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| [Homepage](http://docs.google.com/homepage.htm)  [Abstract](http://docs.google.com/abstract.htm)  [Introduction](http://docs.google.com/introduction.htm)  [Review of the Literature](http://docs.google.com/research.htm)  [Statement of the Problem](http://docs.google.com/problem.htm)  [Hypothesis](http://docs.google.com/hypothesis.htm)  [Materials](http://docs.google.com/materials.htm)  [Procedure](http://docs.google.com/procedure.htm)  [Results](http://docs.google.com/results.htm)  [Recommendations](http://docs.google.com/recommendations.htm)  [Acknowledgments](http://docs.google.com/acknowledgements.htm)  [Daily Log](http://docs.google.com/biolog.htm)  [Images](http://docs.google.com/images.htm)  [Works Cited](http://docs.google.com/workscited.htm) | When driving through the Central Valley, one doesn't see speakers in the fields playing music. If a farmer was seen playing music in his fields, not for the field hands, but for the plants, he would be laughed out of the valley. the idea sounds ridiculous. visions of the flowers in Alice in Wonderland appear and the plants start singing and dancing to the music. The idea is about as far out- there as Never, Never Land. Yet, there still is the myth that stays close to home. The myth that if a person talks to their plants, the plants will grow better. All myths have origins in some truth. So why couldn't this one? Is the reason because people who talk to their plants will take better care of them? Or is the reason deeper, in the bio-pathways within the plant's cells?  Plants are considered autotrophs, meaning they make their own food. The food is produced by taking energy in the form of light, and converting it to sugars. The light energy enters Photosystem I or II, getting converted to the right wavelength, and then exciting an electron which gets passed through the Electron Transport Chain. This passing of the electron allows a hydrogen ion to be pulled through the cell membrane, creating a gradient. To pass back through the membrane, the hydrogen ion must go through ATP synthase, an enzyme in the membrane. The passing of the hydrogen ion provides the energy to tack a phosphate into the end of ADP creating ATP which is used as the energy to make saccrides.  The interesting thing, however, is that sound has many of the same properties as light. Both light and sound come in similar wave patterns. Both light and sound are forms of energy. Whey then, couldn't sound affect plants in a negative or a positive way. Sound waves could be recognized as light, helping to produce more energy for the cell. if there is significantly more energy coming in, the plant could make more chloroplasts, allowing the plant to use more of either energy. The sound waves could enter into different metabolic bio-pathways other than photosynthesis and alter the plant negatively or positively. The sound could stimulate growth, stimulate the production of choroplasts, or cause plants to go into a state of stress from too little or too much energy. The sound waves could stop some metabolic processes, negatively effecting the plant, or enhance the pathway, positively effecting the plant. |