



A plant pathologist specializes in plant health. Keeping plants healthy requires an understanding of the organisms that cause disease, as well as an understanding of how plants grow and are affected by disease.

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### Important Scientist Characteristics:

It is important for me as a scientist to know when to ask questions. More importantly, I also know when to listen to others.

**Example of a simple research question I have tried to answer:** Does *Raffelea lauricola*, a type of fungus, move regularly through the rhizomes, the underground stems and roots, of pondberry plants?

### Technology or equipment used in research:

We use a compound microscope that has a total magnification range of 40-1000x. There are usually three to four objectives on each microscope. The objectives are very high-powered magnifying glasses. Objectives provide 4x, 10x, 40x, 100x magnification. We use a compound microscope to view wet-mount or stained slides. These slides hold samples of the plants. We look at the samples to find fruiting parts and spores from the fungus we study.

### Most Exciting Discovery

We discovered that pondberry is highly likely to be affected by the fungus, *Raffelea lauricola*. The disease from the fungus can spread quickly through the plant rhizomes. It can spread more than three meters from infected plants. When *Raffelea lauricola* infections occur in pondberry, the infection is likely to spread to nearby pondberry plants. This is especially important information because pondberry is an endangered species.

**When did you know you wanted to be a scientist?** As a young girl, I loved to explore the woods, play in the dirt, watch plants grow, and build tree houses. I wanted to have a job working outdoors where I did not need to "dress up." After I read *Silent Spring* by Rachel Carson, I knew I wanted a career in plant science.

<http://www.srs.fs.usda.gov/staff/728>