**Tree Removal for X-disease and Little Cherry Disease Cost Share Application**

**Background** X-disease and Little Cherry Disease cause small, pale, bland, unmarketable fruit in cherries. In peaches, plums, and nectarines X-disease symptoms are typically yellowed curled leaves and shot hole as well as small-deformed fruit. These are long-term, debilitating diseases for infected trees. Infected trees must be removed to stop the spread of the pathogen. There is no cure. The economic impacts of tree removal are long lasting to growers during the seven-year re-establishment period costing growers an average of $118,095 in establishment and lost revenue per acre.

X-disease phytoplasma and Little Cherry Virus 2 are spread by grafting and insect vectors. Leafhoppers disperse and forage over a wide area with a spread observed for 5-10 miles from infected orchards. It is critical to remove infected trees to stop spread to neighboring blocks.

**The goal of this program** is to provide cost share stipends for the removal and testing of trees infected with X-disease and Little cherry disease to slow the spread of these devastating pathogens.

**Funding Source and Availability:** Funding is available through a grant from the Washington State Department of Agriculture Specialty Crop Block Grants to Washington State University Extension in partnership with county Conservation Districts and Pest Boards. Funding is available beginning October 1, 2021 pending USDA approval.

**Eligibility**

* Eligible cherry, peach, plum, nectarine or other stone fruit orchards have suffered a tree loss due to confirmed X-disease phytoplasma or Little cherry virus.
* The affected orchard is within 10 miles of other orchards owned by another legal entity.
* Greater than 20 trees were removed (do not have to be continuous, may be scattered).
* Costs were incurred after 9/30/2021 (the grant start date).

**Required application documents:**

* Documentation of presence of confirmed infection by X-disease phytoplasma, Little cherry virus 2, or Little cherry virus 1 via lab results (positive test results from one or more trees from labs participating in the WSU proficiency testing program <http://treefruit.wsu.edu/labs-lchv2-xdp/> or from Washington State University). Results must be from the year of tree removal. (Documentation can occur before Oct 1, 2021).
* Documentation of distribution in the block for whole block removal. Acceptable documentation include: photographs of symptoms from multiple trees, verification letter by qualified field staff, WSU Extension, or pest board representative (example Appendix 2). (Documentation can occur before Oct 1, 2021).

**Required documentation for tree removal funds:**

* Records of tree removal expenses (e.g. invoice from excavator, labor receipts, laboratory test cost receipts). On-farm labor associated with removal can be charged up to $22/hr. Funds are available on a reimbursement basis for cost share of incurred expenses.
* Documentation of tree removal. Acceptable documentation include: photographs of block/trees after tree removal or verification form filled out by qualified field staff or WSU Extension (see Appendix 1).

**Required documentation for testing cost share funds:**

* Paid invoices from Little cherry/ X-disease testing.

**Reimbursement levels**

* Up to $7,500 per application (grower/entity). 50% cost share for up to ten acres per applicant for tree removal, and 50% cost share on testing that leads to tree removal (up to 10 tests per block).

**Application:** Tree Removal for X-disease and Little Cherry Disease Cost Share

Please fill out the following application. Applications can be made for pre-approval before tree removal or after tree removal where all documentation is included in the submitted application. Pre-approved projects will receive re-imbursement only after trees are removed and applications updated with actual costs and tree removal documentation.

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Mailing address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Phone\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Email\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Total Tree fruit acreage you grow, check 1:**

**\_\_\_\_\_\_\_\_less than 140 acres‡ \_\_\_\_\_\_\_\_141-500 acres \_\_\_\_\_\_\_\_501-1,000 acres \_\_\_\_\_\_\_ greater than 1,000 acres**

**Table 1**Ϫ

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Block** | **Block name** | **GPS Latitude\***  (for block) | **GPS Longitude\***  (for block) | **Variety** | **Rootstock** | **Spacing**  (trees per acre) | **tree age** | **trees removed**  (or to be removed) | **acres removed**  (or to be removed) |
| **1** |  |  |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |  |  |  |

Ϫ Add more lines as necessary.

\*Necessary to verify proximity to neighboring blocks.

‡Average farm size for fruit, nut and berry farms, 2017 Census of Agriculture.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 2 LIST COSTS** *(i.e. labor, materials, etc.)* ***Check one: projected\_\_\_\_\_\_\_\_\_\_\_\_ actual\_\_\_\_\_\_\_\_\_\_\_\_\_\_*** | | | | |
|  | $ |  | | |
|  | $ |  | | |
|  | $ |  | | |
|  | $ |  | | |
|  | $ |  | | |
|  | $ |  | | |
|  | | | | |
| Total Costs | | | $ |  |

Costs may be projected on the application but must be updated to actual for re-imbursement.

**Attachments:**

**Attachment 1 - Laboratory results with 1 or more positives for each block.** Make sure block names match in application and test results. Required for application.

**Attachment 2** - **Documentation of infection distribution.** Required for application.

**Attachment 3 - Receipts.** Required for reimbursement.

**Attachment 4 - Documentation of tree removal.** Required for reimbursement.

**Return forms to the local contact for your county:**

* Will Carpenter, Chelan-Douglas-Okanogan County Pest Board, Will.Carpenter@CO.CHELAN.WA.US (509) 393-0975
* Pam Loa, Franklin County Pest Board, ploa@co.franklin.wa.us (509) 545-3580, (509) 430-1535
* Mark Neilson, Benton County Conservation District, mark-nielson@conservewa.net (509) 366-1678
* Keith Mathews, Yakima County Pest Board, keith.mathews@co.yakima.wa.us (509) 571-5210
* Elliot DeLong, Grant County Conservation District, elliott-delong@conservewa.net (509) 765-9618

**For additional questions contact:** Tianna DuPont, WSU Extension (509) 713-5346 [tianna.dupont@wsu.edu](mailto:tianna.dupont@wsu.edu)

**Appendix 1: Documentation of infection distribution**

Example documentation. To be filled out by qualified field staff, pest board or WSU Extension.

**Date:**

To whom it may concern,

I visited blocks \_\_\_\_\_\_\_\_\_\_\_\_ operated by \_\_\_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_date (approximate dates acceptable). Symptoms of X-disease, Little cherry disease present in the block included\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Symptomatic trees were distributed with approximately \_\_\_\_\_\_\_\_\_ % of the \_\_\_\_\_\_\_\_\_\_ size block affected.

Sincerely,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signature

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_name

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ affiliation

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ contact

**Appendix 2: Documentation of tree removal**

Example documentation. To be filled out by qualified field staff, WSU Extension, or pest board/conservation district.

**Date:**

To whom it may concern,

I visited blocks \_\_\_\_\_\_\_\_\_\_\_\_ operated by \_\_\_\_\_\_\_\_\_\_\_\_\_\_ on \_\_\_\_\_\_\_\_\_\_date. Removal of **\_\_\_\_\_** trees/ acres (circle one) was completed by the operator due to X-disease/ Little cherry disease infection at the time of my visit.

Sincerely,

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signature

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_name

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ affiliation

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ contact