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Priority: Normal
Subject: DOE project Final Report
DOE Final Report

Signal Transduction in Plant Development: Chemical and
Biochemical
Approaches to Receptor Identification David G. Lynn, Department
of
Chemistry

Work on the phenolic signals in Striga has provided evidence
that the
compounds are detected via a chemical reaction, quite distinct
from our
current models of hormone/growth factor detection by membrane
localized
binding proteins. Evidence has been obtained that the
recognition mechanism
is a redox reaction most likely controlled by plasma membrane
localized
oxidoreductases. While the existence of these redox systems
have been
demonstrated in both plants and animals, only recently has
convincing
evidence connecting e- transport with plant development
emerged. These
discoveries have profound consequences for both the control of
plant cell
growth as well as strategies for general growth control.

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We have no objection from a patent
standpoint to the publication or
dissemination of this material.

Mark P. Dvorscak 7-17-00
Office of Intellectual
Property Counsel
DOE Field Office, Chicago
Date

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