

Save Trees and Plants Suffering From High Levels of Damage and Stress

Written By: Dan Banks

Tree care is far more complicated today than in the past because of the number of invasive pests and diseases affecting our trees and plants. Emerald Ash Borer, Hemlock Woolly Adelgid, Pine Wilt Nematode, Beech Bark Disease, and Oak Wilt are just a few of the new arrivals that make our job of maintaining the landscape much more difficult. While there are treatments for these problems a holistic approach to saving the tree will make you far more successful.



Above: Emerald Ash Borer destroyed a large portion of this tree's Cambium (vascular system). It formed a large callous roll over, but by fertilizing it with 18-3-6 and Essential the tree had the needed energy to recover.

When Emerald Ash Borer arrived many arborists started treating trees that were under attack and suffering from high levels of insect damage. Today thousands of these ash trees in the core zone are alive and look better today than before they were attacked. Treatment methods for the insect were not damaging to the tree (no trunk

drilling) to avoid any additional stress being put on the tree. These trees were fertilized spring and fall with a combination of 18-3-6 liquid fertilizer with humic acid and Essential, both manufactured by Growth Products® and distributed by Banner Sales and Consulting, Inc.

Essential® Plus is truly defined as a "Metabolic Enhancer" ...an organic biostimulant that enhances plant growth and development. This rich organic liquid solution contains twenty-one L-Amino Acids from plant extracts, humic acid, a natural wetting agent, sea kelp, naturally fermented gibberellic acid, complex sugars, and vitamins to benefit the plant. This holistic approach produces vigorous plant responses that cannot be attributed to traditional N-P-K fertilizers. For example, the rate at which a tree will callous over EAB tunneling damage is greatly increased with Essential® Plus. This helps repair the tree's vascular system so it can function normally again. Essential alone would be used to help a Hemlock recover from Adelgid damage so we do not create an abundance of lush growth that would attract the Adelgid. The picture at above left illustrates the large callous over very extensive Emerald Ash Borer damage.

Growth Products® 18-3-6 is a professional liquid fertilizer solution made from only the highest quality N-P-K raw materials and micronutrients to assure a safe, reliable and efficient product. The 50% slow release nitrogen will provide a continuous steady feeding for up to

three months providing a fast green up without flushing unwanted growth. These same ingredients assure no nitrates and no chlorides that could damage trees and ornamentals. A custom mix exclusively manufactured for Banner Sales includes the addition of humic acid to assure nutrients are in a readily available form for immediate uptake. One of the largest

Land development practices strip this rich soil and leave sub soils as our planting media, devoid of these beneficial organisms.



Left: Ash trees kept healthy and vibrant in a core area where all untreated ash trees are dead. Trees were trunk injected using the Wedgle and the insecticide Pointer, and fertilized using the combination of 18-3-6 and Essential Plus.

SAVING TREES UNDER STRESS

factors affecting nutrient uptake is PH of the soil and also the water used in the mix.

PH of the soil can be determined with a simple soil test you can do yourself or send a sample to a lab for testing.



Above: This White Birch had been neglected in a 15 gallon Container and put under sever stress. After two applications of Essential Plus the tree let out thick new roots and new healthy growth.

The ideal range of the soil should be around 6.5 to assure availability of the nutrients you are adding. The water used in your spray tank should be neutral 7.0 or slightly acidic. If you are using well water you can check the PH using a simple water test kit for aquariums, swimming pools, or hot tubs. Well water in Michigan is usually alkaline which will affect the performance of your fertilizers and pesticides. Many pesticides that normally give several weeks of control will be reduced to days if mixed in alkaline water. You can easily adjust the PH by using Growth Products®

PH Reducer. PH Reducer is a citric acid solution that will slowly and gently reduce PH without any detrimental effects to the plant material.

Natural soils rich in organic matter contain high levels of beneficial bacteria and microbes. Land development practices strip this rich soil and leave sub soils as our planting media, devoid of these beneficial organisms. The bacteria and microbes act as a biological fungicide and help control Pythium (damping off), Sclerotonia, Anthracnose, Rhizoctonia, Phytophthora, and Fusarium. Now you can add these beneficial bacteria and microbes with the product Companion® by Growth Products. Companion® is a concentrated liquid that does not require mixing or agitation and is compatible with fungicides and fertilizers. Companion's rich organic base helps to feed the microorganism colonies and establish them in the



Above: Essential Plus contains all organic ingredients (listed by OMRI) that stimulate the trees metabolism during times of stress.



Banner Sales and Consulting Inc. is owned and operated by Dan Banks and Doug Fenner who have combined experience of over 51 years in the green industry. Dan and Doug have worked together for over 20 years first at Shemin Nurseries and then at Benham Chemical. Forming Banner Sales and Consulting, Inc. in 2000 focusing on tree, turf, and ornamental care in Michigan and Ohio. Banner Sales reputation is always on the cutting edge of new products and methods of treating the many new invasive pests and problems attacking the landscape today. During the winter months they travel the east coast doing trade shows and conducting training seminars on the newest methods for tree care.

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plant's root hairs. It also helps stimulate root growth, improve plant quality, improve seed germination, and reduce transplant shock.



Above: Companion contains Bacillus subtilis GB03 a Rhizo-Bacteria that quickly colonizes roots and stimulates root growth.



Serving the Green Industry for 25 years.

Manufacturer of Slow Release Nitrogen, N-P-K fertilizers, Chelated Micronutrients and Natural Organics

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