

ABSTRACT

PROPAGATION OF ASIMINA TRILOBA (L.) DUNAL: A NATIVE AMERICAN FRUIT AND POTENTIAL NEW CROP FOR TEMPERATE REGIONS

The North American pawpaw is the largest edible fruit native to the United States. The pawpaw is virtually unknown and has yet to be grown on a large commercial basis, despite its value as a food crop and source of medicine and insecticide. Successful commercialization of this species requires development of effective propagation systems that will allow for mass propagation. Gibberellic acid was observed to have a positive effect on germination rates of pawpaw seeds in place of stratification. Tissue culture of pawpaw using media supplemented with varying concentrations of five cytokinins showed differences in shoot production. Rooting was not successful in vitro regardless of auxin or concentration. Somatic embryogenesis showed promise in the callusing stage with the use of two auxins, 2,4-D and NAA.

Greg Jacob Drier
May 2006