

# PLANT DIAGNOSTIC CLINIC 2020



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Disclaimer:

UVM Plant Diagnostic Clinic samples were considerably reduced in 2020 due to COVID-19. Although the PDC remained open for commercial specimens, numbers were limited due to limited mail access. Home garden samples were not accepted after March 2020 and the UVM Master Gardener Helpline volunteers were not active in the PDC throughout the 2020 growing season.

Following report contains a summary of the samples submitted to the Plant Diagnostic Clinic from 01-Jan-2020 through 12/31/2020. A total of 19 sample(s) have been processed during this time period.

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**The following diagnosticians were involved in processing samples for the laboratory from 01-Jan-2020 through 31-Dec-2020.**

*This section reports samples from all the statuses. Each sample may involve one or more diagnosticians. Hence, this section may not represent the total number of samples processed during this time period.*

Ann Hazelrigg, processed 17 sample(s).

Gabriella Maia, processed 13 sample(s).

**The following Advisory Consultants provided advice for the laboratory from 01-Jan-2020 through 31-Dec-2020.**

*This section reports samples from all the statuses. Each sample may involve one or more advisory consultants. Hence, this section may not represent the total number of samples processed during this time period.*

No records to display.

**The following is the Sample Submission Breakdown for the laboratory.**

For there are 0 sample(s) pending, sample(s) preliminary, 19 sample(s) completed, 0 sample(s) archived.

**The following Personnel provided checked-in samples for the laboratory from 01-Jan-2020 through 31-Dec-2020.**

*This section reports sample check-in's performed only by diagnostician at laboratory. This section does not report the submitter check-in's. Hence, this section may not represent the total number of samples processed during this time period.*

Gabriella Maia, processed 19 sample(s).

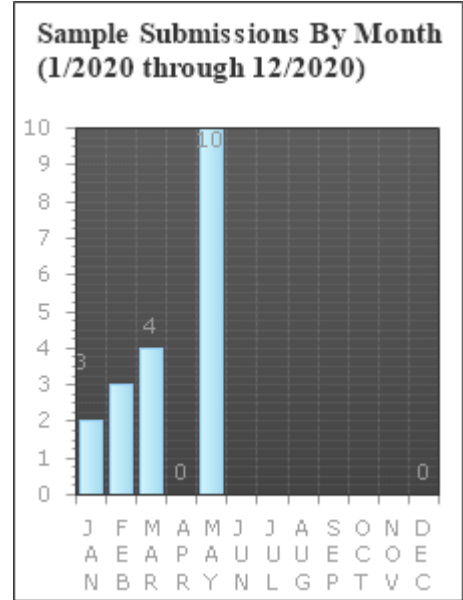
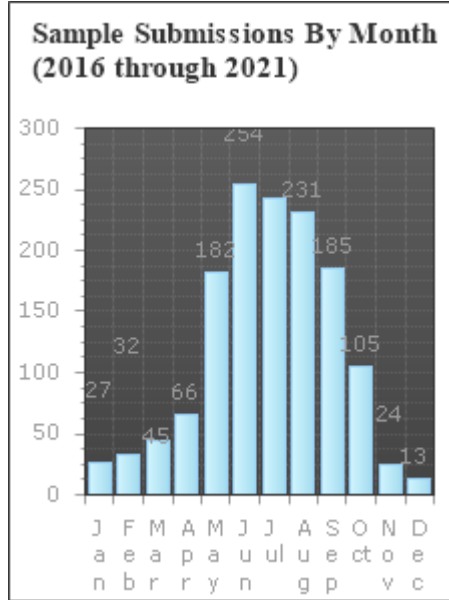
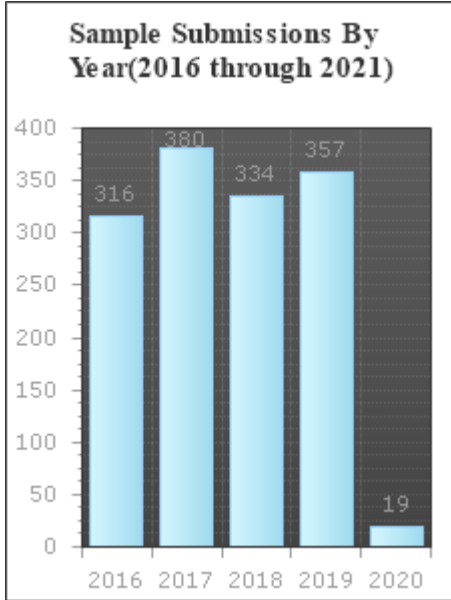
**The following Personnel provided Client responses by writing up samples for the laboratory from 01-Jan-2020 through 31-Dec-2020.**

*This section reports the personnel who have written the final reports for the samples from all the statuses during this time period. Hence, this section may not represent the total number of samples processed during this time period.*

No records to display.

**Table 1. Number of Sample Submissions by Month from 01-Jan-2016 to present.**

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 2020 | 2   | 3   | 4   | 0   | 10  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 19    |
| 2019 | 1   | 3   | 5   | 18  | 38  | 81  | 67  | 69  | 45  | 23  | 4   | 3   | 357   |
| 2018 | 4   | 6   | 13  | 18  | 25  | 59  | 68  | 57  | 41  | 34  | 7   | 2   | 334   |
| 2017 | 6   | 5   | 12  | 20  | 68  | 60  | 53  | 63  | 53  | 25  | 9   | 6   | 380   |
| 2016 | 14  | 15  | 11  | 10  | 41  | 54  | 54  | 42  | 46  | 23  | 4   | 2   | 316   |



**Table 2. Number of Sample Submissions by Client Type from 01-Jan-2020 through 31-Dec-2020 .**

*This section reports the number of clients for each client type for the samples submitted during this time period. Each sample may involve one or more clients. Hence, this section does not represent the total number of samples processed during this time period.*

| Client Type             | Count | %     |
|-------------------------|-------|-------|
| Grower/Farmer           | 11    | 61.11 |
| Homeowner/Home Gardener | 4     | 22.22 |
| Arborist                | 3     | 16.67 |
| Total                   | 18    | 100%  |

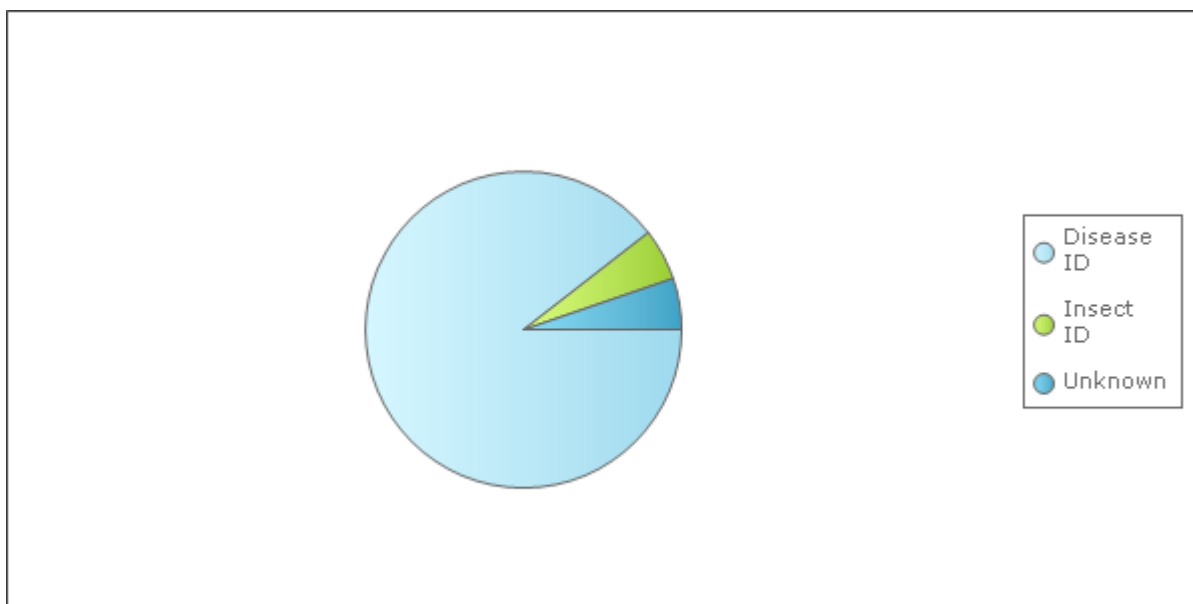
**Table 3. Samples originated from the following states and counties from 01-Jan-2020 through 31-Dec-2020.**

*This section reports the samples from all statuses. Hence, this section represents the total number of samples processed during this time period.*

| State | County      | Number of Samples |
|-------|-------------|-------------------|
| MA    | Franklin    | 1                 |
| MA    | STATE TOTAL | 1                 |
| VT    | Bennington  | 1                 |
| VT    | Caledonia   | 1                 |
| VT    | Chittenden  | 9                 |
| VT    | Orange      | 2                 |
| VT    | Windham     | 5                 |
| VT    | STATE TOTAL | 18                |
|       | GRAND TOTAL | 19                |

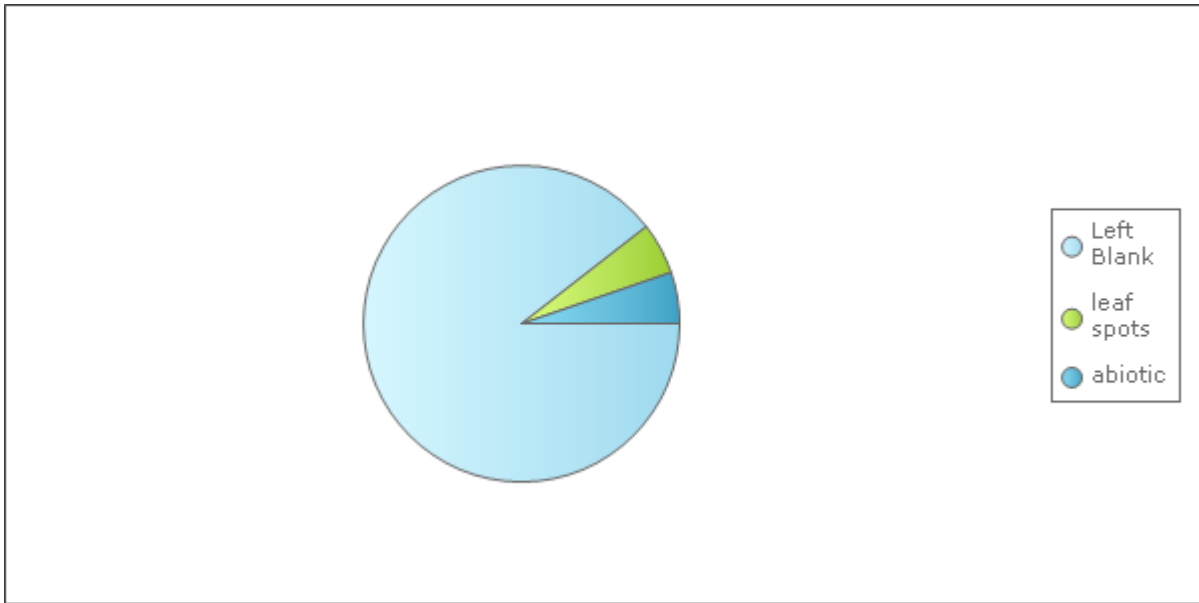
**Table 4. Number of Sample Submissions by Diagnosis Needed from 01-Jan-2020 through 31-Dec-2020.**

*This section reports diagnosis needed for the samples from all statuses. Hence, this section represents the total number of samples processed during this time period.*



| Diagnosis Needed | Number of Samples | %     |
|------------------|-------------------|-------|
| Disease ID       | 17                | 89.47 |
| Insect ID        | 1                 | 5.26  |
| Unknown          | 1                 | 5.26  |
| Total            | 19                | 100%  |

**Table 5. Number of Sample Submissions by Suspected Problem from 01-Jan-2020 through 31-Dec-2020 .**  
*This section reports suspected problem for the samples from all statuses. Hence, this section represents the total number of samples processed during this time period.*

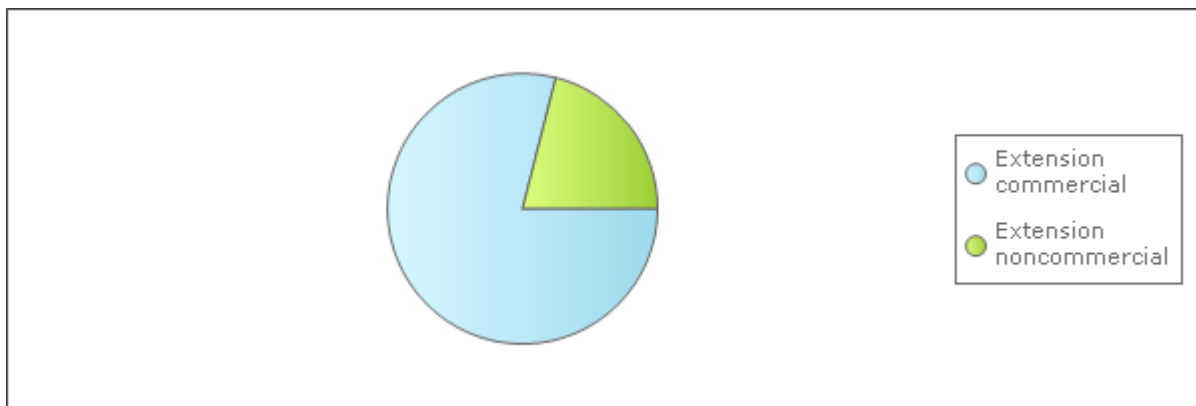


| Suspected Problem | Number of Samples | %     |
|-------------------|-------------------|-------|
| Left Blank        | 17                | 89.47 |
| leaf spots        | 1                 | 5.26  |
| abiotic           | 1                 | 5.26  |
| Total             | 19                | 100%  |



**Table 6. Number of Sample Submissions by Sample Source from 01-Jan-2020 through 31-Dec-2020.**

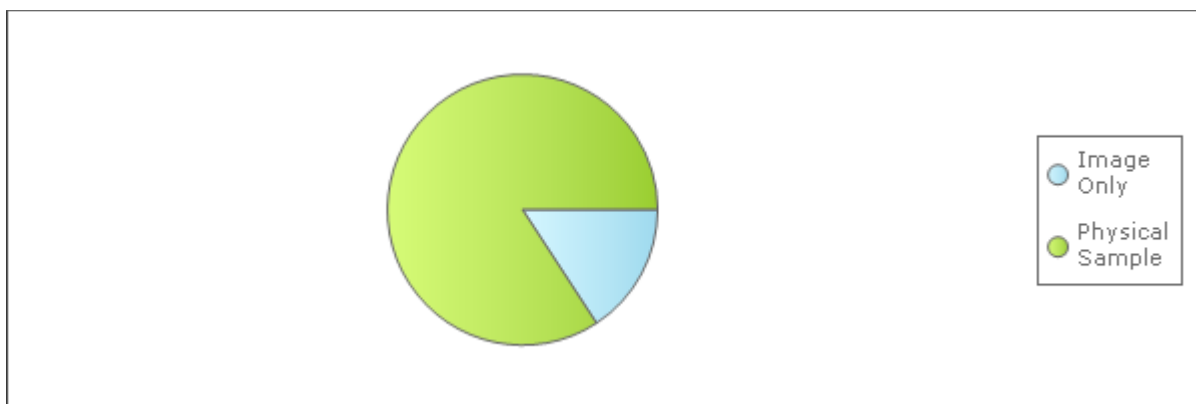
*This section reports sample source for the samples from all statuses. Hence, this section represents the total number of samples processed during this time period.*



| Sample Source           | Number of Samples | %     |
|-------------------------|-------------------|-------|
| Extension commercial    | 15                | 78.95 |
| Extension noncommercial | 4                 | 21.05 |
| Total                   | 19                | 100%  |

**Table 7. Number of Sample Submissions by Type of Sample from 01-Jan-2020 through 31-Dec-2020.**

*This section reports sample type for the samples from all statuses. Hence, this section represents the total number of samples processed during this time period.*



| Sample Type     | Number of Samples | %     |
|-----------------|-------------------|-------|
| Image Only      | 3                 | 15.79 |
| Physical Sample | 16                | 84.21 |
| Total           | 19                | 100%  |

**Table 8. Number of Sample Submissions by Sample Category from 01-Jan-2020 through 31-Dec-2020.**

*Notes: This section reports sample category for samples from all statuses. Hence, this section represents the total number of samples processed during this time period.*

| Sample Category              | Count | %     |
|------------------------------|-------|-------|
| Vegetables                   | 10    | 52.63 |
| Small Fruit                  | 3     | 15.79 |
| Woody ornamental - Evergreen | 2     | 10.53 |
| Woody ornamental -Deciduous  | 2     | 10.53 |
| Annual                       | 1     | 5.26  |
| Fruit                        | 1     | 5.26  |
| Total                        | 19    | 100%  |

**Table 9. Number of Sample Submissions by Sample Material Submitted from 01-Jan-2020 through 31-Dec-2020.**

*Notes: This section reports sample material submitted for the samples from all statuses. Each sample may have one or more sample materials submitted. Hence, this section does not represent the total number of samples processed.*

| Sample Material Submitted | Number of Samples |
|---------------------------|-------------------|
| Leaves/needles            | 10                |
| Branches/twigs            | 5                 |
| Fruit/seed                | 1                 |

**Table 10. Number of Sample Submissions and Diagnosis/ID by Host/Habitat from 01-Jan-2020 through 31-Dec-2020.**

Notes: This section reports samples from all statuses. Each sample may have one or more diagnosis/identification and hence this section does not represent the total number of samples processed.

|  | Confirmed | Not Detected | Suspected | Undetermined |
|--|-----------|--------------|-----------|--------------|
| <b>Black Currant (<i>Ribes nigrum</i>) (Host,Diagnosis/ID) (1,1)</b>       |           |              |           |              |
| No pathogen found (Identification Analysis)                                | 0         | 1            | 0         | 0            |
| <b>Blueberry (<i>Vaccinium sp./spp.</i>) (Host,Diagnosis/ID) (2,3)</b>     |           |              |           |              |
| Environmental stress; Problem (Abiotic disorder)                           | 0         | 0            | 1         | 0            |
| No pathogen found (Identification Analysis)                                | 0         | 1            | 0         | 0            |
| Poor pruning practice (Abiotic disorder)                                   | 0         | 0            | 1         | 0            |
| <b>Boxwood (<i>Buxus sp./spp.</i>) (Host,Diagnosis/ID) (1,2)</b>           |           |              |           |              |
| Additional sample requested (Identification Analysis)                      | 0         | 0            | 0         | 0            |
| Volutella leaf blight; Dieback ( <i>Volutella sp./spp.</i> )               | 0         | 0            | 1         | 0            |
| <b>Cole Crops (<i>Brassica sp./spp.</i>) (Host,Diagnosis/ID) (1,3)</b>     |           |              |           |              |
| Environmental stress; Problem (Abiotic disorder)                           | 0         | 0            | 1         | 0            |
| No insect found (Identification Analysis)                                  | 1         | 0            | 0         | 0            |
| No pathogen found (Identification Analysis)                                | 1         | 0            | 0         | 0            |
| <b>Common Fig (<i>Ficus carica</i>) (Host,Diagnosis/ID) (1,3)</b>          |           |              |           |              |
| No pathogen found (Identification Analysis)                                | 1         | 0            | 0         | 0            |
| Residue (Identification Analysis)  | 0         | 0            | 1         | 0            |
| Twospotted spider mite ( <i>Tetranychus urticae</i> )                      | 1         | 0            | 0         | 0            |
| <b>Fir (<i>Abies sp./spp.</i>) (Host,Diagnosis/ID) (1,3)</b>               |           |              |           |              |
| Cultural/environmental problem (Abiotic disorder)                          | 0         | 0            | 1         | 0            |
| No insect found (Identification Analysis)                                  | 0         | 0            | 0         | 0            |
| No pathogen found (Identification Analysis)                                | 0         | 0            | 0         | 0            |
| <b>Kale (<i>Brassica oleracea acephala</i>) (Host,Diagnosis/ID) (1,4)</b>  |           |              |           |              |
| Cold wet soils (Abiotic disorder)  | 0         | 0            | 1         | 0            |
| Environmental stress; Problem (Abiotic disorder)                           | 0         | 0            | 1         | 0            |
| No insect found (Identification Analysis)                                  | 1         | 0            | 0         | 0            |
| No pathogen found (Identification Analysis)                                | 1         | 0            | 0         | 0            |
| <b>lettuce () (Host,Diagnosis/ID) (1,1)</b>                                |           |              |           |              |
| Downy mildew (Lettuce) ( <i>Bremia lactucae</i> )                          | 1         | 0            | 0         | 0            |
| <b>Pear (ornamental) (<i>Pyrus sp./spp.</i>) (Host,Diagnosis/ID) (1,4)</b> |           |              |           |              |
| Cultural/environmental problem (Abiotic disorder)                          | 0         | 0            | 1         | 0            |
| Dieback; Canker; Twig blight ( <i>Botryosphaeria sp./spp.</i> )            | 1         | 0            | 0         | 0            |
| Environmental stress; Problem (Abiotic disorder)                           | 0         | 0            | 1         | 0            |
| Non-pathogenic; Saprophyte (Secondary Agents; Saprophytes; Unspecif.)      | 0         | 0            | 1         | 0            |
| <b>Pepper (<i>Capsicum sp./spp.</i>) (Host,Diagnosis/ID) (1,2)</b>         |           |              |           |              |
| Cold wet soils (Abiotic disorder)  | 0         | 0            | 1         | 0            |
| Environmental stress; Problem (Abiotic disorder)                           | 0         | 0            | 1         | 0            |
| <b>Spinach (<i>Spinacia oleracea</i>) (Host,Diagnosis/ID) (2,6)</b>        |           |              |           |              |

|   | Confirmed | Not Detected | Suspected | Undetermined |
|---|-----------|--------------|-----------|--------------|
| Beet leafminer; Spinach Im ( <i>Pegomya hyoscyami</i> )                             | 0         | 0            | 1         | 0            |
| Bulb mite ( <i>Rhizoglyphus</i> sp./spp.)   | 2         | 0            | 0         | 0            |
| Non-pathogenic; Saprophyte (Secondary Agents; Saprophytes; Unspecif.)               | 1         | 0            | 0         | 0            |
| Oedema; Edema (Abiotic disorder)  | 1         | 0            | 0         | 0            |
| Springtails (Order Collembola)  | 1         | 0            | 0         | 0            |
| <b>Spruce (ornamental) (<i>Picea</i> sp./spp.) (<i>Host,Diagnosis/ID</i>) (1,3)</b> |           |              |           |              |
| Cultural/environmental problem (Abiotic disorder)                                   | 0         | 0            | 1         | 0            |
| No insect found (Identification Analysis)   | 1         | 0            | 0         | 0            |
| No pathogen found (Identification Analysis)   | 1         | 0            | 0         | 0            |
| <b>Sweet Basil (<i>Ocimum basilicum</i>) (<i>Host,Diagnosis/ID</i>) (1,1)</b>       |           |              |           |              |
| Common thrips (Family Thripidae)  | 1         | 0            | 0         | 0            |
| <b>Tomato (<i>Lycopersicon esculentum</i>) (<i>Host,Diagnosis/ID</i>) (1,3)</b>     |           |              |           |              |
| No insect found (Identification Analysis)   | 1         | 0            | 0         | 0            |
| Non-pathogenic; Saprophyte (Secondary Agents; Saprophytes; Unspecif.)               | 0         | 0            | 1         | 0            |
| Unspecified pathology ( <i>Rhizopus</i> sp./spp.)                                   | 1         | 0            | 0         | 0            |
| <b>Tomato (<i>Lycopersicon</i> sp./spp.) (<i>Host,Diagnosis/ID</i>) (2,5)</b>       |           |              |           |              |
| Corky root rot ( <i>Pyrenochaeta lycopersici</i> )                                  | 0         | 0            | 1         | 0            |
| Intumescence (Abiotic disorder)   | 0         | 0            | 1         | 0            |
| No insect found (Identification Analysis)   | 2         | 0            | 0         | 0            |
| No pathogen found (Identification Analysis)   | 1         | 0            | 0         | 0            |
| <b>Tomato (<i>Solanum lycopersicum</i>) (<i>Host,Diagnosis/ID</i>) (1,3)</b>        |           |              |           |              |
| Cold wet soils (Abiotic disorder)   | 0         | 0            | 1         | 0            |
| Environmental stress; Problem (Abiotic disorder)                                    | 0         | 0            | 1         | 0            |
| No pathogen found (Identification Analysis)   | 1         | 0            | 0         | 0            |