

eth·no·bot·a·ny

eTHnō'bätñ-ē/

noun

1. the scientific study of the traditional knowledge and customs of a people concerning plants and their medical, religious, and other uses.

This painting symbolizes the natural relationship between plants and humans. I believe that we need to respect culture's traditions, spanning generations, to use natural remedies to cure people. Most of the time, we see plants in any natural setting and do not understand that there is a vast web of knowledge that links these plants to the cultures that surround them.

This work expresses my relationship to plants. The background colors symbolize different spiritual states I experience when in nature. Red is a grounding color. Red is closest to the feet, symbolizing being rooted in nature. I try to stay well grounded spiritually and mentally—to allow bad energy to leave and good energy to come. Yellow means birth and rebirth, symbolizing how I become a better person when in nature: I see, I smell, and I feel different, as if everything is brand new to me. Blue symbolizes stillness; it generates understanding, allowing me to be more aware and connected.

Cheyann

We are connected

Cheyann



My love for plants started with my grandma when I was younger about age five years old I remember my grandma having a bunch of plants and vegetables and cacti in our yard and we lived in an apartment complex which means minimal space for everything but my grandma believed plants belonged everywhere. In every corner in every room there was a plant there giving life to room with its beautiful colors. My grandma would talk to her plants; she knew exactly what they needed which is love and water. Sometimes she would burn incense in soil the plants sat in; she would say something like it makes them happy. The incense smelled so nice sweet and the fragrant would spread through the house. For some reason the plants would grow. I feel that being able to connect with plants is the greatest moment ever because you're communicating with something that can't really respond back or even hear us, but feel our vibration is amazing.

WHEN I AM IN NATURE

When I'm in nature I find myself stuck at certain spots because I try to remember the path we took in class so I kept stopping and trying out different routes and walking back to my original spot, I found out afterwards I wasn't supposed to have any electronics but I took a bunch of pictures of tree up close that I thought were interesting.

As I walked down and up paths I stopped to meditate for at least ten minutes every twenty minutes, I also had my crystals that make everything balanced. I begin to be aware of all the noises, I sensed someone or something was following me but it was just the sound of leaves falling in between the trees. The rustling had a creeping sound to it but I started to get comfortable with it. I soon stop and catch a baby lizard.

We simply walked together and me being such a caring person I realized I was taking this baby lizard farther and farther away from it home so I started to feel terrible for the li'l guy so I decided to walk back and drop it off. Not only did I feel bad for it but I also felt a small connection with it. I felt its heartbeat, which gave me joy that there is life and emotion in my hand. After that mini incident I tried to walk as slow as possible making little to no sound, trying to imagine how it would be without me there or how it was before I was there.

I thought about the idea that if I didn't walk this path, would all of the sounds increase or stay quiet

My brain wandered for a minute so I decided to sit alongside a cliffy road

I ate a couple of strawberries, they were squashy but delicious

I began to meditate and listen to my breathing and how I was getting lighter I started to travel through these dimensions

Sounds of nature started to get louder and louder

I found it very awaking to realize this moment.

Rather than just sitting there, I started to feel my surrounding by touching the ground and leaves that have fallen.

I then slowly got up so I could stay in that same state.

I started to observe all the trees along the path, showing their age as if I was meant to see.

I felt so welcomed when I was there.

I've had moments where I felt like I could fly along with the hawks but it so vivid it seemed possible.

My experience was like no other; it feels better when you're alone.

It makes that moment more special when you began to have self-realization that you're small and one out of seven billion.

Moments like these Are me Are meant for me only and because I was there for that moment it makes it more special.

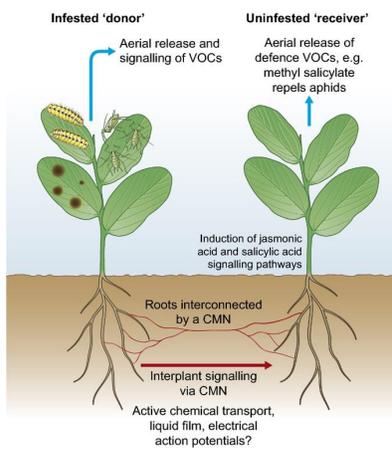
Ethnobotany, refers to the way cultures use plants for maintaining their mystical, cultural, social, medical, traditions. I find plants very intriguing because I work with them and I wish to broaden my understanding of plants and the natural world. My personal uses of plants are sage a sandalwood smudging - the natives would use sage to burn away bad energy from a space by smudging an area or themselves, most importantly trying to understand the spiritual traditions of their culture is beautiful. More likely I tend to smudge my self at least three times a month and sometime I try to send good energy to ones in need of it or to myself then with the ashes leave them outside my house so the wind can carry the blessing or prayer to whomever. Then when I use the sandalwood to make my room smell like the forest because I live in the desert which kind of has no smell I believe what made we want to continue my research is from the *Bioneers* organization- a bunch of people spoke to my beliefs and what we need to change in our society. Ethnobotany is very fascinating because there are people like Maria Fadiman a famous botanist- currently researching in Ecuador studying the culture of the people living in this dangerous environment Since we are a part of the environment and as such we need to be mindful and respectful to our planet and get to know plants like our closest friend. It might just open our eyes to not pollute or destroy the world. Destroying the plants and the natural world means an end to human life.

What is the relationship between humans and plants? Most of my questions try digging further into the fact that us humans are very similar to plant life and yes that sounds crazy because like imaging everything that come from plants like the veggies we eat and this came up in my connection class when we had a debate that started with vegans and meat eater, the conversation was very heated because there was a point where the vegans would point put that plants have rights because they have feeling and a thought processes but then the meat eaters started to say that plants when you put stuff on them it kills the bugs living on them. Having this awkward turn around and then wondering if we would we still eat plants if they had feelings. But everything connects in some way and one thing we have in common are plants and animals.

All three produce and grow in a similar ways it's just, plants need nutrients from the sun in order to live and animals need to depend on each other in order to live just like human on human. But my question is what is the relationship between human and plants. Plants on the other hand can see, touch, smell and hear.

Plants have many characteristics that humans so like being able to see-Daniel Chamovitz wrote an article explaining how plants can see from photoreceptors throw their stems & leaves allowing term to differentiate between red and blue and even wavelengths that are human eyes can't see also red and ultraviolet parts of the spectrum. Plants need photosynthesis using light receptors to turn carbon dioxide and water into sugar so the plant produces food. Having oxygen phototropism is one of the many plant tropisms or movements, which respond to external stimuli. Growth towards a light source is called positive phototropism, while growth away from light is

called negative phototropism. Light receptors in the membranes of the cell in the plant tips are sensitive to blue light, so when they feel it, it is a cascade of signals that modulates the activity of its hormone *auxin* making the cells on the shaded side of the stem elongate, bending the plant towards light. This allows the plant to turn off at night. Plants are very sensitive to touch allowing them to respond to attacks in their environment. Plants have a dodder, this is a the sniffer dog of the vegetable world containing no chlorophyll, dodder is exceptionally sensitive to odors, so most plants have sense of smell. *Ethylene*, a plant hormone that regulates many processes, its ability to smell has other advantages. Smell also helped plants communicate in 1980's research shows caterpillars infested plants and its leaves contained chemicals so it seem that the attacked trees can send an airborne unpalatable message that prepared healthy trees to prepare for imminent attack.



There were studies to show that plants can identify when a certain insect was eating a leaf and where exactly it was coming from by the saliva of the insect, sends to the plant and it can instantly call out to a predator to consume it. Plants can also hear through vibrations produced by insects such as bees buzzing (proactive awareness). Clearly plants don't want to be attacked or at least don't want to be in a situation if they can't move. It's aphids wings beats including minuscule sounds plants seem to just react to vibrations and frequencies.

WHAT IS HUMAN COMMUNICATION THEN?

Plants communicate silently and humans use verbal words to get by their opinion or just to say "hi". We use social media as a means to communicate with each other; we post about our lives keeping everyone up to date on what's happening every second of our lives. By giving hugs, waving, moving a certain way can give off some type of conversation or at least confirm it. Even babies have the tendency to communicate that their hunger then we humans knowing what they want from a certain type of cry.

CONCLUSION

Should plants get human rights if they can see, feel, and communicate with each other - My topic is supposed to educate others about ethnobotany, with research and articles based off the daily life. Extending rights to plants would be harder because while they have some human characteristics, there is no consciousness. Therefore there's no need. But we who care for plant life would like to respect and keep nature clean.

Bibliography

- B. C. Willige, S. Ahlers, M. Zourelidou, I. C. R. Barbosa, E. Demarsy, M. Trevisan, P. A. Davis, M. R. G. Roelfsema, R. Hangarter, C. Fankhauser, C. Schwechheimer. **D6PK AGCVIII Kinases Are Required for Auxin Transport and Phototropic Hypocotyl Bending in Arabidopsis.** *The Plant Cell*, 2013; DOI: 10.1105/tpc.113.111484
- Charley Boy, Lisa. "The Ancient Art of Smudging." *Spirituality & Health Magazine*. ?, Nov. 2012. Web. 05 Dec. 2016.
- GENDALL, OHN. "Kindred Spirits: Mickalene Thomas' Collaborative Photography at Aperture | Art | Wallpaper* Magazine." *Wallpaper**. Wallpaper*, 2016. Web. 14 Nov. 2016.
- Heil, Martin, and Richard Karban. "Explaining evolution of plant communication by airborne signals." *Trends in ecology & evolution* 25.3 (2010): 137-144.
- KELLY, SIMON. "No. 125: Barkley L. Hendricks, Simon Kelly." *The Modern Art Notes Podcast*. N.p., 27 Mar. 2014. Web. 14 Nov. 2016.
- Maria Fadiman, Ethnobotanist Information, Facts, News, Photos -
- National Geographic
- PROACTIVE AWARENESS. "The Incredible Similarities Between Human and Plant Consciousness -." *The Incredible Similarities Between Human and Plant Consciousness* - . N.p., 09 Aug. 2015. Web. 14 Nov. 2016.
- ScienceDaily*. ScienceDaily, 28 May 2013. Web. 03 Dec. 2016.
- "Smudging." *Smudging* ***. N.p., n.d. Web. 01 Dec. 2016.
- Society, National Geographic. "Maria Fadiman, Ethnobotanist Information, Facts, News, Photos -- National Geographic." *National Geographic*. Nation Geo, n.d. Web. 01 Dec. 2016.
- Technische Universitaet Muenchen. "How do plants grow toward the light? Scientists explain mechanism behind phototropism." ScienceDaily. ScienceDaily, 28 May 2013. <www.sciencedaily.com/releases/2013/05/130528105946.htm>.
- Tiwari, Manjul, and Maneesha Tiwari. "Voice-How humans communicate?." *Journal of Natural Science, Biology and Medicine* 3.1 (2012): 3.
- What Plants Talk About (Full Documentary)*. Perf. https://www.youtube.com/channel/UCxZYSiQcIGiI2_MHPSAH_og. Youtube, 28 Feb. 2014. Web.

