Bacterial Leaf Scorch in Pin Oaks and Red Oaks

Bacterial leaf scorch (BLS) is a systemic disease caused by a bacterium (Xylella fastidiosa) which invades the xylem (the water and nutrient conducting tissues of susceptible trees). While it can be found in a variety of species, in Haddonfield, it has seen most often in Pin oaks and Red oaks. There is no cure for this disease at this time. Generally, once a tree shows symptoms of the disease, it will fail within five to eight years.

Verifying the Tree Species

Pin oaks and Red oaks are in the same branch of the oak family and can be most easily identified by their lobed, pointed leaves. White oaks, which are in a different branch of the oak family, are less susceptible to BLS and can be identified by their lobed, rounded leaves.

Pin oak leaves are 3 to 6” long and almost as wide, with 5 to 7 lobes that are pointed at all ends. A mature tree can be as much as 60-70’ tall with a pyramidal shape. Generally, the lower branches grow downward, the middle branches horizontal and the upper branches upright. It has been widely planted and spreads readily from its acorn seeds.

Red oak leaves are larger than pin oak leaves, 4 to 6” wide and 4 to 9 inches long, with 7 to 11 lobes that are pointed at all ends. A mature tree can be as much as 60-75’ tall with a more rounded shape. The bark on red oaks is dark brown and deeply ridged. It too has been widely planted and spreads readily from its acorn seeds.

The symptoms of BLS are most easily seen in mid to late summer when leaves begin to turn brown prematurely. The browning begins at the edges of the leaves and spreads to look as though the leaf is being painted brown (red oak, below left). Once the leaves on the branches turn brown, those branches die, leaving an increasingly bare canopy (below right).