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| *The term allelopathy is stated as "a function of plant-produced chemicals to inhibit or promote growth and activity of other life... Å"*  If you don't like your neighbors you always have the option of moving. But what about trees? If they don't like the plants growing next to their trunk, knowing if it strives in their environment it could one day starve them of sunlight, what can they do?  Many plants have found different ways to compete against other plants in their surrounding environment. One characteristic that has become a successful way of competition, is allelopathy.  Figure 1.1Ç  Allelopathy is known in the scientific world as the chemicals produced by plants to keep other plants in their vicinity from taking over. Today allelopathy can be seen as a competitive characteristic for plants to maintain the maximum benefits from their environment. If a plant contains allelopathic characteristics it is a crucial benefit for the plant to keep other producers from taking their current food and water source. Allelopathic characteristics can be found in all types of plants, including "angiosperms, gymnosperms, and lower plants like ferns and micro-organisms. É"  Allelopathy has sparked the interest of many scientists in the field of agriculture today because of the unique benefits allelopathy may have to the interactions of plant-plant, plant-insect, and plant-microorganism. Scientists at the University of Vigo, in Europe, have been studying the agriculture aspects of allelopathy and believe that allelopathy may play a role as a "chemical-free weed and insect preventant to promote more beneficial crops.Ñ"  A main department in the United States government has also been studying the effects of allelopthic chemicals, the United States Department of Agriculture (USDA). Dr. Henry Gilbert, of the USDA members, has found that allelopathic chemicals are prevalent in many trees found through out the United States. Recently Dr. Henry Gilbert has found that the plant, Baccharis Coridifolia (a plant found at the border of America and Mexico), kills other competing producers through the production of the phytotoxins in its leaves. Dr. Gilbert believes that if further research continues in this field of study, it maybe used to help kill competitors in the farming fields found all over the United States.  Dr. Gilbert�s research has given way to over one hundred experiments pertaining to allelopathy in the USDA. Jane Gates, another scientist at the USDA, is using her knowledge of allelopathy to "play a crucial role in the production of man-made forests. Ö" Gates believes that if certain trees are placed together, do to the fact that they can with stand the allelopathic chemicals of the area around them, it would enable the United States to plant more trees that will have a higher percentage of living. This would benefit many Americans, through the production of wood (making it cheaper) and also preserving and rebuilding our national forests.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Å Academic Press Dictionary of Science and Technology © All rights reserved.  Ç Courtesy of Jeff G. Nelson, http://miavx1.muohio.edu  ÉAliotta, Giovanni, "Allelopathy," University of Naples, June 30th 2000  Ñ Yoshiharu FUJII-Chairman of the Organizing Committee, "Allelopathy" Japan  Ö Gates, Jane " Allelopathy: The Effects of Chemicals Produced by Plants" USDA September 1994    ([Intro1](http://docs.google.com/introduction.html))([Intro2](http://docs.google.com/intro2.html))  [[Home](http://docs.google.com/home.html)][[Introduction](http://docs.google.com/introduction.html)][[Hypothesis](http://docs.google.com/hypothesis.html)][[Procedure](http://docs.google.com/procedure.html)][[Data](http://docs.google.com/data.html)][[Conclusions](http://docs.google.com/conclusions.html)][[Bilio/Links](http://docs.google.com/biblio.html)]  [[2002 Projects](http://docs.google.com/AP2002/index.html)][[2001 Projects](http://docs.google.com/index.html)][[2000 Projects](http://docs.google.com/AP2000/index.html)][[1999 Projects](http://docs.google.com/AP99/index.html)][[1998 Projects](http://docs.google.com/AP98/index.html)] |