

I went out to conduct fieldwork on Thursday October 16th at the International School of Texas. I walked down to the outdoor classroom and sat on the ground hearing the leaves crunch while I sat. I saw the nature surrounding me. I close my eyes and hear the birds chirping around me, I breathe in to smell the fresh cold October air.

I looked around to see the trees surrounding me, their leaves still green not changing color. I look to see the crunchy brown and yellow leaves that have coated the ground making a blanket of yellow and brown. I see the sun peaking through the leaves trying to peek through the leaves. I see the birds hiding in the little trees. I was surprised to see that some of the leaves on the trees had brown dots on them.

I was surprised to learn that if the leaves have brown dots on them that means that they have a fungal or bacterial disease, this is usually called anthracnose fungi, this most commonly happens to leaves, flowers, fruit, and stem tissues. Places where plants have anthracnose fungi are more common in places with warm, humid weather. although plants can still be found with anthracnose fungi in other climates. According to UCIMP, "If leaves are very young when infected, they can become curled and distorted with only a portion of each leaf dying." It also says, "Mature leaves are generally resistant to infection, but when conditions are favorable, spotty lesions can occur. Heavily infected leaves fall prematurely throughout the growing season, and sometimes trees become completely defoliated.

New leaf growth usually occurs after leaves drop prematurely." ([Anthracnose](#) 05/202) This shows how young leaves don't fully die from Anthracnose fungi but that only small pieces will fall off but sometimes, the whole leaf will die from anthracnose fungi. On the website Birds and Bloom this is what it says you can do to fix it, " Adjust the [watering schedule](#) and do not allow plants to sit in excess water. Often that alone is enough to stop the disease's progress." ([How to prevent brown spots on leaves](#) September 25 2024)

My observation makes me wonder how much the climate really affected the anthracnose fungi. An example of an experiment I could do is, I could get 3 different types of the same plant. I could then put one plant in a cold room and water it 3 times a day. For the second plant I would put it in a room temperature humid room and water it 3 times a day. I would check on the plants every day and look for signs of the anthracnose fungi. I would look for what plant would get symptoms of the anthracnose fungi first and if the plants can overcome the fungi. I could also use a globe visualization system to track the weather in different states, and then I could get pictures from the area showing the same plants being affected with different temperatures. Although there is no test to test your plants for anthracnose fungi, you these are some signs that your plant has anthracnose fungi early on, "Leaf symptoms,

Tan to brown irregularly shaped spots or blotches on young leaves. Infected leaves are often distorted, cupped or curled. Severe infection can result in leaf drop in spring. Trees produce a second growth of leaves by midsummer if leaf drop

occurs. Anthracnose may cause tan to dark brown spots on mature leaves but these leaves do not become cupped or distorted. Leaf spots on mature leaves are often found with minor wounds like insect feeding. Leaf symptoms are often most severe on the lower and inner branches of the tree but may progress up through the canopy.”

([Anthracnose of Shade Trees](#) Reviewed in 2024)

