

# Brittle Cinder Fungus

## TREE DOCTOR TIPS

### Brittle Cinder Fungus (*Kretzschmaria deusta*)

#### DESCRIPTION:

Brittle cinder fungus, or *Kretzschmaria deusta*, is a fungal pathogen that causes breakage in seemingly healthy trees. The fungus appears around the base of trees as a crust-like fruiting body that has wavy edges. When the fungus is young, it will be grey with white margins. As it ages, it will turn black and resemble burnt bark.

#### HOSTS:

Many species of trees are susceptible to brittle cinder, but the most commonly affected trees include:

- Beech
- Horse chestnut
- Maple
- Oak

#### BIOLOGY AND SYMPTOMS:

This fungus infects trees through open wounds, but is also known to spread through root grafts to neighboring trees. The fungus degrades the cellulose of the plant cell walls, compromising the structure of the wood and making it extremely brittle. As it degrades the wood of the tree, the crown may not show symptoms of the infection and appears healthy. Infected trees may even snap off completely at the base of the tree or roots, making them extremely dangerous in landscapes.

#### MANAGEMENT:

There are currently no pesticides that are effective against brittle cinder, so prevention is key. Helping your trees remain healthy by using cultural practices such as proper fertilization, pruning and mulching methods, as well as minimizing wounds to the tree from lawn maintenance equipment, can help minimize stress. Complete removal may be necessary if

the tree is infected, but extra precaution should be taken when removing because internal decay may cause the structure of the tree to fail during removal.



FIGURE A. GRAYISH-WHITE COLOR TO THE FUNGUS IS CHARACTERISTIC OF BRITTLE CINDER FUNGUS

FIGURE B. BRITTLE CINDER FUNGUS, AS IT AGES AND TURNS BLACK, IS A SERIOUS PATHOGEN FOR TREES

The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute's Plant Health Care Book*.

