

BRANCHES TREE CARE LTD.

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APPLE FIRE BLIGHT (ERIWINIA AMYLOVORA)

APPLE FIRE BLIGHT IS A BACTERIAL DISEASE TRANSMITTED BY INSECTS, BEES, RAIN, DEW, WIND AND BIRDS IN THE SPRING THROUGH THE FLOWERS. ONCE THE FUNGUS IS IN A FLOWER. POLLINATING INSECTS SPREAD IT. COMMONLY AFFECTING APPLE, COTONEASTER, PEAR AND MOUNTAIN ASH TREES BUT ANY PLANT OF THE ROSACEAE FAMILY IS AT RISK. EARLY SIGNS OF THIS DISEASE MAY BE ALL OR ONE OF THE FOLLOWING: INFECTED FLOWERS THAT HAVE A BROWNISH, SHRIVELED APPEARANCE, SHRIVELED LEAVES THAT TURN BROWN, ORANGE, RED OR DARK PURPLISH. TYPICALLY, WE SEE THE DIE BACK IN THE LEAVES STARTING MID JULY. LEAVES AFFECTED ARE NEW GROWTH, TYPICALLY OF THAT SEASON, AND FIRST APPEARS ON THE OUTER f 8INCHES OF THE SHOOT. THE LEAVES TURN COLOR OR DARK BROWN, STAY SOFT UNTIL FULLY DESSICATED (DRIED OUT) AND DO NOT FALL OFF, EVEN WHEN GOING DORMANT. FURTHER INFECTION WILL ALSO CAUSE REDDISH WATER SOAKED LESIONS ON THE BARK AND THE OUTER 8-10 INCHES ON NEW SHOOTS TURNS BLACKISH BROWN, MAKING THE SHOOT SHEPHERD HOOK. On warm days these lesions can ooze redish brown liquid. Fire Blight symptoms START TO APPEAR MID JULY AND KILLS BLOSSOMS, SHOOTS, LIMBS AND EVENTUALLY THE ENTIRE TREE. IT SPREADS RAPIDLY IN HIGH MOISTURE WEATHER AND THE BACTERIA OVER WINTER IN THE INFECTED BARK.

AFFECTED AREAS ON THE TREE NEED TO BE TRIMMED OFF AS SOON AS POSSIBLE, ESPECIALLY BEFORE THE DORMANCY PERIOD STARTS. TRIMMING CUTS MUST BE MADE TO ANOTHER BRANCH UNION OR COMPLETE REMOVAL OF THAT BRANCH. AFTER EVERY CUT THE TOOL USED MUST BE STERILIZED, UNLESS THE PRUNING CUTS ARE MADE IN DORMANCY PHASE WHEN THE BACTERIA IS NOT ACTIVE.

THERE IS NO GUARANTEE THAT PRUNING AND STERILIZING AT FIRST SIGNS SAVES THE TREE.

ONCE A TREE CONTRACTS FIRE BLIGHT IT USUALLY REAPPEARS YEAR AFTER YEAR. ALSO, FIRE
BLIGHT IS SPREAD BY FACTORS NOT CONTROLLABLE BY HUMANS SO REINFECTION IS EASY
REGARDLESS OF OUR EFFORTS.

What you can do? Prune out affected areas as soon as possible, disinfect after every cut, make proper cuts in proper locations and always a foot before the die back. I recommend deep root fertilizing the tree every spring to help it stay strong, a healthy immune system does help the tree fight the blight and extend it's life. Unfortunately, all of the products that can be applied to the tree are not available in Canada. Lime Sulphur is a common fungicide that helps but isn't a cure. It needs to be applied to the tree every 10 days, for 3 times, from mid April to beginning of July to prevent infection and done every year. The first application being when the flower buds emerge and then every 10 days for 3 times. None of this is guaranteed, fire blight is very aggressive and may have already spread in the branch closer to the trunk. I have had no success in treating trees with fungicide.

OTHER WOODY PLANTS THAT CAN BE AFFECTED BUT IS NOT COMMON ARE HAWTHORN, ROSE, SASKATOON, NINEBARK AND RASPBERRY.
APPLE FIRE BLIGHT IS A NATIVE BACTERIA. I DID SIGNIFICANT RESEARCH ON IT IN 2013 AND FOUND THAT IT WAS CURRENTLY WIPING OUT APPLE ORCHARDS IN MANITOBA. IF IT CAN DO THAT IN MANITOBA OUR TREES DON'T STAND A CHANCE. FIRE BLIGHT IS THAT AGGRESSIVE AND WINTER TOLERANT. THAT SAID, IT SEEMS THE THUNDERCHILD CRAB APPLE LINE IS FAIRLY RESISTANT AND OR TOLERANT TO IT. IT DOESN'T SPREAD THROUGH THE TREE OR KILL IT LIKE APPLE PRODUCING TREES. THUNDERCHILD CRAB APPLE TREES HAVE PINK FLOWERS. THERE ARE MANY TYPES IN THIS LINE.
I HOPE YOU HAVE FOUND THIS BASIC INFORMATION SHEET INFORMATIVE. IF YOU HAVE ANY QUESTIONS OR NEED ME TO COME OUT AND SEE YOUR TREE PLEASE GIVE ME A CALL, LET'S DISCUSS AND MAKE A PLAN.

