

# Your Company Info and Logo Here



©2004 Rainbow Treecare Scientific Advancements Cambistat 25C is a registered Trademark of Rainbow Treecare Scientific Advancements

## **Research:**

The active ingredient in Cambistat has been widely researched and proven effective by major universities. For detailed research information ask your arborist or go to [www.rainbowscience.com](http://www.rainbowscience.com).

## **How long does it last?**

You will receive three years of benefits from one treatment of Cambistat. To maintain size you should re-treat every three years. In southern states re-treatment may be needed sooner.

## **Will it affect my bedding plants or grass?**

Grass, plants and shrubs at the base of the tree may show signs of slow or stunted growth. These effects are often subtle and should result in no permanent damage. To prevent unwanted regulation remove all non-targeted plants 2 feet beyond treatment area.

# Cambistat<sup>®</sup>

*for a greener, healthier, lower maintenance tree*

Size Maintenance

## Situations for Use

- trees too close to houses
- trees near pools, decks, patios and sidewalks
- trees under powerlines
- blocked scenic views
- high maintenance trees

# Cambistat Size Maintenance

Research shows that Cambistat gently slows the growth of trees, allowing the tree to redirect some of its energy from canopy growth to defense chemicals, fibrous root production, and other uses. The resulting benefit of the reallocation of energy makes your tree healthier and more durable.



one year treated growth

one year untreated growth



The oak branches represent three years of growth from 2000 through fall of 2003.



## Tree Response to Cambistat

<p><b>Growth Reduction</b></p> <ul style="list-style-type: none"> <li>■ Cambistat is designed to gently and predictably slow the growth of your trees. You can expect 40 - 60% reduction in growth over a 3-year period. <b>Cambistat should be reapplied after 3 years.</b></li> </ul>	<p><b>Higher Tolerance to Insects and Disease</b></p> <ul style="list-style-type: none"> <li>■ Research shows Cambistat makes trees significantly tougher in response to some opportunistic insects and disease. <b>Cambistat thickens the protective barrier of the leaf and increases production of defense chemicals.</b></li> </ul>	<p><b>Improved Drought &amp; Heat Resistance</b></p> <ul style="list-style-type: none"> <li>■ Drought is a major cause of tree death and decline in the urban landscape. <b>Research shows Cambistat increases drought resistance by helping the tree to decrease water losses during dry, hot periods.</b></li> </ul>	<p><b>Root System Enhancement</b></p> <ul style="list-style-type: none"> <li>■ Research shows that Cambistat increases fine root density. <b>Higher root density increases a tree's ability to absorb minerals and water, increasing the tree's ability to produce energy and survive stressful situations.</b></li> </ul>
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*Energy* is redirected from canopy growth allowing for these health benefits to occur.

# Health Benefits

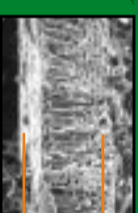
Cambistat is scientifically proven to improve the health of trees. You will see greener leaves, less insect and disease injury and your trees will be better able to withstand drought and other environmental stresses.

Red oak leaves shown at the end of third growing season after treatment.

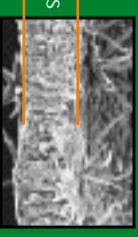


treated

untreated



treated



untreated

leaf thickness

Electron microscope photos of treated and untreated oak leaves. courtesy of Qi, Kingpin and Chaney

In response to Cambistat the leaf's protective barrier is thickened, providing better protection from disease and water loss.

## Health Benefits Situations for Use

- construction injured trees
- declining and older trees
- trees stressed from drought
- trees growing in limited rooting area
- injury caused by disease or insects
- newly transplanted trees

## Treatment for Trees in Mild Decline



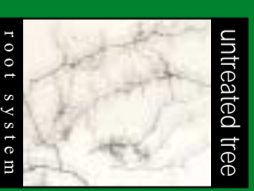
1989 treated



1994



2001



untreated tree root system



treated tree root system

*Cambistat promotes fibrous root growth.*

Information and photos from Watson, G.W. 1996. Tree Root System Enhancement with Paclobutrazol. J. Arboriculture 22:211-217.