Invasive Plants in Pennsylvania Bee-bee tree

Tetradium daniellii Benn.



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Background:

Also known as Korean Evodia, this tree was brought to the U.S. for the landscape and nursery trade. It is still being sold for such purposes, although it is not overly common in the trade yet.

Range:

This species has a very limited distribution in Pennsylvania and Ohio. It has shown to be invasive on the Penn State Mont Alto campus, into the neighboring Michaux State Forest, and has naturalized at Morris Arboretum and disturbed forest fragments in southeastern Pennsylvania.

Description:

This deciduous tree can grow 30 to 50 feet tall or more and is usually just as wide. Multiple low-growing lateral branches are common.

Pinnate leaves with seven to 11 leaflets grow oppositely along the branches. Leaves are deep green, glossy and have an unpleasant smell when crushed. Bark is smooth and resembles a beech tree. The buds are not covered with scales.

This species is dioecious, meaning there are male and female trees. On the female trees, flowers bloom in the summer and are white and arranged in large terminal clusters. The female tree's fruits are in the form of a capsule that opens to reveal dark red-purple fleshy seeds.



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Habitat:

This tree prefers moist, fertile, well-drained soil and can tolerate a wide range of soil pH. It grows in full sun. Young trees are less cold hardy than mature ones.



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Biology and Spread:

This plant spreads by the numerous seeds. Birds will eat the fruits and disperse seeds to new locations.

Ecological Threat:

Some suggest that this tree is weak wooded, so it may cause harm to structures and people during and after storms.

Little is known about its impact on the environment, but it is considered a "watch list species" because it shows invasive tendencies in certain situations.

How to Control this Species:

Control methods specific to this species have not been developed yet, but the following may be effective in ridding bee-bee tree from an area, as it works for other invasive trees.

Cut down or girdle the tree, then apply a systemic herbicide like triclopyr or glyphosate. Herbicide application can be done at any time of year, as long as temperatures are above 60 degrees F for 24 to 48 hours and it is not expected to rain for at least 24 hours. Fall or winter herbicide applications will avoid impacts to other vegetation. Repeated treatments may be necessary.

Look-A-Likes:

Young bee-bee trees may be confused with another invasive, Amur cork-tree *Phellodendron amurense*). Adult corktrees have corky, ridged bark while the bee-bee tree bark is smooth. Fruits of the bee-bee tree are red, while corktree fruits are greenish, turning to black. Bee-bee trees may also resemble some ash trees (*Fraxinus* spp.) but ash have scales on their buds and the leaves do not have an unpleasant smell.



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