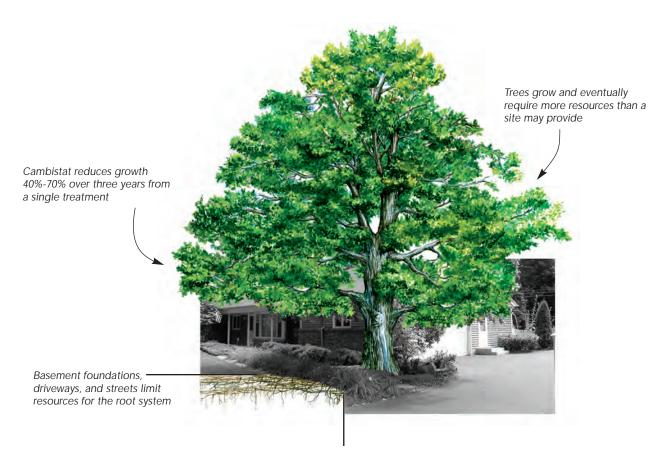
# Using Cambistat® to Reduce Growth



# Slowing Growth for a Healthier Tree

Large trees add beauty, character, and value to the landscape, and they are highly desired by many homeowners. While it is appealing to think most trees in the landscape will eventually grow large and provide these benefits, this may not always be in the best interest of your tree and property.

There are two main reasons why:

- 1. The size of a mature tree is often underestimated, and many trees are planted too close to houses, garages, power lines, and other structures. This type of interference may cause damage to the property and require additional maintenance to correct.
- 2. Large trees require more water, minerals, and soil volume for roots than smaller trees, and these resources may not be available in sufficient quantity in smaller urban sites. If these resources are limited tree health will eventually suffer.

### What does Cambistat do?

Cambistat is a tree growth regulator that reduces canopy growth by 40-70% over a three year period. Reducing the amount of tree growth can help you:

- > Safely maintain the visual appeal of the landscape.
- Reduce the amount of live wood pruning required.
- Prevent premature overcrowding of competing trees.
- Maintain a smaller, more appropriate tree size when there is a restricted root zone.
- Maintain vista views with less frequent pruning.
- Extend the time in between pruning events.
- Minimize intrusion by power companies.

### Additional Cambistat Benefits

As a result of growth reduction, some favorable changes occur that enhance the durability of your tree to the stresses associated with living in an urban yard. These include:

- > Stimulate fine root production
- ▶ Improve drought and heat resistance
- Higher tolerance to certain diseases



# **Slower Growing Trees**

A common myth about trees is that a faster growing tree is healthier than a slower growing tree. The truth is that slower growing trees will outlive trees that grow faster, especially in situations such as yards where space and resources are limited. The chart below shows some important differences between a tree growing relatively faster or slower.

# Cambistat Treated Tree



# Slower Growth is Beneficial

Tree Characteristic	Tree Growth Rate Comparison	
	Faster Growth	Slower Growth
Resource Demand	Higher	Lower
Sensitivity to Resource Availability	Higher	Lower
Stored Energy Reserves	Lower	Higher
Root : Shoot Ratio	Lower	Higher
Sensitivity to Stress or Damage	More Sensitive	Less Sensitive
Overall Tree Durablity	Less Durable	More Durable

# An Integrated Approach

When caring for urban trees it is important to make a thorough evaluation of the site to accurately diagnose all stressing agents and tailor your recommendation to the specific circumstances. These must be dealt with so that your tree can live to its fullest potential. Utilize your arborist for a comprehensive maintenance program.

# Benefits of Cambistat for Urban Trees

Cambistat is a soil applied product that is absorbed through the roots. 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 reallocation of energy makes your tree healthier and more durable.

Drought is a major cause of tree death and decline in the urban landscape. Research shows Cambistat increases drought resistance by helping the tree reduce water losses during dry, hot periods.

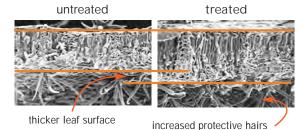




untreated

3 years after treatment

Cambistat changes some important physical traits of leaves. Leaves of treated trees tend to be greener (higher concentrations of chlorophyll) than untreated and have an enhanced protective barrier (thicker leaf surface and denser surface hairs).



Research has shown Cambistat increases fine root density in trees





untreated

3 years after treatment