Pest Detection Surveys in Alaska

Focus on Phytophthora ramorum

*P. ramorum* is a plant pathogen that causes the disease Sudden Oak Death (SOD). Although Oak species do not occur naturally in Alaska, *P. ramorum* infects other plant species that are either sold as nursery stock or occur natively in the state, namely Rhododendron and until relatively recently, it has been discovered to infect Silver Birch (*Betula pendula*) and Western Hemlock (*Tsuga heterophylla*) trees in Europe. Rhododendron is sold and planted in Alaska and appears to do well in the southeast coastal Alaska climate. Silver Birch does not occur naturally in Alaska, but is planted as an ornamental in portions of the Eastern and Western U.S. Western Hemlock does occur natively in Alaska, ranging from northern coastal California up to portions of the Kenai Peninsula. The host range for *P. ramorum* is relatively broad, with about 60 genera having been identified as hosts. In previous years, while conducting other surveys or nursery visits throughout the state, we have opportunistically surveyed for *P. ramorum* and have not found it to be present in Alaska.

*P. ramorum* has been reported in several coastal locations of California and Oregon. The likely pathway of the disease is primarily via infected plant material (e.g., nursery stock). Once in an area, it can spread via streams or rivers to new locations. In locations where it has been detected, it has been discovered in soil on hiking trails and on the boots of hiker's.

The disease is difficult to diagnose by visual inspection alone, as it is difficult to differentiate the symptoms of *P. ramorum* to those caused by other plant pathogens. Symptoms include either bark cankers that may kill the host or foliar blights that may serve as a reservoir for the pathogen. Laboratory analysis and DNA testing are required for confirmation. Plants in the following genera are considered highly susceptible to *P. ramorum*: *Camellia, Rhododendron, Viburnum, Pieris, Syringa* (Lilac), *Kalmia* (mountain laurel), *Quercus* (Oak), and *Umbellularia* (California bay laurel).

If you suspect that trees or plants are infected with *P. ramorum*, contact the Division of Agriculture or your local Cooperative Extension Service office nearest your community. For further information on *P. ramorum*, click [here](http://dnr.alaska.gov/ag).
**Marketing Section**

**Competitive Grant**

On March 15th we will be announcing the Specialty Crop Competitive Grant. This grant is intended to solely enhance the competitiveness of Alaska Grown specialty crops. Eligible specialty crops include fruits, vegetables, and nursery crops including floriculture. Alaska Grown products that **DO NOT** qualify as specialty crops under the federal agreement and are therefore **ineligible** for this grant include: feed crops (such as barley, corn, hay, oats) livestock, dairy products, eggs, and aquaculture products. Eligible grant recipients include: for/non-profit organizations; government entities; industry trade associations; producers and producer groups; universities.

Project concept papers may be submitted for a total of $10,000 and for a project timeline of up to two years. Applicants are encouraged to provide evidence of matching funds, either in-kind or cash. Projects will be eligible to receive grant funds on a reimbursement schedule; no advance payments will be made. The application deadline is May 14th.

Remember that at this time the Cooperative Marketing Program (CMP) grant and Innovation Grant (AAIG) are open at this time. The CMP applications are due no later than March 19th and the AAIG applications are due no later than March 31st.

Please contact Patricia O'Neil with any questions you have during the application process. It is easier to answer questions during the application process than after you submit the proposal. We enjoy providing guidance to applicants, so please do not hesitate to contact us.

**Land Sales & Grazing Leases**

**Water Rights**

Access to water is one of the most important considerations in farming. It seems we get too much one year and not enough the next. If we did have a drought, do you know where your water would come from? Do you have a good well? Could you pull water from a creek or pond? Do you know what permits you need? Do you have a water right?

Land owners do not have automatic rights to ground water or surface water, including that pond you may have dug. You need a water right to use a *significant amount of surface water in Alaska. If you don't have one you may be guilty of a misdemeanor under AS 46.15.180. A water right gives you legal rights to a specific water source, to use a specific amount of water, for a specific use. So a water right for livestock cannot be used to irrigate your garden or vice versa. The first person to obtain a water right will also have priority over those who file later. You may not think development will occur close to you, but history has shown development follows agriculture. I encourage you to look forward and determine your future water needs, act now and protect that future use.

To obtain a water right you will need to apply and pay the associated fees. You can find the information on the [DNR Water Resource](http://dnr.alaska.gov/ag/ag_water.htm).

**Application Fees:**

- $200 for 5,000 gallons per day (GPD)
- $450 for greater than 5,000 GPD and no more than 30,000 GPD
$550 for greater than 30,000 GPD and no more than 100,000 GPD
Water Right holders are also subject to an annual $50 fee

If you are curious who holds water rights in your area, click here to find out. You can zoom in and look up all water rights in your area.

*A significant amount of water is defined by 11 AAC 93.035. Basically the consumptive use of more than 5,000 GPD or more than 500 GPD for 10 days in a calendar year.

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**Inspection Section**

**Seed Potatoes & Tomato Plants**

Believe it or not, spring planting season will soon be here! But before you start planting, the Division of Agriculture would like to remind growers about the restrictions on seed potatoes and tomato plants in Alaska.

Late Blight (*Phytophthora infestans*) is a fungal disease that caused the Great Potato Famine in Ireland in the mid 1800s. The disease is common in potato fields in the Lower 48, but has not been established in Alaska. In order to prevent this devastating disease from infecting our Alaskan potato crops and soils, the Division of Agriculture has established a quarantine on seed potatoes as well as tomato plants, both of which can carry this disease into our state. This quarantine is summarized below.

**Seed potatoes and potato plants entering Alaska must be:**

a. produced as certified seed potatoes in the state or country of origin and must be certified; and

b. inspected in storage and no late blight is found in the lot; and

c. inspected at the shipping point and no late blight is found

Never buy seed potatoes that do not have an official seed certificate tag attached to the package, and never plant "table stock" potatoes from the grocery store. Potatoes that are not certified can carry diseases and pests which can infect crops and soils in Alaska.

**Tomato plants entering Alaska must be:**

a. grown in a nursery or greenhouse that has been inspected and found free of late blight; and

b. inspected at the shipping point and no late blight is found on the plants; and

c. treated prior to shipment with a registered fungicide for late blight disease control

Additionally, each shipment of regulated articles into Alaska shall be accompanied by an official Certificate issued by the government regulatory agency in the state or county of origin assuring that the conditions of this quarantine have been met.

Farmers, plant nursery centers, and gardeners must all be vigilant to avoid allowing Late Blight to become established in Alaska! Contact Barb Hanson @ 761-3854 or Mia Kirk @ 761-3853 with any questions you may have.
In April we will be sending out the list of Foundation Seed for sale. Foundation Seed is seed that has been grown for many years and proves true to its genetics. Most of these seeds were collected in Alaska and selected for various qualities. For grasses the plants should be able to be planted with normal farm equipment and will grow uniformly. Their flowers should also form close to the same time. With most grasses, the seeds will germinate and be ready for harvest about 4 weeks after the flower occurs. Being able to harvest fertile seeds at one time is very important for efficiency.

To prepare for a seed sale from the Plant Materials Center, once the seed has been harvested and cleaned, each lot or group of seeds needs to have a germination and purity test. Germination for high quality crops needs to be higher than 90%. No noxious weeds can be in the lot. Chaff and extra material needs to be cleaned out thoroughly. We have to follow Alaska Seed Regulations, which are stated in 11 AAC 34.010, Labeling. Each lot will have an identifying label with the year harvested, the name and lot number, the germination and purity listed (as well as the date the test was prepared), the inert matter listed, and the amount available.

Foundation seed is sold only to commercial growers. Foundation seed is the base seed for growers to produce crops which then can be sold to the many agencies that need seed for revegetation purposes. The foundation seed of forbs (non-grass, flowering, non-woody) selected for sale by the PMC are plants which have been evaluated for easy cultivation and as companion plants for revegetation efforts. Many forbs and grasses are also very useful for landscaping. Again, these forbs are the foundation. These seeds are not for turn-around planting in landscapes or revegetation. Instead these foundation seeds are sold to commercial growers who will grow the crop out for resale to various users.

To determine the prices for the seed from the PMC, several sources and formulas are consulted. Grains are based on prices from the lower 48 plus added freight costs, germination and purity results, and the certification that these are foundation seed. Grasses and forb prices are based on prices from certified commercial growers or brokers here in Alaska. The PMC is not in competition with the growers. Because we sell the start-up seed, our prices are much higher than what is sold commercially in some cases 3 times higher).

At this point in time, it looks like we will have approximately 20 different forbs for sale, 19 different grains, and 22 different grasses. To determine which crop you might want to grow, review “A Revegetation Manual for Alaska” and review the SLAP directory to see which plants are needed. Additionally, do your research about what kind of grain will best meet your needs. Please call with any questions you may have! 745-4469