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An environmentally acceptable method for assaying the inhibition of α -amylase induction

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Abstract:

A facile α -amylase induction inhibition assay method was investigated. Induced α -amylase was determined using a microplate filled with a gel containing rice starch and Gellan gum. Embryo-less barley seeds were incubated with GA₃ (10^{-7} M) and appropriate ABA. Diluted incubation fluid was dispensed to the wells and the change of absorbance was measured. Induced α -amylase was calculated from the change of the absorbance. The results were almost equal to those of the Somogyi–Nelson method. As noxious wastewater containing heavy metal ions does not occur in this experiment, this method can be an environmentally acceptable assay method for ABA analogs.

Keywords:

α -amylase quantification, gibberellic acid, abscisic acid, α -amylase induction inhibition assay

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