

## Illinois Wesleyan University Digital Commons @ IWU

John Wesley Powell Student Research Conference

2004, 15th Annual JWP Conference

Apr 17th, 9:00 AM - 10:30 AM

### Effect of Paclobutrazol, a Gibberellin Biosynthesis Inhibitor, on Dark-Grown Protonema of *Ceratodon Purpureus*

Katie Polak
Illinois Wesleyan University
Loni Walker, Faculty Advisor
Illinois Wesleyan University

Follow this and additional works at: http://digitalcommons.iwu.edu/jwprc

Katie Polak and Loni Walker, Faculty Advisor, "Effect of Paclobutrazol, a Gibberellin Biosynthesis Inhibitor, on Dark-Grown Protonema of *Ceratodon Purpureus*" (April 17, 2004). *John Wesley Powell Student Research Conference*. Paper 23. http://digitalcommons.iwu.edu/jwprc/2004/posters/23

This Event is brought to you for free and open access by The Ames Library, the Andrew W. Mellon Center for Curricular and Faculty Development, the Office of the Provost and the Office of the President. It has been accepted for inclusion in Digital Commons @ IWU by the faculty at Illinois Wesleyan University. For more information, please contact digitalcommons@iwu.edu. ©Copyright is owned by the author of this document.

#### THE JOHN WESLEY POWELL STUDENT RESEARCH CONFERENCE - APRIL 2004

#### Poster Presentation P41

# EFFECT OF PACLOBUTRAZOL, A GIBBERELLIN BIOSYNTHESIS INHIBITOR, ON DARK-GROWN PROTONEMA OF CERATODON PURPUREUS.

<u>Katie Polak and</u> Loni Walker \* Department of Biology, Illinois Wesleyan University

Plants utilize chemical messages called plant hormones to regulate growth and development. One of these plant hormones, gibberellin, mediates a number of developmental processes in flowering plants, including seed germination, flowering, and stem elongation. While there is a wealth of information about GAs in flowering plants, there are only a few references in the literature concerning GA's in mosses, a non-flowering plant.

Preliminary research by former IWU student (Justin Paprick) suggested that the exogenous application of a GA biosynthesis inhibitor resulted in a decreased growth response in the moss *Ceratodon purpureus*. This decrease in growth suggests that endogenous gibberellins are important for growth in *C. purpureus*. To further investigate the role of gibberellins in *C. purpureus*, a GA biosynthesis inhibitor was applied to darkgrown protonema (a juvenile form in moss) and the growth response was analyzed. The results of this analysis will be presented.