

## **Be On the Watch for Late Blight**

*Written by Judy English, certified WSU Clallam County Master Gardener.*

Oh tomatoes! So many gardeners anticipate them. First, the plant "takes hold" and the leaves turn a luxurious dark green; then the yellow blossoms appear. Soon the fruit begins to show, and in a few more weeks you pick the first tomato of the season. That is unless your plants become victim to one of the most destructive tomato diseases – LATE BLIGHT!

Late blight is common west of the Cascades. It is caused by a fungus-like microorganism, *Phytophthora infestans*, which thrives in moist conditions and infects not only tomatoes, but potatoes and other members of the Solanaceae family. Although labeled late blight, this disease can occur any time during the growing season and in a broad temperature range. Rainy weather, dew and fog are favorable conditions for late blight. Add to that excess foliage, poor air circulation, and overhead watering and you have created the perfect environment for late blight.

Late blight can be recognized by irregular, greenish, water-soaked lesions appearing on tomato leaves or stems. Under cool, moist conditions, these quickly change to purple-black lesions. Leaves and stems develop black or brown streaks. Leaves die and drop. On green fruit, water-soaked, gray-green spots form, enlarge, and become leathery-brown.

Once present, late blight is very difficult to control. Immediately remove infected leaves, plants, and fruit, including those that have fallen from the plant. All infected material must be destroyed to prevent the fungal spores from spreading. Do not compost it. Bag the infected material and discard it as trash or burn it. Check regulations before burning.

Prevention is the best approach. At the end of the season, discard all infected tomato fruit and potato tubers. If infected tomatoes or potatoes were left in or on the ground and did not freeze, they can spread infection to tomatoes and potatoes planted this season. As exciting as it is to see volunteer plants popping up in the spring, pull and discard them. Volunteer plants carrying the fungus can infect other plants.

Avoid conditions conducive to late blight. Avoid excess foliage by using a low-nitrogen fertilizer (5-10-10), water at the base of the plant, and ensure ample air circulation by proper spacing of tomatoes. Some gardeners even prune their tomatoes to improve air circulation.

Fungicide applications can be made to protect leaves, vines, and fruit from infection. Monitor weather forecasts for damp, foggy or humid conditions, and apply a preventative-type fungicide. Fungicides will not eradicate the fungus from infected tissue but will help to protect uninfected tissue.

Carefully read the fungicide label before purchasing. Make sure the plant name and "Late Blight" are shown on the label. Follow the directions on the label.

After applying the fungicide, closely monitor the plant for signs of infection and follow directions regarding additional applications. If the disease spreads to a significant portion of the plant, the fungicide may be of little use.

If this doesn't work, consider planting blight tolerant tomato varieties such as 'Legend' which does fairly well in this area.

A homegrown tomato is worth the effort! Oh tomatoes!

**A tomato with late blight showing the characteristic gray-green water-soaked spots on leaves, stems and fruit. This plant is too severely affected to be saved. It should be removed and destroyed to prevent the spread of disease to other plants.**

