diagnoses by Sample Category and Causal Agent Type  
2008**

Sample Category	Causal Agent Type									
	Total Diagnoses	Fungi	Bacteria	Viruses	Arthropods	Nematodes	Herbicide Injury	Abiotic	Poor /Insufficient	Unknown
Field Crops	359	123	39	41	4	1	70	71	3	6
Tree/Shrub	238	57	5	5	38	0	16	110	5	2
Fruit/Veg	60	17	2	0	3	0	8	28	1	1
Plant ID	31	0	0	0	0	0	0	0	0	0
Insect ID	4	0	0	0	4	0	0	0	0	0
Mold/Fungi ID	16	16	0	0	0	0	0	0	0	0
Turf/Lawn	11	7	0	0	0	0	0	4	0	0
Ornamental	12	3	0	1	1	0	0	4	2	1
Soil (SCN or assay)	63	6	0	0	0	57	0	0	0	0
<b>Total Diagnoses</b>	<b>794</b>	<b>229</b>	<b>46</b>	<b>47</b>	<b>50</b>	<b>58</b>	<b>94</b>	<b>217</b>	<b>11</b>	<b>10</b>

### **Dutch Elm Disease – By ND County 2006-2008**

Dutch elm disease continues to infect American elm trees throughout the state. Although Dutch elm disease testing data from the lab is presented here, these data cannot indicate whether incidence has risen or lowered from one year to the next since not all samples suspected to be infected with Dutch elm disease are sent here for testing. Symptoms of Dutch elm disease are fairly diagnostic by experienced tree health professionals, but only a laboratory test can confirm the presence of the Dutch elm disease pathogen.

Keeping American elm trees healthy is the best defense against infection. Adequate watering and fertilization is important, but just as important, and possibly even more critical, are the following recommendations, offered by Dr. James Walla (NDSU research pathologist): 1) avoid application of broadleaf herbicides that contain dicamba near the rootzone of the trees; 2) avoid any other herbicide damage to the leaves or roots of the trees; and 3) avoid mechanical damage to the trunk or roots of the trees (mowers and weed whackers can cause serious problems). These measures, however, only reduce the possibility of infection; they don't eliminate the possibility completely.

Fungicide injections may also be helpful to protect a tree against infection, but such treatments are costly and must be repeated every couple of years. Consequently, fungicide injections are usually only economically justified for trees of high value. Such injections are primarily a protective measure, before a tree becomes infected. Some fungicides, however, may be able to eradicate the disease if the infection has not progressed very far. In such cases, the tree reportedly has a better chance of survival if the fungicide injection is combined with proper pruning to remove infected limbs. These 'curative' treatments can also negatively affect the tree (phytotoxicity). Good luck is also involved, since such treatments are not always effective and it is not yet apparently fully understood why.

Some American elm cultivars and several elm hybrids have demonstrated tolerance or even possible resistance to Dutch elm disease. Homeowners should talk to their county agent or to NDSU extension specialists to find which cultivars, hybrids, or varieties of elm have performed well in ND.

### **Dutch Elm Disease Samples by County**

<b>County, Number submitted</b>	<b>2006</b>		<b>2007</b>		<b>2008</b>	
	Positive	Not Detected	Positive	Not Detected	Positive	Not Detected
Cass	3	0	1	1	4	0
Emmons	--	--	--	--	1	0
LaMoure	1	0	1	0	--	--
McHenry	--	--	--	--	1	0
McKenzie	2	0	--	--	--	--
Norman	--	--	--	--	0	1
Sargent	--	--	--	--	2	0
Ward	0	1	--	--	1	0
<b>Total:</b>	<b>6</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>1</b>

### **Seed health and Phytosanitary Samples 2008**

Samples for seed health testing are usually submitted during the winter months, typically beginning in September. The number of samples submitted for potato bacterial ring rot (BRR), potato viruses, nematode seed wash (screening for nematodes on seed of pulse crops and sunflower), dome (bacterial foliar blights on dry bean), anthracnose, and other seed health tests are summarized in the table below.

<b>Seed health testing and Phytosanitary Testing Summary</b>	
Test Type	Number of samples submitted for requested test
BRR	317
Potato viruses	13
Nematode – pulse crops and sunflower	793
Dome (bacterial, dry bean)	15
Anthracnose (dry bean, pulse crops)	12
Ascochyta (pulse crops)	0
Other	10

***Details of Routine Diagnoses Samples Processed in 2008***

The table on the following pages summarizes the diagnoses by the NDSU Plant Diagnostic Lab, by plant type or sample category. Research samples are not included in the table below.

## 2008 Routine Diagnoses Samples – Details (excludes research, phytosanitary, and seed health samples)

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Alder	<i>Alnus</i> species	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Cass
Alfalfa	<i>Medicago sativa</i>	Stemphylium Leaf Spot	<i>Stemphylium</i> species	Confirmed	ND	Walsh
Apple	<i>Malus domestica</i>	Apple Scab	<i>Venturia inaequalis</i>	Suspected	ND	Ward
Apple	<i>Malus domestica</i>	Black Rot	<i>Botryosphaeria obtusa</i>	Suspected	ND	Grand Forks
Apple	<i>Malus domestica</i>	Branch Girdling	Abiotic disorder	Inconclusive	ND	Walsh
Apple	<i>Malus domestica</i>	Canker	Unidentified Fungus	Suspected	ND	Cass
Apple	<i>Malus domestica</i>	Cedar-apple Rust (Gall)	<i>Gymnosporangium juniperi-virginianae</i>	Confirmed	MN	Lincoln
Apple	<i>Malus domestica</i>	Envrionmental stress	Abiotic disorder	Suspected	ND	Cass
Apple	<i>Malus domestica</i>	Frost; Cold Damage	Abiotic disorder	Suspected	ND	Walsh
Apple	<i>Malus domestica</i>	Mechanical Damage	Abiotic disorder	Confirmed	MN	Clay
Apple	<i>Malus domestica</i>	Mechanical Damage	Abiotic disorder	Confirmed	ND	Logan
Apple	<i>Malus domestica</i>	Plant Bugs	Family Miridae	Suspected	ND	Grand Forks
Apple	<i>Malus domestica</i>	Root Problems	Abiotic disorder	Inconclusive	ND	Cass
Apple	<i>Malus domestica</i>	Scorch	Abiotic disorder	Suspected	ND	Bowman
Apple	<i>Malus domestica</i>	Trunk Girdling	Abiotic disorder	Inconclusive	ND	Cass
Apple	<i>Malus domestica</i>	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Walsh
Apple	<i>Malus domestica</i>	Woolly Apple Aphid	<i>Eriosoma lanigerum</i>	Confirmed	ND	Richland
Arborvitae	<i>Thuja</i> species	Fall Needle Drop	Abiotic disorder	Suspected	ND	Cass
Arborvitae	<i>Thuja</i> species	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Burleigh
Ash	<i>Fraxinus</i> species	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Confirmed	ND	Foster
Ash	<i>Fraxinus</i> species	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Confirmed	ND	Foster
Ash	<i>Fraxinus</i> species	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Suspected	ND	Ransom
Ash	<i>Fraxinus</i> species	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Confirmed	ND	Wells
Ash	<i>Fraxinus</i> species	Ash Rust	<i>Puccinia peridermiospora</i>	Confirmed	ND	Foster
Ash	<i>Fraxinus</i> species	Ash Rust	<i>Puccinia peridermiospora</i>	Confirmed	ND	Foster
Ash	<i>Fraxinus</i> species	Ash Rust	<i>Puccinia peridermiospora</i>	Confirmed	ND	Ransom
Ash	<i>Sorbus decora</i>	Canker	Unknown cause	Suspected	ND	Grand Forks
Ash	<i>Fraxinus</i> species	Excessive Water	Abiotic disorder	Suspected	ND	Cass
Ash	<i>Fraxinus</i> species	Growth Regulator Effect	Chemical Injury	Suspected	ND	Burleigh
Ash	<i>Fraxinus</i> species	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Foster
Ash	<i>Fraxinus</i> species	Woolly Aphids	Families aphididae(part)	Confirmed	ND	Cass
Ash - Mountain	<i>Sorbus aucuparia</i>	Scorch	Abiotic disorder	Confirmed	ND	Cass
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Confirmed	ND	Cass
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Confirmed	ND	Cass
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash anthracnose	<i>Gnomoniella fraxini</i>	Confirmed	ND	Logan
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Confirmed	ND	Ramsey
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Leaf Spot	<i>Mycosphaerella fraxinicola</i>	Suspected	ND	Cass

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Rust	<i>Puccinia peridermiospora</i>	Confirmed	ND	Grand Forks
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Rust	<i>Puccinia sparganioides</i>	Confirmed	ND	Grand Forks
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Rust	<i>Puccinia peridermiospora</i>	Confirmed	ND	Walsh
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Ash Rust	<i>Puccinia peridermiospora</i>	Confirmed	ND	Wells
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Glyphosate Injury	Chemical Injury	Suspected	ND	Morton
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Herbicide Injury	Chemical Injury	Suspected	ND	Richland
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Herbicide Injury	Chemical Injury	Suspected	ND	Richland
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Lecanium species	<i>Lecanium</i> species	Suspected	MN	Clay
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Scale Insects	Order homoptera	Confirmed	ND	Logan
Ash - Green	<i>Fraxinus pennsylv. lanceolata</i>	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Logan
Ash - Manshurian	<i>Fraxinus mandshurica</i>	Mechanical Damage	Abiotic disorder	Confirmed	ND	Barnes
Ash - Mountain	<i>Sorbus</i> species	Insufficient Sample	Insufficient Sample	Confirmed	ND	Adams
Ash - white	<i>Fraxinus americana</i>	Ash Anthracnose	<i>Gnomoniella fraxini</i>	Suspected	ND	Cass
Aspen - Quaking	<i>Populus tremuloides</i>	Armillaria Root Rot	<i>Armillaria</i> species	Suspected	ND	Burleigh
Aspen - Quaking	<i>Populus tremuloides</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Burleigh
Barley	<i>Hordeum</i> species	Fusarium Root Rot	<i>Fusarium</i> species	Confirmed	ND	McLean
Barley	<i>Hordeum</i> species	Root Rot	<i>Bipolaris sorokiniana</i>	Confirmed	ND	McLean
Barley	<i>Hordeum</i> species	Mechanical Damage	Abiotic disorder	Suspected	ND	Benson
Basil - sweet	<i>Ocimum basilicum</i>	Colletotrichum Leaf Spot	<i>Colletotrichum</i> species	Suspected	ND	Cass
Broadleaf Weeds	Mixed species	Herbicide Drift	Chemical Injury	Suspected	ND	Dickey
Buckeye - Ohio	<i>Aesculus glabra</i>	Scorch	Abiotic disorder	Suspected	ND	Bowman
Buckeye - Ohio	<i>Aesculus glabra</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Cass
Buckwheat	<i>Fagopyrum esculentum convolulus</i>	Mechanical Damage	Abiotic disorder	Suspected	ND	Kidder
Buckwheat	<i>Fagopyrum esculentum convolulus</i>	Phomopsis Canker	<i>Phomopsis</i> sp./spp.	Confirmed	ND	Grand Forks
Burning Bush	<i>Euonymus atropurpurea</i>	Canker	Unidentified Fungus	Inconclusive	ND	Burleigh
Burning Bush	<i>Euonymus atropurpurea</i>	Mechanical Damage	Abiotic disorder	Suspected	ND	Burleigh
Canola	<i>Brassica napus</i> var. <i>napus</i>	Envrionmental stress	Abiotic disorder	Suspected	ND	Cass
Canola	<i>Brassica napus</i> var. <i>napus</i>	No Pathogen Found	No Pathogen Found	Confirmed	ND	Cass
Canola	<i>Brassica napus</i> var. <i>napus</i>	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Ward
Cedar	<i>Cedrus</i> species	Natural Senescence	Abiotic disorder	Inconclusive	ND	Emmons
Chickpea (garbanzo)	<i>Cicer arietinum</i>	Ascochyta Blight	<i>Ascochyta</i> species	Inconclusive	ND	Adams
Choke Cherry	<i>Prunus virginiana</i>	Cherry Albino	X-Disease Phytoplasma	Not Detected	AZ	Maricopa
Choke Cherry	<i>Prunus virginiana</i>	Cherry Leaf Spot; Shothole	<i>Coccomyces</i> species	Inconclusive	ND	Cass
Choke Cherry	<i>Prunus virginiana</i>	Eriophyid Mites	Family Eriophyidae	Confirmed	ND	Walsh
Choke Cherry	<i>Prunus virginiana</i>	Glyphosate Injury	Chemical Injury	Suspected	SD	Dewey
Choke Cherry	<i>Prunus virginiana</i>	Lace Bugs	Family Tingidae	Suspected	ND	Bowman



Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Choke Cherry	<i>Prunus virginiana</i>	Prunus Necrotic Ringspot	Prunus Necrotic Ringspot Virus (PNRSV)	Not Detected	ND	Cass
Choke Cherry	<i>Prunus virginiana</i>	Prunus Necrotic Ringspot	Prunus Necrotic Ringspot Virus (PNRSV)	Not Detected	ND	Cass
Choke Cherry	<i>Prunus virginiana</i>	Prunus Necrotic Ringspot	Prunus Necrotic Ringspot Virus (PNRSV)	Not Detected	ND	Cass
Choke Cherry	<i>Prunus virginiana</i>	Prunus Necrotic Ringspot	Prunus Necrotic Ringspot Virus (PNRSV)	Not Detected	ND	Cass
Choke Cherry	<i>Prunus virginiana</i>	Prunus Necrotic Ringspot	Prunus Necrotic Ringspot Virus (PNRSV)	Not Detected	ND	Cass
Choke Cherry	<i>Prunus virginiana</i>	Valsa Canker	<i>Valsa</i> species	Suspected	ND	Bowman
Cinquefoil	<i>Potentilla</i> species	Insufficient Sample	Insufficient sample	Confirmed	ND	Mercer
Corn	<i>Zea mays</i>	Anthraco nose	<i>Colletotrichum graminicola</i>	Confirmed	MN	Norman
Corn	<i>Zea mays</i>	Bacterial Leaf Spot	<i>Pseudomonas</i> species	Suspected	ND	Barnes
Corn	<i>Zea mays</i>	Chemical Injury	Chemical Injury	Suspected	ND	La Moure
Corn	<i>Zea mays</i>	Chemical Injury	Chemical Injury	Suspected	ND	Rolette
Corn	<i>Zea mays</i>	Cold Wet Soils	Abiotic disorder	Suspected	ND	Rolette
Corn	<i>Zea mays</i>	Cultural/Env. Problem	Abiotic disorder	Suspected	ND	Mcintosh
Corn	<i>Zea mays</i>	Cultural/Env. Problem	Abiotic disorder	Confirmed	ND	Ransom
Corn	<i>Zea mays</i>	Cultural/Env. Problem	Abiotic disorder	Confirmed	SD	McPherson
Corn	<i>Zea mays</i>	Fusarium Root Rot	<i>Fusarium moniliforme</i>	Confirmed	MN	Douglas
Corn	<i>Zea mays</i>	Fusarium Root Rot	<i>Fusarium oxysporum</i>	Confirmed	ND	Cass
Corn	<i>Zea mays</i>	Fusarium Stalk Rot	<i>Fusarium moniliforme</i>	Confirmed	ND	Barnes
Corn	<i>Zea mays</i>	Fusarium Stalk Rot	<i>Fusarium moniliforme</i>	Confirmed	ND	Cass
Corn	<i>Zea mays</i>	Fusarium Stalk Rot	<i>Fusarium moniliforme</i>	Confirmed	ND	Cass
Corn	<i>Zea mays</i>	Fusarium Stalk Rot	<i>Fusarium moniliforme</i>	Confirmed	ND	Grand Forks
Corn	<i>Zea mays</i>	Fusarium Stalk Rot	<i>Fusarium moniliforme</i>	Confirmed	ND	Grand Forks
Corn	<i>Zea mays</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	MN	Douglas
Corn	<i>Zea mays</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Barnes
Corn	<i>Zea mays</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Cass
Corn	<i>Zea mays</i>	Gibberella Stalk Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Cass
Corn	<i>Zea mays</i>	Gibberella Stalk Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Cass
Corn	<i>Zea mays</i>	Gibberella Stalk Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Grand Forks
Corn	<i>Zea mays</i>	Gibberella Stalk Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Grand Forks
Corn	<i>Zea mays</i>	Gibberella Stalk Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	La Moure
Corn	<i>Zea mays</i>	Glyphosate Injury	Chemical Injury	Inconclusive	ND	Mcintosh
Corn	<i>Zea mays</i>	Growth Regulator Effect	Chemical Injury	Confirmed	MN	Kittson
Corn	<i>Zea mays</i>	Growth regulator effect	Chemical Injury	Suspected	ND	Burleigh
Corn	<i>Zea mays</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Richland
Corn	<i>Zea mays</i>	Herbicide Carryover	Chemical Injury	Suspected	ND	Cass
Corn	<i>Zea mays</i>	nitrogen deficiency	Abiotic disorder	Suspected	MN	Otter Tail
Corn	<i>Zea mays</i>	Nitrogen Deficiency	Abiotic disorder	Suspected	ND	Cass

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Corn	<i>Zea mays</i>	Planting Too Shallow	Abiotic disorder	Suspected	ND	Mcintosh
Corn	<i>Zea mays</i>	Red Root Rot	<i>Phoma terrestris</i>	Inconclusive	MN	Douglas
Corn	<i>Zea mays</i>	Soil Compaction	Abiotic disorder	Suspected	ND	Mcintosh
Corn	<i>Zea mays</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Stark
Corn	<i>Zea mays</i>	Wind Damage	Abiotic disorder	Suspected	ND	Steele
Cotoneaster	<i>Cotoneaster</i> species	Canker	Unknown cause	Inconclusive	ND	Grand Forks
Crabapple	<i>Malus</i> species	Apple Scab	<i>Venturia inaequalis</i>	Confirmed	ND	Grand Forks
Crabapple	<i>Malus</i> species	Cedar-apple Rust (Gall)	<i>Gymnosporangium juniperi-virginianae</i>	Suspected	ND	Mckenzie
Crabapple	<i>Malus</i> species	Fire Blight	<i>Erwinia amylovora</i>	Suspected	MN	Clay
Crabapple	<i>Malus</i> species	Root Girdling	Abiotic disorder	Inconclusive	ND	Walsh
Cranberry bush - Am.	<i>Viburnum trilobum</i>	Erineum Galls	Family Eriophyidae	Confirmed	ND	Kidder
Cranberry bush - Am.	<i>Viburnum trilobum</i>	Eriophyd Mites	Family Eriophyidae	Confirmed	ND	Grand Forks
Cucumber	<i>Cucumis sativus</i>	Angular Leaf Spot	<i>Pseudomonas</i> species	Suspected	ND	Sheridan
Cucumber	<i>Cucumis sativus</i>	Angular Leaf Spot	<i>Pseudomonas</i> species	Inconclusive	ND	Ward
Cucumber	<i>Cucumis sativus</i>	No Pest Found	Identification Analysis	Confirmed	ND	Cass
Cucumber	<i>Cucumis sativus</i>	Powdery Mildew	<i>Erysiphe</i> species	Confirmed	MN	Clay
Cucumber	<i>Cucumis sativus</i>	Thrips	<i>Thrips</i> species	Suspected	ND	Sheridan
Cucumber	<i>Cucumis sativus</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Richland
Dogwood	<i>Cornus</i> species	Discula Anthracnose	<i>Discula</i> species	Inconclusive	ND	Walsh
Dogwood	<i>Cornus</i> species	Dogwood Leaf Spot	<i>Septoria cornicola</i>	Confirmed	ND	Walsh
Dogwood	<i>Cornus</i> species	Septoria Leaf Spot	<i>Septoria</i> species	Suspected	ND	Cass
Dry Bean	<i>Phaseolus vulgaris</i>	ALS-enzyme inhibitor	Chemical Injury	Suspected	ND	Wells
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Blight	<i>Xanthomonas campestris</i>	Confirmed	ND	Burleigh
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Blight	<i>Xanthomonas campestris</i>	Suspected	ND	McLean
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Brown Spot	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	Suspected	MN	Aitkin
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Brown Spot	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	Suspected	ND	Benson
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Brown Spot	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	Suspected	ND	Cass
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Brown Spot	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	Confirmed	ND	Traill
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Brown Spot	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	Suspected	ND	Walsh
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Brown Spot	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	Suspected	ND	Walsh
Dry Bean	<i>Phaseolus vulgaris</i>	Bacterial Leaf Spot	Uncharacterized bacteria	Confirmed	MN	Renville
Dry Bean	<i>Phaseolus vulgaris</i>	Bean Halo Blight (Bacterial)	<i>Pseudomonas syringae</i> pv. <i>phaseolicola</i>	Suspected	MN	Clay
Dry Bean	<i>Phaseolus vulgaris</i>	Bean Rust	<i>Uromyces appendiculatus</i> ( <i>phaseoli</i> )	Confirmed	ND	Traill
Dry Bean	<i>Phaseolus vulgaris</i>	Chemical Injury	Chemical Injury	Suspected	ND	Walsh
Dry Bean	<i>Phaseolus vulgaris</i>	Common Bacterial Blight	<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>	Suspected	MN	Clay
Dry Bean	<i>Phaseolus vulgaris</i>	Common Bacterial Blight	<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>	Suspected	MN	Mahnomen

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Dry Bean	<i>Phaseolus vulgaris</i>	Common Bacterial Blight	<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>	Suspected	ND	Benson
Dry Bean	<i>Phaseolus vulgaris</i>	Common Bacterial Blight	<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>	Suspected	ND	Griggs
Dry Bean	<i>Phaseolus vulgaris</i>	Common Bacterial Blight	<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>	Confirmed	ND	Traill
Dry Bean	<i>Phaseolus vulgaris</i>	Common Bacterial Blight	<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>	Confirmed	ND	Traill
Dry Bean	<i>Phaseolus vulgaris</i>	Common Bacterial Blight	<i>Xanthomonas campestris</i> pv. <i>phaseoli</i>	Suspected	ND	Walsh
Dry Bean	<i>Phaseolus vulgaris</i>	Cutworms	Family Noctuidae	Inconclusive	ND	Pembina
Dry Bean	<i>Phaseolus vulgaris</i>	Dinitroaniline	Chemical Injury	Suspected	ND	Foster
Dry Bean	<i>Phaseolus vulgaris</i>	Dinitroaniline injury	Chemical Injury	Suspected	ND	Steele
Dry Bean	<i>Phaseolus vulgaris</i>	Fusarium Root Rot	<i>Fusarium</i> species	Confirmed	ND	Cass
Dry Bean	<i>Phaseolus vulgaris</i>	Fusarium Root Rot	<i>Fusarium oxysporum</i>	Confirmed	ND	Grand Forks
Dry Bean	<i>Phaseolus vulgaris</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	MN	Aitkin
Dry Bean	<i>Phaseolus vulgaris</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	MN	Grant
Dry Bean	<i>Phaseolus vulgaris</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Cass
Dry Bean	<i>Phaseolus vulgaris</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Grand Forks
Dry Bean	<i>Phaseolus vulgaris</i>	Herbicide Injury; Exposure	Chemical Injury	Inconclusive	ND	Pembina
Dry Bean	<i>Phaseolus vulgaris</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Ward
Dry Bean	<i>Phaseolus vulgaris</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Wells
Dry Bean	<i>Phaseolus vulgaris</i>	Insufficient Sample	Insufficient sample	Confirmed	ND	Wells
Dry Bean	<i>Phaseolus vulgaris</i>	Mechanical Damage	Abiotic disorder	Suspected	ND	Cass
Dry Bean	<i>Phaseolus vulgaris</i>	Rust	<i>Uromyces appendiculatus</i>	Confirmed	ND	Traill
Dry Bean	<i>Phaseolus vulgaris</i>	Soil Compaction	Abiotic disorder	Inconclusive	ND	Pembina
Dry Bean	<i>Phaseolus vulgaris</i>	Sunscald	Abiotic disorder	Suspected	ND	Grand Forks
Dry Bean	<i>Phaseolus vulgaris</i>	Sunscald	Abiotic disorder	Suspected		
Dry Bean	<i>Phaseolus vulgaris</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Adams
Dry Bean	<i>Phaseolus vulgaris</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected		
Dry Field peas	<i>Pisum sativum</i>	Bacterial Leaf Spot	<i>Pseudomonas</i> species	Suspected	KS	Gove
Dry Field peas	<i>Pisum sativum</i>	Bacterial Leaf Spot	<i>Pseudomonas</i> species	Confirmed	KS	Unknown
Dry Field peas	<i>Pisum sativum</i>	Cutworms	Family Noctuidae	Suspected	ND	Ward
Dry Field peas	<i>Pisum sativum</i>	No Pathogen Found	No Pathogen Found	Not Detected	ND	Stark
Elm	<i>Ulmus</i> species	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Not Detected	MN	Norman
Elm	<i>Ulmus</i> species	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Cass
Elm	<i>Ulmus</i> species	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Mchenry
Elm	<i>Ulmus</i> species	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Sargent
Elm	<i>Ulmus</i> species	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Sargent
Elm	<i>Ulmus</i> species	Scale Insects	Order homoptera	Inconclusive	ND	Foster
Elm	<i>Ulmus</i> species	Squirrel Damage	Abiotic disorder	Suspected	ND	Cass
Elm	<i>Ulmus</i> species	Woolly Elm Aphid	<i>Eriosoma americanum</i>	Suspected	ND	Foster

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Elm - American	<i>Ulmus americana</i>	Bacterial Leaf Scorch	<i>Xylella fastidiosa</i>	Suspected	MN	Clay
Elm - American	<i>Ulmus americana</i>	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Cass
Elm - American	<i>Ulmus americana</i>	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Emmons
Elm - American	<i>Ulmus americana</i>	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Stark
Elm - Cathedral	Siberian elm X Japanese elm	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Cass
Elm - Cathedral	<i>Ulmus pumila</i> X <i>S. davidiana</i>	Dutch Elm Disease	<i>Ophiostoma ulmi</i>	Confirmed	ND	Cass
Elm - Siberian	<i>Ulmus pumila</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Dickey
Elm - Siberian	<i>Ulmus pumila</i>	Spring Cankerworm	<i>Paleacrita vernata</i>	Confirmed	ND	Walsh
Flax	<i>Linum usitatissimum</i>	Glyphosate Injury	Chemical Injury	Inconclusive	ND	Morton
Flax	<i>Linum usitatissimum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Walsh
Foxtail - Green	<i>Setaria viridis</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Stark
Fungus ID Request	Household material	<i>Alternaria</i> sp./spp. Fungal ID	<i>Alternaria</i> species	Confirmed	MN	Wilkin
Fungus ID Request	Household material	Cladosporium Mold	<i>Cladosporium</i> species	Suspected	ND	Cass
Fungus ID Request	Packaged food	Mold	<i>Penicillium</i> species	Suspected	MA	Bristol
Fungus ID Request	Packaged food	Mold	Unidentified Mold	Confirmed	MA	Bristol
Fungus ID Request	Household material	Mold	Unidentified Mold	Confirmed	MN	Clay
Fungus ID Request	Household material	Mold	Unidentified Mold	Suspected	ND	Cass
Fungus ID Request	Household material	Mold	Unidentified Mold	Confirmed	ND	Cass
Fungus ID Request	Household material	Mold	Unidentified Mold	Confirmed	ND	Cass
Fungus ID Request	Industrial Property	Mold	Unidentified Mold	Confirmed	ND	Cass
Fungus ID Request	Household material	Mold; Mildew	<i>Chaetomium</i> species	Confirmed	MN	Clay
Fungus ID Request	Household material	Mold; Mildew	<i>Chaetomium</i> species	Confirmed	ND	Cass
Fungus ID Request	Household material	Mold; Mildew	<i>Chaetomium</i> species	Confirmed	ND	Cass
Fungus ID Request	Household material	Mold; Mildew	<i>Chaetomium</i> species	Suspected	SD	Roberts
Fungus ID Request	Household material	No mold detected on sample	No mold detected on sample	Confirmed	ND	Cass
Fungus ID Request	Playground	Stump puffball mushroom	<i>Lycoperdon pyriforme</i>	Suspected	ND	Griggs
Fungus ID Request	Unidentified plant material	Unidentified plant material	Zygomycetes	Confirmed	ND	Dickey
Grape	<i>Vitis</i> species	Grape Anthracnose	<i>Elsinoe ampelina</i>	Confirmed	ND	Cass
Grape	<i>Vitis</i> species	Grape Downy Mildew	<i>Plasmopara viticola</i>	Confirmed	ND	Cass
Grape	<i>Vitis</i> species	Grape Powdery Mildew	<i>Uncinula necator</i>	Confirmed	ND	Cass
Grape	<i>Vitis</i> species	Growth Regulator Effect	Chemical Injury	Confirmed	ND	Mckenzie
Grape	<i>Vitis</i> species	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Cass
Hackberry	<i>Celtis</i> species	Growth Regulator Effect	Chemical Injury	Suspected	ND	Ramsey
Hackberry	<i>Celtis</i> species	Hackberry Nipplegall Maker	<i>Pachypsylla celtidismamma</i>	Confirmed	ND	Kidder
Hackberry	<i>Celtis</i> species	Psyllid	<i>Pachypsylla</i> species	Suspected	ND	Ramsey
Hackberry	<i>Celtis</i> species	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Morton
Home and garden	habitat	Insufficient Sample	Identification Analysis	Confirmed	ND	Sheridan

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Home and garden	habitat	Mineral/Elemental Toxicity	Abiotic disorder	Inconclusive	ND	Richland
Home and garden	habitat	Salt Damage	Abiotic disorder	Suspected	ND	Richland
Home and garden	habitat	Soil Compaction	Abiotic disorder	Suspected	ND	Richland
Hosta	<i>Hosta</i> species	Hosta Virus X	Hosta Virus X (HVX)	Confirmed	ND	Grand Forks
Insect ID Request	Insect ID Request	Common Sawflies	Family Tenthredinidae	Confirmed	ND	Wells
Insect ID Request	Insect ID Request	Forest Tent Caterpillar	<i>Malacosoma disstria</i>	Confirmed	ND	Wells
Insect ID Request	Insect ID Request	Green Stink Bug	<i>Acrosternum hilaris</i>	Confirmed	ND	Cass
Insect ID Request	Home and Garden	Soft-winged flower beetles	Family Melyridae	Suspected	ND	Grand Forks
Jade	<i>Crassula arborescens</i>	Mealybugs	Family Pseudococcidae	Confirmed	MN	Clay
Juniper	<i>Juniperus</i> species	Arborvitae Witches" Broom	<i>Gymnosporangium ellisii</i>	Inconclusive	ND	Golden Valley
Juniper	<i>Juniperus</i> species	Branch Girdling	Abiotic disorder	Suspected	ND	Cass
Juniper	<i>Juniperus</i> species	Rust	<i>Gymnosporangium</i> species	Confirmed	ND	McLean
Juniper	<i>Juniperus</i> species	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Burleigh
Juniper - Rocky Mtn	<i>Juniperus scopulorum</i>	Insufficient Sample	Insufficient Sample	Confirmed	ND	Emmons
Lentil	<i>Lens culinaris</i>	Herbicide Carryover	Chemical Injury	Inconclusive	ND	Stark
Lilac	<i>Syringa</i> species	Envrionmental stress	Abiotic disorder	Suspected	ND	Emmons
Lilac	<i>Syringa</i> species	Excessive Water	Abiotic disorder	Suspected	ND	Cass
Lilac - Japanese Tree	<i>Syringa reticulata</i>	Poor Growing Conditions	Abiotic disorder	Suspected	ND	Walsh
Lilac - Japanese Tree	<i>Syringa reticulata</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Cass
Lily	<i>Lilium</i> species	Oedema	Abiotic disorder	Suspected	ND	Cass
Linden	<i>Tilia americana</i>	Eriophyid Gall Mite	Family Eriophyidae	Confirmed	IA	Black Hawk
Linden	<i>Tilia</i> species	Eriophyid Mites	Family Eriophyidae	Confirmed	ND	Kidder
Linden	<i>Tilia</i> species	Eriophyid Mites	Family Eriophyidae	Suspected	ND	Wells
Linden	<i>Tilia</i> species	Excessive Water	Abiotic disorder	Suspected	ND	Ramsey
Linden	<i>Tilia</i> species	scorch	Abiotic disorder	Confirmed	ND	Dickey
Maple	<i>Acer</i> species	Chemical Injury	Chemical Injury	Suspected	ND	Dickey
Maple	<i>Acer</i> species	Envrionmental stress	Abiotic disorder	Suspected	ND	Cass
Maple	<i>Acer</i> species	Erineum Galls	Family Eriophyidae	Confirmed	MN	Clay
Maple	<i>Acer</i> species	Eriophyid Mites	Family Eriophyidae	Confirmed	ND	Cass
Maple	<i>Acer</i> species	Insufficient Sample	Insufficient Sample	Confirmed	ND	Ransom
Maple	<i>Acer</i> species	Iron Deficiency	Abiotic disorder	Suspected	MN	Clay
Maple	<i>Acer</i> species	Iron Deficiency	Abiotic disorder	Suspected	ND	Barnes
Maple	<i>Acer</i> species	Iron Deficiency	Abiotic disorder	Suspected	ND	Cass
Maple	<i>Acer</i> species	Iron Deficiency	Abiotic disorder	Confirmed	ND	Cass
Maple	<i>Acer</i> species	Iron Deficiency	Abiotic disorder	Suspected	ND	Walsh
Maple	<i>Acer</i> species	Maple Bladdergall Mite	<i>Vasates quadripedes</i>	Suspected	MN	Clay
Maple	<i>Acer</i> species	Scorch	Abiotic disorder	Suspected	ND	Barnes

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Maple	<i>Acer</i> species	Unknown	Unknown	Confirmed	ND	Cass
Maple - Silver	<i>Acer saccharinum</i>	Envrionmental stress	Abiotic disorder	Suspected	NJ	Essex
Maple - Silver	<i>Acer saccharinum</i>	Mechanical Damage	Abiotic disorder	Suspected	ND	Cass
Maple - Silver	<i>Acer saccharinum</i>	No Pest Found	Identification Analysis	Confirmed	ND	Cass
Muskmelon	<i>Cucumis melo reticulatus</i>	Poor pollination	Abiotic disorder	Suspected	MN	Clay
Nicotiana	<i>Nicotiana</i> species	Undetermined Injury or Pest	Identification Analysis	Inconclusive	GA	Dooly
Oak	<i>Quercus</i> species	Aphids	Family Aphididae	Confirmed	ND	Cass
Oak	<i>Quercus</i> species	Bark Beetles; Ambrosia Beetles	Family Scolytidae	Suspected	ND	Cass
Oak	<i>Quercus</i> species	Oak Anthracnose	<i>Gnomonia quercina</i>	Confirmed	MN	Clay
Oak	<i>Quercus</i> species	Oak Anthracnose	<i>Gnomonia quercina</i>	Confirmed	ND	Walsh
Oak	<i>Quercus</i> species	Oak Leaf Miner	<i>Cameraria cincinnatiella</i>	Confirmed	MN	Clay
Oak	<i>Quercus</i> species	Scorch	Abiotic disorder	Suspected	ND	Ward
Oak - Bur	<i>Quercus macrocarpa</i>	Envrionmental stress	Abiotic disorder	Suspected	ND	Cass
Oak - Bur	<i>Quercus macrocarpa</i>	Oak Anthracnose	<i>Gnomonia quercina</i>	Confirmed	ND	Cass
Oak - Bur	<i>Quercus macrocarpa</i>	Scorch	Abiotic disorder	Suspected	ND	Ramsey
Oat	<i>Avena sativa</i>	Barley Yellow Dwarf	Barley Yellow Dwarf Virus (BYDV)	Not Detected	ND	Bottineau
Oat	<i>Avena sativa</i>	Helminthosporium Leaf Spot	<i>Helminthosporium</i> species	Confirmed	ND	Bottineau
Oat	<i>Avena sativa</i>	No Pathogen Found	No Pathogen Found	Confirmed	ND	Bottineau
Onion	<i>Allium cepa</i>	Frost; Cold Damage	Abiotic disorder	Suspected	MN	Becker
Onion	<i>Allium cepa</i>	mechanical injury	Abiotic disorder	Suspected	ND	Dickey
Onion	<i>Allium cepa</i>	onion bulb rots	Unidentified fungi	Confirmed	MN	Becker
Onion	<i>Allium cepa</i>	sunscald	Abiotic disorder	Suspected	ND	Dickey
Palm - Parlor	<i>Chamaedorea elegans</i>	High Soluble Salt	Abiotic disorder	Suspected	ND	Cass
Palm - Parlor	<i>Chamaedorea elegans</i>	Insufficient Light	Abiotic disorder	Suspected	ND	Cass
Pear	<i>Pyrus</i> species	Iron Deficiency	Abiotic disorder	Suspected	ND	Cass
Pear	<i>Pyrus</i> species	Scorch	Abiotic disorder	Confirmed	ND	Cass
Pear	<i>Pyrus</i> species	Trunk Girdling	Abiotic disorder	Suspected	ND	Mcintosh
Petunia	<i>Petunia</i> species hybrids	Root Girdling	Abiotic disorder	Suspected	ND	Mercer
Pine	<i>Pinus</i> species	Drought Stress Damage	Abiotic disorder	Suspected	ND	Morton
Pine	<i>Pinus</i> species	Drought Stress Damage	Abiotic disorder	Suspected	ND	Stark
Pine	<i>Pinus</i> species	Envrionmental stress	Abiotic disorder	Confirmed	ND	Dunn
Pine	<i>Pinus</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Morton
Pine - Ponderosa	<i>Pinus ponderosa</i>	Animal Damage	Abiotic disorder	Confirmed	ND	Griggs
Pine - Ponderosa	<i>Pinus ponderosa</i>	Hail Damage	Abiotic disorder	Suspected	ND	Mchenry
Pine - Ponderosa	<i>Pinus ponderosa</i>	insufficient sample	Insufficient Sample	Confirmed	ND	Burleigh
Pine - Ponderosa	<i>Pinus ponderosa</i>	Pine Western Gall Rust	<i>Endocronartium harknessii</i>	Suspected	ND	Ward
Pine - Ponderosa	<i>Pinus ponderosa</i>	Red Pine Shoot Moths	<i>Dioryctria</i> species	Suspected	ND	Cass

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Pine - Ponderosa	<i>Pinus ponderosa</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Logan
Pine - Ponderosa	<i>Pinus ponderosa</i>	Winter Injury	Abiotic disorder	Suspected	ND	Emmons
Pine - Scotch	<i>Pinus sylvestris</i>	Drought Stress Damage	Abiotic disorder	Suspected	ND	Morton
Pine - Scotch	<i>Pinus sylvestris</i>	Drought Stress Damage	Abiotic disorder	Suspected	ND	Mountrail
Pine - Scotch	<i>Pinus sylvestris</i>	Envrionmental stress	Abiotic disorder	Suspected	ND	Mercer
Pine - Scotch	<i>Pinus sylvestris</i>	Fall Needle Drop	Abiotic disorder	Suspected	ND	Mchenry
Pine - Scotch	<i>Pinus sylvestris</i>	Mechanical Damage	Abiotic disorder	Suspected	ND	Mchenry
Plant Id request	Plant ID Request	Alternate-leaved Dogwood	<i>Cornus alterniflora</i>	Inconclusive	ND	Hettinger
Plant Id request	Plant Id request	American elderberry	<i>Sambucus canadensis</i>	Confirmed	ND	Cavalier
Plant Id request	Plant Id request	American yellowwood	<i>Cladrastis kentukea</i>	Confirmed	MN	Clay
Plant Id request	Plant Id request	Bellflower; Roving	<i>Campanula rapunculoides</i>	Confirmed	ND	Pembina
Plant Id request	Plant Id request	Bellflower; Roving	<i>Campanula rapunculoides</i>	Confirmed	ND	Towner
Plant Id request	Plant Id request	Brome; Japanese	<i>Bromus japonicus</i>	Confirmed	ND	Dickey
Plant Id request	Plant ID Request	Coarse Cyperus	<i>Cyperus odoratus</i>	Confirmed	ND	Traill
Plant Id request	Plant Id request	Common Buckthorn	<i>Rhamnus cathartica</i>	Inconclusive	ND	Hettinger
Plant Id request	Plant Id request	Corktree	<i>Phellodendron amurense</i>	Confirmed	MN	Clay
Plant Id request	Plant Id request	Fairy Candelabra	<i>Androsace occidentalis</i>	Confirmed	ND	Cass
Plant Id request	Plant Id request	Flowering Crabapple	<i>Malus coronaria</i>	Inconclusive	ND	Hettinger
Plant Id request	Plant Id request	Jimsonweed	<i>Datura stramonium</i>	Confirmed	ND	Pembina
Plant Id request	Plant Id request	Magnolias	Family Magnoliaceae	Confirmed	MN	Clay
Plant Id request	Plant Id request	Manchurian Crabapple	<i>Malus baccata Mandchurica</i>	Inconclusive	ND	Hettinger
Plant Id request	Plant Id request	Mullein; Common	<i>Verbascum thapsus</i>	Suspected	ND	Cass
Plant ID Request	Plant Id request	Nightshades	Family Solanaceae	Suspected	ND	Foster
Plant Id request	Plant Id request	Pepperweed; Virginia	<i>Lepidium virginicum</i>	Confirmed	ND	Burleigh
Plant Id request	Plant Id request	Pussytoes; Field	<i>Antennaria neglecta</i>	Suspected	MN	Roseau
Plant Id request	Plant Id request	Quackgrass	<i>Elytrigia repens</i>	Confirmed	ND	Cass
Plant Id request	Plant ID Request	Redosier Dogwood	<i>Cornus sericea</i>	Inconclusive	ND	Hettinger
Plant Id request	Plant Id request	Sedge; Fox	<i>Carex vulpinoidea</i>	Confirmed	ND	Grand Forks
Plant Id request	Plant Id request	Siberian Crabapple	<i>Malus baccata</i>	Inconclusive	ND	Hettinger
Plant Id request	Plant Id request	Siberian squill	<i>Scilla siberica</i>	Suspected	ND	Cass
Plant Id request	Plant Id request	Snowberry	<i>Symphoricarpos species</i>	Confirmed	ND	Burleigh
Plant ID Request	Plant Id request	Snow-on-the-mountain	<i>Euphorbia marginata</i>	Suspected	MN	Clay
Plant Id request	Plant Id request	Speedwell; Purslane	<i>Veronica peregrina</i>	Confirmed	MN	Kittson
Plant Id request	Plant Id request	Stickeywilly (Catchweed B.)	<i>Galium aparine</i>	Confirmed	ND	Unknown
Plant ID Request	Plant Id request	Thicket creeper	<i>Parthenocissus vitacea</i>	Confirmed	ND	Logan
Plant Id request	Plant Id request	Waterleaf Family	Family Hydrophyllaceae	Suspected	ND	Richland
Plant Id request	Plant Id request	Waterpod	<i>Ellisia nyctelea</i>	Confirmed	ND	Cass

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Plant ID Request	Plant ID Request	White Willow	<i>Salix alba</i>	Confirmed	ND	Cass
Plum	<i>Prunus</i> species	Excessive Water	Abiotic disorder	Suspected	ND	Cass
Poplar	<i>Populus</i> species	Gall	Unidentified Agent	Confirmed	ND	Mckenzie
Poplar - hybrid	<i>Populus</i> species hybrids	Root Rot	Various fungi	Confirmed	ND	Cass
Potato	<i>Solanum tuberosum</i>	Early Blight (Potato; Tomato)	<i>Alternaria solani</i>	Confirmed	GA	Dooly
Potato	<i>Solanum tuberosum</i>	elephant hide; growth crack	Abiotic disorder	Suspected	ND	Morton
Potato	<i>Solanum tuberosum</i>	Envrionmental stress	Abiotic disorder	Suspected	ND	Morton
Potato	<i>Solanum tuberosum</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Dickey
Potato	<i>Solanum tuberosum</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Griggs
Potato	<i>Solanum tuberosum</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Griggs
Potato	<i>Solanum tuberosum</i>	Potato Black Dot; Root Rot	<i>Colletotrichum coccodes</i>	Confirmed	ND	Ward
Potato	<i>Solanum tuberosum</i>	Potato Powdery Scab	<i>Spongospora subterranea</i>	Inconclusive	ND	Cass
Potato	<i>Solanum tuberosum</i>	Soft Rot	<i>Erwinia</i> species	Not Detected	GA	Dooly
Potato	<i>Solanum tuberosum</i>	Tomato Spotted Wilt	Tomato Spotted Wilt Virus (TSWV)	Confirmed	GA	Dooly
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	<i>Erwinia</i> species	Suspected	MN	Clay
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	various tuber rot pathogens	Confirmed	MN	Polk
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	various tuber rot pathogens	Confirmed	MN	Polk
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	various tuber rot pathogens	Confirmed	MN	Polk
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	various tuber rot pathogens	Confirmed	MN	Polk
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	various tuber rot pathogens	Confirmed	MN	Polk
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	various tuber rot pathogens	Confirmed	MN	Polk
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	various tuber rot pathogens	Confirmed	ND	Adams
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	<i>Erwinia</i> species	Suspected	ND	Walsh
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	<i>Erwinia</i> species	Suspected	ND	Walsh
Potato	<i>Solanum tuberosum</i>	Tuber rot evaluation	<i>Erwinia</i> species	Suspected	ND	Walsh
Potato	<i>Solanum tuberosum</i>	Undetermined Injury or Pest	unknown cause	Inconclusive	GA	Dooly
Pumpkin	<i>Cucurbita</i> species	Cucurbit Powdery Mildew	<i>Podosphaera xanthii</i>	Suspected	ND	Cass
Pumpkin	<i>Cucurbita</i> species	Genetic Disorders	Chemical Injury	Suspected	ND	Cass
Raspberry	<i>Rubus</i> species	Insect Damage	Abiotic disorder	Confirmed	ND	Mckenzie
Raspberry	<i>Rubus</i> species	Leaf Spot	<i>Sphaerulina rubi</i>	Confirmed	ND	Traill
Raspberry	<i>Rubus</i> species	nutrient imbalance	Abiotic disorder	Suspected	ND	Dickey
Rhubarb	<i>Rheum rhabarbarum</i>	Anthravnose	<i>Colletotrichum</i> species	Inconclusive	ND	Cass
Rhubarb	<i>Rheum rhabarbarum</i>	Ascochyta Leaf Spot	<i>Ascochyta rhei</i>	Confirmed	ND	Cass
Rose	<i>Rosa</i> species	Botrytis Bud and Twig Blight	<i>Botrytis cinerea</i>	Suspected	ND	Cass
Rye	<i>Secale cereale</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Confirmed	ND	Cass
Rye	<i>Secale cereale</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Confirmed	ND	Cass



Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Rye	<i>Secale cereale</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Confirmed	ND	Cass
Rye	<i>Secale cereale</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Confirmed	ND	Cass
Rye	<i>Secale cereale</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Confirmed	ND	Cass
Sandcherry, purpleleaf	<i>Prunus x cistena</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Emmons
Schefflera	<i>Schefflera</i> species	Insufficient Sample	Insufficient sample	Confirmed	ND	Stutsman
Soil	Soil	Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	ND	Cass
Soil	Soil	Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	ND	Cass
Soil	Soil	Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	ND	Cass
Soil	Soil	Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	ND	Cass
Soil	Soil	Root Rot	<i>Aphanomyces cochlioides</i>	Not Detected	ND	Cass
Soil	Soil	Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	MN	Wilkin
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	MN	Wilkin
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Cass
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Richland
Soil	Soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Unknown
Soil	Soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Unknown
Soil	Soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Unknown
Soil	Soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Unknown
Soil	Soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Unknown
Soil	Soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Unknown
Soil	Soil	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Not Detected	ND	Unknown
Sorghum	<i>Sorghum bicolor</i>	Leaf Spot	Physiological Disorder	Suspected	ND	Ward
Soybean	<i>Glycine max</i>	Aphids	Family Aphididae	Confirmed	MN	Cass
Soybean	<i>Glycine max</i>	Atrazine Carryover	Chemical Injury	Suspected	MN	Otter Tail
Soybean	<i>Glycine max</i>	Bacterial Blight	<i>Pseudomonas syringae</i>	Suspected	MN	Cass
Soybean	<i>Glycine max</i>	Bacterial Blight	<i>Pseudomonas savastanoi</i>	Confirmed	MN	Norman
Soybean	<i>Glycine max</i>	Bacterial Blight	<i>Pseudomonas savastanoi</i>	Confirmed	ND	Cass

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Soybean	<i>Glycine max</i>	Bean Pod Mottle	Bean Pod Mottle Virus (BPMV)	Not Detected	ND	Mchenry
Soybean	<i>Glycine max</i>	Bean Pod Mottle	Bean Pod Mottle Virus (BPMV)	Not Detected	ND	Richland
Soybean	<i>Glycine max</i>	Charcoal Rot	<i>Macrophomina phaseolina</i>	Suspected	MN	Clay
Soybean	<i>Glycine max</i>	Charcoal Rot	<i>Macrophomina phaseolina</i>	Suspected	MN	Wilkin
Soybean	<i>Glycine max</i>	Charcoal Rot	<i>Macrophomina phaseolina</i>	Suspected	MN	Wilkin
Soybean	<i>Glycine max</i>	Charcoal Rot	<i>Macrophomina phaseolina</i>	Suspected	ND	Cass
Soybean	<i>Glycine max</i>	Charcoal Rot	<i>Macrophomina phaseolina</i>	Suspected	ND	Richland
Soybean	<i>Glycine max</i>	Chemical Injury	Chemical Injury	Suspected	ND	Stutsman
Soybean	<i>Glycine max</i>	Cultural/Env. Problem	Abiotic disorder	Suspected	ND	Cass
Soybean	<i>Glycine max</i>	Cultural/Env. Problem	Abiotic disorder	Suspected	ND	Cass
Soybean	<i>Glycine max</i>	Cultural/Env. Problem	Abiotic disorder	Suspected	ND	Richland
Soybean	<i>Glycine max</i>	diphenyl ether herbicide injury	Chemical Injury	Suspected	ND	Nelson
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium moniliforme</i>	Confirmed	MN	Norman
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium moniliforme</i>	Confirmed	MN	Norman
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	MN	Norman
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	MN	Norman
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	MN	Wilkin
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	MN	Wilkin
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	ND	Adams
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	ND	Cass
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium moniliforme</i>	Confirmed	ND	Mcintosh
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	ND	Richland
Soybean	<i>Glycine max</i>	Fusarium Root Rot	<i>Fusarium oxysporum</i>	Confirmed	ND	Stutsman
Soybean	<i>Glycine max</i>	Fusarium Wilt	<i>Fusarium oxysporum</i>	Confirmed	MN	Marshall
Soybean	<i>Glycine max</i>	Fusarium Wilt	<i>Fusarium oxysporum</i>	Confirmed	ND	Cass
Soybean	<i>Glycine max</i>	Fusarium Wilt	<i>Fusarium oxysporum</i>	Confirmed	ND	Richland
Soybean	<i>Glycine max</i>	Fusarium Wilt	<i>Fusarium oxysporum</i>	Confirmed	SD	Kingsbury
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	MN	Becker
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	MN	Beltrami
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Confirmed	MN	Cass
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Confirmed	MN	Sherburne
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Barnes
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Barnes
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Barnes
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Cass
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Cass
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Dickey

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Mchenry
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Richland
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Confirmed	ND	Richland
Soybean	<i>Glycine max</i>	Growth Regulator Effect	Chemical Injury	Suspected	SD	Roberts
Soybean	<i>Glycine max</i>	Herbicide Carryover	Chemical Injury	Suspected	SD	Codington
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	MN	Norman
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	MN	Wilkin
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	MN	Wilkin
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Cass
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Inconclusive	ND	Logan
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Inconclusive	ND	Logan
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Logan
Soybean	<i>Glycine max</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Wells
Soybean	<i>Glycine max</i>	ineffective nodulation	abiotic disorder	Suspected	MN	Norman
Soybean	<i>Glycine max</i>	Insufficient Sample	unknown cause	Confirmed	ND	Cass
Soybean	<i>Glycine max</i>	Insufficient Sample	Insufficient sample	Confirmed	ND	Traill
Soybean	<i>Glycine max</i>	Iron Deficiency	Abiotic disorder	Confirmed	MN	Norman
Soybean	<i>Glycine max</i>	Physiological Responses	Abiotic disorder	Suspected	MN	Clay
Soybean	<i>Glycine max</i>	Phytophthora Root Rot	<i>Phytophthora sojae</i>	Confirmed	ND	Pembina
Soybean	<i>Glycine max</i>	Pod and Stem Blight	<i>Diaporthe</i> species	Confirmed	ND	Richland
Soybean	<i>Glycine max</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	MN	Aitkin
Soybean	<i>Glycine max</i>	Soybean Cyst Nematode	<i>Heterodera glycines</i>	Confirmed	ND	Grant
Soybean	<i>Glycine max</i>	Soybean Mosaic	Soybean Mosaic Virus (SMV)	Not Detected	ND	Mchenry
Soybean	<i>Glycine max</i>	Soybean Mosaic	Soybean Mosaic Virus (SMV)	Not Detected	ND	Richland
Soybean	<i>Glycine max</i>	Soybean Stem Canker	<i>Diaporthe phaseolorum</i>	Confirmed	MN	Clay
Soybean	<i>Glycine max</i>	Soybean Stem Canker	<i>Diaporthe phaseolorum</i>	Confirmed	MN	Norman
Soybean	<i>Glycine max</i>	Soybean Stem Canker	<i>Diaporthe phaseolorum</i>	Confirmed	MN	Otter Tail
Soybean	<i>Glycine max</i>	Soybean Stem Canker	<i>Diaporthe phaseolorum</i>	Confirmed	MN	Wilkin
Soybean	<i>Glycine max</i>	Soybean Stem Canker	<i>Diaporthe phaseolorum</i>	Confirmed	ND	Cass
Soybean	<i>Glycine max</i>	Soybean Stem Canker	<i>Diaporthe phaseolorum</i>	Confirmed	ND	Richland
Soybean	<i>Glycine max</i>	Sunscald	Abiotic disorder	Inconclusive	MN	Clay
Soybean	<i>Glycine max</i>	Unknown	Unknown	Confirmed	MN	Traverse
Soybean	<i>Glycine max</i>	Unknown	Unknown	Confirmed	ND	Pembina
Soybean	<i>Glycine max</i>	Unknown Abiotic Disorder	Abiotic disorder	Inconclusive	MN	Clay
Soybean	<i>Glycine max</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	MN	Clay
Soybean	<i>Glycine max</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	MN	Marshall
Soybean	<i>Glycine max</i>	Unknown Abiotic Disorder	Abiotic disorder	Inconclusive	MN	Wilkin



Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Spruce	<i>Picea</i> species	Salt Damage	Abiotic disorder	Suspected	ND	Adams
Spruce	<i>Picea</i> species	Salt Damage	Abiotic disorder	Suspected	ND	Burleigh
Spruce	<i>Picea</i> species	Salt Damage	Abiotic disorder	Suspected	ND	Foster
Spruce	<i>Picea</i> species	Salt Damage	Abiotic disorder	Suspected	ND	Hettinger
Spruce	<i>Picea</i> species	Sooty Mold	Various fungi	Suspected	ND	Cass
Spruce	<i>Picea</i> species	spider mite injury	Spider mites	Suspected	ND	Cass
Spruce	<i>Picea</i> species	Spider Mite Injury	Abiotic disorder	Suspected	ND	Cass
Spruce	<i>Picea</i> species	Spider Mite Injury	Abiotic disorder	Confirmed	ND	Pembina
Spruce	<i>Picea</i> species	Spider Mite Injury	Abiotic disorder	Confirmed	ND	Renville
Spruce	<i>Picea</i> species	Spider Mite Injury	Abiotic disorder	Suspected	ND	Walsh
Spruce	<i>Picea</i> species	Spider Mites	Family Tetranychidae	Confirmed	ND	Renville
Spruce	<i>Picea</i> species	Spruce Bud Scale	<i>Physokermes piceae</i>	Confirmed	ND	Renville
Spruce	<i>Picea</i> species	Stigmata Needle Blight	<i>Stigmata lautii</i>	Suspected	ND	Pembina
Spruce	<i>Picea</i> species	Stigmata Needle Blight	<i>Stigmata lautii</i>	Confirmed	ND	Renville
Spruce	<i>Picea</i> species	Transplant Shock	Abiotic disorder	Suspected	ND	Cass
Spruce	<i>Picea</i> species	Transplant Shock	Abiotic disorder	Suspected	ND	Mercer
Spruce	<i>Picea</i> species	Trunk Girdling	Abiotic disorder	Suspected	ND	Mercer
Spruce	<i>Picea</i> species	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Adams
Spruce	<i>Picea</i> species	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	McLean
Spruce	<i>Picea</i> species	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Renville
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Burleigh
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Burleigh
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Burleigh
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Burleigh
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Cass
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Cass
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	Hettinger
Spruce	<i>Picea</i> species	Winter Injury	Abiotic disorder	Suspected	ND	McLean
Spruce	<i>Picea</i> species	Yellowheaded Spruce Sawfly	<i>Pikonema alaskensis</i>	Suspected	ND	McLean
Spruce	<i>Picea</i> species	Yellowheaded Spruce Sawfly	<i>Pikonema alaskensis</i>	Inconclusive	ND	Mercer
Spruce - Black Hills	<i>Picea glauca densata</i>	Cytospora Canker	<i>Cytospora</i> species	Inconclusive	ND	Burleigh
Spruce - Black Hills	<i>Picea glauca densata</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Richland
Spruce - Black Hills	<i>Picea glauca densata</i>	Hail Damage	Abiotic disorder	Suspected	ND	Burleigh
Spruce - Black Hills	<i>Picea glauca densata</i>	Pine Needle Scale	<i>Chionaspis pinifoliae</i>	Confirmed	MN	Clay
Spruce - Black Hills	<i>Picea glauca densata</i>	Spider Mite Injury	Abiotic disorder	Confirmed	ND	Foster
Spruce - Black Hills	<i>Picea glauca densata</i>	Spider Mite Injury	Abiotic disorder	Confirmed	ND	Renville
Spruce - Black Hills	<i>Picea glauca densata</i>	Spider Mite Injury	Abiotic disorder	Suspected	ND	Ward

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Spruce - Black Hills	<i>Picea glauca densata</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Renville
Spruce - Blue	<i>Picea pungens</i>	Cytospora Canker	<i>Cytospora</i> species	Suspected	IL	Calhoun
Spruce - Blue	<i>Picea pungens</i>	Envrionmental stress	Abiotic disorder	Suspected	ND	Burleigh
Spruce - Blue	<i>Picea pungens</i>	Envrionmental stress	Abiotic disorder	Confirmed	ND	Mountrail
Spruce - Blue	<i>Picea pungens</i>	Growth Regulator Effect	Chemical Injury	Suspected	SD	Grant
Spruce - Blue	<i>Picea pungens</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Golden Valley
Spruce - Blue	<i>Picea pungens</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Ward
Spruce - Blue	<i>Picea pungens</i>	High Soluble Salt	Abiotic disorder	Suspected	ND	Ransom
Spruce - Blue	<i>Picea pungens</i>	Insufficient Light	Abiotic disorder	Suspected	ND	Burleigh
Spruce - Blue	<i>Picea pungens</i>	Mechanical Damage	Abiotic disorder	Suspected	ND	Kidder
Spruce - Blue	<i>Picea pungens</i>	Needle cast	Unidentified Fungus	Suspected	ND	Barnes
Spruce - Blue	<i>Picea pungens</i>	Phytotoxic effect	Abiotic disorder	Suspected	ND	Burleigh
Spruce - Blue	<i>Picea pungens</i>	Pine Needle Scale	<i>Chionaspis pinifoliae</i>	Confirmed	ND	Barnes
Spruce - Blue	<i>Picea pungens</i>	Salt Damage	Abiotic disorder	Suspected	ND	Burleigh
Spruce - Blue	<i>Picea pungens</i>	Spider Mite Injury	Abiotic disorder	Suspected	ND	Barnes
Spruce - Blue	<i>Picea pungens</i>	spider mite injury	Spider mites	Confirmed	ND	Wells
Spruce - Blue	<i>Picea pungens</i>	Spider Mites	Family Tetranychidae	Confirmed	ND	Ward
Spruce - Blue	<i>Picea pungens</i>	Spruce Bud Scale	<i>Physokermes piceae</i>	Confirmed	ND	Burleigh
Spruce - Blue	<i>Picea pungens</i>	Stigmima Needle Blight	<i>Stigmima lautii</i>	Confirmed	ND	Cass
Spruce - Blue	<i>Picea pungens</i>	Stigmima Needle Blight	<i>Stigmima lautii</i>	Confirmed	ND	Cass
Spruce - Blue	<i>Picea pungens</i>	Stigmima Needle Blight	<i>Stigmima lautii</i>	Confirmed	ND	Cass
Spruce - Blue	<i>Picea pungens</i>	Tordon exposure	Chemical Injury	Suspected	ND	Burleigh
Spruce - Blue	<i>Picea pungens</i>	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	McLean
Spruce - Blue	<i>Picea pungens</i>	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Pembina
Spruce - Blue	<i>Picea pungens</i>	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Stutsman
Spruce - Blue	<i>Picea pungens</i>	Winter Injury	Abiotic disorder	Suspected	ND	Burleigh
Spruce - Blue	<i>Picea pungens</i>	Winter Injury	Abiotic disorder	Suspected	ND	Kidder
Spruce - Blue	<i>Picea pungens</i>	Winter Injury	Abiotic disorder	Suspected	ND	Renville
Squash	<i>Cucurbita</i> species	Angular Leaf Spot	<i>Pseudomonas</i> species	Suspected	ND	Sheridan
Squash	<i>Cucurbita</i> species	Magnesium Deficiency	Abiotic disorder	Suspected	ND	Sheridan
Strawberry	<i>Fragaria</i> species	Crown Rot	Unidentified Fungus	Suspected	ND	Burleigh
Strawberry	<i>Fragaria</i> species	nutrient imbalance	Abiotic disorder	Suspected	ND	Dickey
Sugar Beet	<i>Beta vulgaris altissima</i>	ALS enzyme inhibitor	Chemical Injury	Suspected	ND	Walsh
Sugar Beet	<i>Beta vulgaris altissima</i>	Alternaria Leaf Spot	<i>Alternaria</i> species	Confirmed	MN	Aitkin
Sugar Beet	<i>Beta vulgaris altissima</i>	Bacterial Vascular Necrosis	<i>Erwinia carotovora betavasculorum</i>	Inconclusive	MN	Becker
Sugar Beet	<i>Beta vulgaris altissima</i>	Bacterial Vascular Necrosis	<i>Erwinia carotovora betavasculorum</i>	Suspected	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Bacterial Vascular Necrosis	<i>Erwinia carotovora betavasculorum</i>	Not Detected	MN	Clay

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Sugar Beet	<i>Beta vulgaris altissima</i>	Beet Necrotic Yellow Vein	Beet Necrotic Yellow Vein Virus (BNYVV)	Not Detected	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Beet Western Yellows	Beet Western Yellows Virus (BWYV)	Not Detected	MN	Polk
Sugar Beet	<i>Beta vulgaris altissima</i>	Black Root; Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	MN	Wilkin
Sugar Beet	<i>Beta vulgaris altissima</i>	Excessive Water	Abiotic disorder	Inconclusive	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Fusarium Dry Rot	<i>Fusarium</i> species	Not Detected	MN	Becker
Sugar Beet	<i>Beta vulgaris altissima</i>	Fusarium Root Rot	<i>Fusarium</i> species	Suspected	MN	Polk
Sugar Beet	<i>Beta vulgaris altissima</i>	Fusarium Wilt	<i>Fusarium oxysporum</i>	Confirmed	MN	Cass
Sugar Beet	<i>Beta vulgaris altissima</i>	Fusarium Yellows	<i>Fusarium oxysporum</i>	Inconclusive	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Fusarium Yellows	<i>Fusarium oxysporum</i>	Not Detected	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Growth Regulator Effect	Chemical Injury	Confirmed	WY	Goshen
Sugar Beet	<i>Beta vulgaris altissima</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	WY	Goshen
Sugar Beet	<i>Beta vulgaris altissima</i>	Not Pathogen; Saprophyte	Saprophytes detected	Suspected	MN	Marshall
Sugar Beet	<i>Beta vulgaris altissima</i>	Pythium Root Rot	<i>Pythium</i> species	Suspected	MN	Wilkin
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Crown and Root Rot	<i>Rhizoctonia solani</i>	Confirmed	MN	Cass
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Crown and Stem Rot	<i>Rhizoctonia solani</i>	Confirmed	IA	Muscatine
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	ND	Cass
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	ND	Cass
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	NE	Adams
Sugar Beet	<i>Beta vulgaris altissima</i>	Rhizoctonia Root; Crown Rot	<i>Rhizoctonia solani</i>	Confirmed	MN	Polk
Sugar Beet	<i>Beta vulgaris altissima</i>	Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Root Rot	<i>Aphanomyces cochlioides</i>	Confirmed	NE	Adams
Sugar Beet	<i>Beta vulgaris altissima</i>	Unknown	Unknown	Confirmed	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Verticillium Wilt	<i>Verticillium dahliae</i>	Confirmed	MN	Clay
Sugar Beet	<i>Beta vulgaris altissima</i>	Verticillium Wilt	<i>Verticillium</i> species	Not Detected	MN	Clay
Sunflower	<i>Helianthus annuus</i>	Chemical/Env injury	Chemical Injury	Suspected	ND	Sheridan
Sunflower	<i>Helianthus annuus</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Bottineau
Sunflower	<i>Helianthus annuus</i>	Herbicide Carryover	Chemical Injury	Inconclusive	ND	Bottineau
Sunflower	<i>Helianthus annuus</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	-99	Unknown
Sunflower	<i>Helianthus annuus</i>	Leaf Spot	Unidentified Agent	Confirmed	ND	Cass
Sunflower	<i>Helianthus annuus</i>	Over Fertilization	Abiotic disorder	Suspected	ND	Bottineau
Sunflower	<i>Helianthus annuus</i>	Phomopsis stem canker	<i>Phomopsis helianthi</i>	Suspected	MN	Otter Tail
Thicket creeper	<i>Parthenocissus vitacea</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Logan



Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Thistle - Spiny Sow	<i>Sonchus asper</i>	Mechanical Damage	Abiotic disorder	Suspected	ND	Cass
Tomato	<i>Lycopersicon esculentum</i>	Bacterial Leaf Spot	<i>Xanthomonas campestris vesicatoria</i>	Suspected	ND	Cass
Tomato	<i>Lycopersicon esculentum</i>	Chemical Injury	Chemical Injury	Suspected	ND	Dickey
Tomato	<i>Lycopersicon esculentum</i>	Growth Regulator Effect	Chemical Injury	Suspected	MN	Becker
Tomato	<i>Lycopersicon esculentum</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Cass
Tomato	<i>Lycopersicon esculentum</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Dickey
Tomato	<i>Lycopersicon esculentum</i>	Growth Regulator Effect	Chemical Injury	Suspected	ND	Dickey
Tomato	<i>Lycopersicon esculentum</i>	Herbicide Carryover	Chemical Injury	Suspected	ND	Mchenry
Tomato	<i>Lycopersicon esculentum</i>	Tomato Septoria Leaf Spot	<i>Septoria lycopersici</i>	Confirmed	MN	Clay
Tomato	<i>Lycopersicon esculentum</i>	Tomato; Pepper Bacterial Spot	<i>Xanthomonas campestris pv. vesicatoria</i>	Confirmed	ND	Burleigh
Turfgrass	Turfgrass mixed species	Bird's Nest Fungi	<i>Cyathus</i> species	Confirmed	ND	Ward
Turfgrass	Turfgrass mixed species	Crown and Root Rot	Pathogen complex	Confirmed	MN	Polk
Turfgrass	Turfgrass mixed species	Crown and Root Rot	Pathogen complex	Confirmed	ND	Morton
Turfgrass	Turfgrass mixed species	Crown and Root Rot	Pathogen complex	Confirmed	ND	Morton
Turfgrass	Turfgrass mixed species	Fairy Ring	Various fungi	Suspected	ND	Cass
Turfgrass	Turfgrass mixed species	High Soluble Salt	Abiotic disorder	Confirmed	ND	Stark
Turfgrass	Turfgrass mixed species	Powdery Mildew	<i>Blumeria graminis</i> f.sp. <i>hordei</i>	Confirmed	ND	Cass
Turfgrass	Turfgrass mixed species	Salt Damage	Abiotic disorder	Suspected	ND	Cass
Turfgrass	Turfgrass mixed species	Soil Compaction	Abiotic disorder	Confirmed	ND	Cass
Turfgrass	Turfgrass mixed species	Turfgrass P. Rust Complex	<i>Puccinia</i> species	Not Detected	ND	Cass
Turfgrass	Turfgrass mixed species	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Burleigh
Unidentified host		High Soluble Salt	Abiotic disorder	Suspected	ND	Dickey
Vegetables - various	various garden vegetables	Envrionmental stress	Abiotic disorder	Suspected	ND	Cass
Water Sample	Water sample	Algae	Algae	Confirmed	ND	Cass
Watermelon	<i>Citrullus lanatus</i>	heat canker	Abiotic disorder	Suspected	ND	Towner
Watermelon	<i>Citrullus lanatus</i>	Soil Compaction	Abiotic disorder	Suspected	ND	Grant
Watermelon	<i>Citrullus lanatus</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Grant
Wheat	<i>Triticum</i> species	Barley Yellow Dwarf	Barley Yellow Dwarf Virus (BYDV)	Not Detected	SD	Perkins
Wheat	<i>Triticum</i> species	Black Point	<i>Helminthosporium</i> species	Confirmed	ND	Cass
Wheat	<i>Triticum</i> species	Chemical Injury	Chemical Injury	Inconclusive	ND	Pembina
Wheat	<i>Triticum</i> species	Cultural/Env.Problem	Abiotic disorder	Suspected	ND	Cass
Wheat	<i>Triticum</i> species	Drought Stress Damage	Abiotic disorder	Suspected	ND	Morton
Wheat	<i>Triticum</i> species	Envrionmental stress	Abiotic disorder	Suspected	CO	Costilla
Wheat	<i>Triticum</i> species	Fusarium Root Rot	<i>Fusarium</i> species	Confirmed	ND	Adams
Wheat	<i>Triticum</i> species	Fusarium Root Rot	<i>Fusarium</i> species	Suspected	ND	Sargent
Wheat	<i>Triticum</i> species	Glyphosate Injury	Chemical Injury	Suspected	ND	Mclean
Wheat	<i>Triticum</i> species	Growth Regulator Effect	Chemical Injury	Suspected	ND	Sargent

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Wheat	<i>Triticum species</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Cass
Wheat	<i>Triticum species</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	La Moure
Wheat	<i>Triticum species</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Morton
Wheat	<i>Triticum species</i>	Herbicide Injury; Exposure	Chemical Injury	Suspected	ND	Pembina
Wheat	<i>Triticum species</i>	No Pathogen Found	No Pathogen Found	Confirmed	ND	Cass
Wheat	<i>Triticum species</i>	Physiological Responses	Abiotic disorder	Suspected	CO	Costilla
Wheat	<i>Triticum species</i>	Rhizoctonia Root Rot	<i>Rhizoctonia solani</i>	Confirmed	ND	Adams
Wheat	<i>Triticum species</i>	Root Rot	Unidentified Agent	Suspected	ND	Cass
Wheat	<i>Triticum species</i>	Sooty Mold	Various fungi	Confirmed	ND	Cass
Wheat	<i>Triticum species</i>	Unknown Abiotic Disorder	Abiotic disorder	Confirmed	ND	Cass
Wheat	<i>Triticum species</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	McLean
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Billings
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Cass
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Cass
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Foster
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Golden Valley
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Griggs
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Nelson
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Ramsey
Wheat	<i>Triticum species</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Unknown
Wheat	<i>Triticum species</i>	WSMV	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Stark
Wheat - Durum	<i>Triticum turgidum</i>	ALS-inhibitor herbicide injury	Chemical Injury	Suspected	ND	Burleigh
Wheat - Durum	<i>Triticum turgidum</i>	Chemical Injury	Chemical Injury	Inconclusive	ND	Ward
Wheat - Durum	<i>Triticum turgidum</i>	Chemical Injury	Chemical Injury	Inconclusive	ND	Ward
Wheat - Durum	<i>Triticum turgidum</i>	Fusarium Root Rot	<i>Fusarium species</i>	Suspected	ND	Cass
Wheat - Durum	<i>Triticum turgidum</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	ND	Mountrail
Wheat - Durum	<i>Triticum turgidum</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	ND	Mountrail
Wheat - Durum	<i>Triticum turgidum</i>	Fusarium Root Rot	<i>Fusarium species</i>	Confirmed	ND	Mountrail
Wheat - Durum	<i>Triticum turgidum</i>	Root rot	<i>Bipolaris sorokiniana</i>	Confirmed	ND	Cass
Wheat - Durum	<i>Triticum turgidum</i>	Root Rot	<i>Bipolaris sorokiniana</i>	Confirmed	ND	Mountrail
Wheat - Durum	<i>Triticum turgidum</i>	Root Rot	<i>Bipolaris sorokiniana</i>	Confirmed	ND	Mountrail
Wheat - Durum	<i>Triticum turgidum</i>	Pythium Root Rot	<i>Pythium species</i>	Suspected	ND	Cass
Wheat - Durum	<i>Triticum turgidum</i>	Undetermined Injury or Pest	unknown cause	Confirmed	ND	Hettinger
Wheat - Durum	<i>Triticum turgidum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Cass
Wheat - Durum	<i>Triticum turgidum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Hettinger
Wheat - Durum	<i>Triticum turgidum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	McLean
Wheat - Durum	<i>Triticum turgidum</i>	Wheat Stem Maggot	<i>Meromyza americana</i>	Confirmed	ND	Mountrail

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Wheat - Spring	<i>Triticum aestivum</i>	als-inhibitor herbicide injury	Chemical Injury	Suspected	ND	Burleigh
Wheat - Spring	<i>Triticum aestivum</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Not Detected	ND	Cass
Wheat - Spring	<i>Triticum aestivum</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Suspected	ND	Cass
Wheat - Spring	<i>Triticum aestivum</i>	Bacterial Leaf Streak	<i>Xanthomonas</i> species	Suspected	ND	Walsh
Wheat - Spring	<i>Triticum aestivum</i>	Bird Cherry-oat Aphid	<i>Rhopalosiphum padi</i>	Confirmed	ND	Walsh
Wheat - Spring	<i>Triticum aestivum</i>	Chemical/Env injury	Chemical Injury	Suspected	ND	Foster
Wheat - Spring	<i>Triticum aestivum</i>	Chemical Injury	Chemical Injury	Suspected	MN	Norman
Wheat - Spring	<i>Triticum aestivum</i>	English Grain Aphid	<i>Macrosiphum avenae</i>	Suspected	ND	Walsh
Wheat - Spring	<i>Triticum aestivum</i>	Envrionmental stress	Abiotic disorder	Suspected	ND	Cass
Wheat - Spring	<i>Triticum aestivum</i>	Fusarium Root Rot	<i>Fusarium</i> species	Confirmed	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Fusarium Root Rot	<i>Fusarium</i> species	Confirmed	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Fusarium Root Rot	<i>Fusarium</i> species	Confirmed	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Fusarium Root Rot	<i>Fusarium</i> species	Confirmed	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Not Detected	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Not Detected	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Not Detected	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Not Detected	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Herbicide Injury; Exposure	Chemical Injury	Inconclusive	ND	Walsh
Wheat - Spring	<i>Triticum aestivum</i>	High Plains Disease	High Plains Virus (HPV)	Confirmed	ND	Dunn
Wheat - Spring	<i>Triticum aestivum</i>	Leafspot Crown and Root Rot;	<i>Bipolaris sorokiniana</i>	Confirmed	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Nutritional Deficiency	Abiotic disorder	Inconclusive	ND	Cass
Wheat - Spring	<i>Triticum aestivum</i>	Root Rot	Unidentified Agent	Inconclusive	ND	Richland
Wheat - Spring	<i>Triticum aestivum</i>	Sooty Mold	<i>Alternaria</i> species	Confirmed	ND	Mclean
Wheat - Spring	<i>Triticum aestivum</i>	Sooty Mold	<i>Cladosporium</i> species	Confirmed	ND	Mclean
Wheat - Spring	<i>Triticum aestivum</i>	Tipburn	Abiotic disorder	Confirmed	ND	Griggs
Wheat - Spring	<i>Triticum aestivum</i>	Undetermined Injury or Pest	unknown cause	Confirmed	ND	Emmons
Wheat - Spring	<i>Triticum aestivum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Bottineau
Wheat - Spring	<i>Triticum aestivum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Bowman
Wheat - Spring	<i>Triticum aestivum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Unknown Abiotic Disorder	Abiotic disorder	Suspected	ND	Stark
Wheat - Spring	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Dunn
Wheat - Spring	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Golden Valley
Wheat - Spring	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Hettinger
Wheat - Spring	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Hettinger
Wheat - Winter	<i>Triticum aestivum</i>	Barley Yellow Dwarf	Barley Yellow Dwarf Virus (BYDV)	Confirmed	ND	Cass
Wheat - Winter	<i>Triticum aestivum</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Stark
Wheat - Winter	<i>Triticum aestivum</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Stark

Host	Host (Taxonomic)	Diagnosis	Diagnosis (Taxonomic)	Confidence	STATE	COUNTY
Wheat - Winter	<i>Triticum aestivum</i>	Gibberella Root Rot	<i>Gibberella zeae/Fusarium graminearum</i>	Confirmed	ND	Stark
Wheat - Winter	<i>Triticum aestivum</i>	High Plains Disease	High Plains Virus (HPV)	Confirmed	ND	Dickey
Wheat - Winter	<i>Triticum aestivum</i>	High Plains Disease	High Plains Virus (HPV)	Confirmed	ND	Hettinger
Wheat - Winter	<i>Triticum aestivum</i>	High Plains Disease	High Plains Virus (HPV)	Confirmed	ND	Mchenry
Wheat - Winter	<i>Triticum aestivum</i>	High Plains Disease	High Plains Virus (HPV)	Confirmed	SD	Brown
Wheat - Winter	<i>Triticum aestivum</i>	Nitrogen Deficiency	Abiotic disorder	Suspected	ND	Sheridan
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Benson
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Bowman
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Bowman
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Cass
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Not Detected	ND	Cass
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Dickey
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Emmons
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Hettinger
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Mchenry
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	ND	Mclean
Wheat - Winter	<i>Triticum aestivum</i>	Wheat Streak Mosaic	Wheat Streak Mosaic Virus (WSMV)	Confirmed	SD	Brown
Willow	<i>Salix species</i>	Winter Injury	Abiotic disorder	Suspected	ND	Cass
Woody Ornamentals	various	Wetwood	<i>Erwinia species</i>	Suspected	MN	Clay
Woody Ornamentals	various	Cultural/Env. Problem	Abiotic disorder	Suspected	ND	Cass
Woody Ornamentals	various	Eriophyid Mites	Family Eriophyidae	Confirmed	ND	Cass
Woody Ornamentals	various	Herbicide Drift	Chemical Injury	Suspected	ND	Cass
Woody Ornamentals	various	Iron Deficiency	Abiotic disorder	Suspected	MN	Clay
Woody Ornamentals	various	Iron or Manganese Deficiency	Abiotic disorder	Suspected	MN	Clay
Woody Ornamentals	various	Powdery Mildew	Unidentified Fungus	Confirmed	ND	Cass
Woody Ornamentals	various	Scorch	Abiotic disorder	Confirmed	ND	Dickey
Woody Ornamentals	various	Spider Mite Injury	Abiotic disorder	Suspected	MN	Clay
Yew	<i>Taxus species</i>	Scale Insects	Order homoptera	Confirmed	ND	Burleigh
Zinnia	<i>Zinnia elegans</i>	White Mold (Stem Rot)	<i>Sclerotinia sclerotiorum</i>	Confirmed	ND	Cavalier

## ***Specialists consulted in 2008***

The table below is an attempt to acknowledge the diagnostic assistance and other contributions of various faculty and specialists to the NDSU Plant Diagnostic Lab. Due to the nature of entering these 'consultants' into the database, I may have overlooked a few people. For those who were mistakenly omitted from the list, please accept my sincere apologies. The consultants are listed in order by first name.

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Deying Li	NDSU Plant Sciences
Dwain Meyer	NDSU Plant Sciences
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Gary Secor	NDSU Plant Pathology
Gerald Fauske	NDSU Entomology
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Ted Helms	NDSU Plant Sciences
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