

10KC-2008-08

Engineering Lipids in Vegetative Tissues of Plants

This invention relates to altering the lipid composition of a plant and vegetative production of lipids in particular, by affecting the expression of certain plant genes, such as a At4g24160 gene of Arabidopsis or plant homologs thereof. This specifically includes, but is not limited to, plants such as corn, sugarcane, sorghum, millet, rice, wheat, barley, soybean, Glycine sp., grape, canola, Arabidopsis, Brassica sp., cotton, tobacco, bamboo, sugar beet, sunflower, willow, switchgrass (*Panicum virgatum*), giant reed (*Arundo donax*), reed canarygrass (*Phalaris arundinacea*), Miscanthus x giganteus, Miscanthus sp., Sericea lespedeza (*Lespedeza cuneata*), ryegrass (*Lolium multiflorum*, *lolium sp.*), timothy, kochia (*Kochia scoparia*), forage soybeans, alfalfa, clover, turf grass, sunn hemp, kenaf, bahiagrass, bermudagrass, dallisgrass, pangolagrass, big bluestem, indiangrass, fescue (*Festuca sp.*) including tall fescue, *Dactylis sp.*, *Brachypodium distachyon*, smooth brome grass, orchardgrass, kentucky bluegrass, yellow nutsedge, pine, poplar (*Populus sp.*), and eucalyptus, among others. The invention thus provides methods for controlling levels of lipids in plants.

For Additional Information, Please Contact:

The University of North Texas  
Office of the Vice President for Research  
and Economic Development  
3940 North Elm, A160  
Denton, TX 76207  
Fax: 940-565-2944  
Email: [richard.croley@unt.edu](mailto:richard.croley@unt.edu)