|  |
| --- |
| ***� Why Acid Rain Makes Plants Go Brrr�*** ��� Problem, Hypothesis, and Prediction |

|  |  |  |
| --- | --- | --- |
|  | **Problem to be Addressed**  Simply stated, our objective is to examine one of many detrimental effects of acid deposition on plants.� Acid deposition, through a series of acid-based chemical reactions, increases the level of soluble aluminum in soils.� This aluminum is subsequently absorbed through the growing roots of plants.� Once inside, the reactions reverse themselves and cause a myriad of harmful effects, which ultimately result in a dangerous slowdown of the affected plant�s metabolism.� Rendered unable to react immediately to decreases in temperature by closing its guard cells, the plant is likely to die when such conditions are encountered.   Hypothesis Acid deposition results in a dangerous slowing of plant metabolism stemming from aluminum toxicity that can be remedied with buffers.    **Prediction**  ���������� We predict that if a group of plants potted in perlite is treated with simulated acid rain, then it will survive at a rate significantly lower than both a control group watered with neutral water and a third group watered with simulated acid rain and then treated with a buffering solution, when they are subjected to freezing temperatures. |  |
| **�����������������������������**  **�������������������������������������������** [**Home**](http://docs.google.com/Title.html) **|** [**Abstract**](http://docs.google.com/Abstract.html) **|** [**Acknowledgements**](http://docs.google.com/Acks.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) **|** [**Statistics**](http://docs.google.com/Stats.html) **|** [**Charts**](http://docs.google.com/Charts.html) **|** [**Conclusions**](http://docs.google.com/Conclusions.html)  **�������������������������������������������** [**Pictures**](http://docs.google.com/Pictures.html) **|** [**Journal**](http://docs.google.com/Journal.html) **|** [**Works Cited**](http://docs.google.com/Works.html) **|** [**Recommendations**](http://docs.google.com/Recommendations.html) | | |
|  |  |  |

|  |
| --- |
| ������������������������������������������������� ���������������������Copyright � 2001 Chris Grigsby, Amador Valley High School |