EFFECT OF ABA AND GA₃ DURING GERMINATION OF ANGICO VERMELHO [Anadenanthera peregrina (Benth.) Speg.] EMBRYOS¹

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The objective of this work was to investigate the effects of ABA and GA_3 on the protein profile of germinating embryos of Angico vermelho, a Brazilian leguminous wood tree which shows non-dormant seeds. Mature embryos were excised from seeds soaked in dH_2O for 5 hours and germinated in darkness using a 3% sucrose solution supplemented with 0, 10^{-5} or 10^{-4} M of ABA and/or 10^{-6} M of GA_3 , during 0, 6, 12, 18, 24 and 30 h. Our results indicated degradation of a protein, as evaluated by SDS-PAGE, with molecular weight of approximately 17 kD, at 6 hours incubation. Degradation of this protein was blocked by ABA and/or GA_3 and this effect gradually decreased up to 30 h. No presence of the 17 kD protein was observed in control-embryos which were germinated for 6 h and transferred to ABA and/or GA_3 medium for 12, 18 or 24 h. These preliminary results indicate that ABA and/or GA_3 do not induce the synthesis of this 17 kD protein, but block its degradation, possibly by inhibiting the action of a specific protease.

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