

Title Influence of processing on the generation of gamma-aminobutyric acid in green coffee beans

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Abstract

A determination of the concentrations of free amino acids in differently processed green coffees indicated the nonprotein amino acid γ -aminobutyric acid (GABA), a well-known plant stress metabolite, to be present in raw coffee beans (*Coffea arabica* L.) in significantly varying amounts. The GABA content of unwashed Arabica beans (green coffee produced by the dry processing method) was always markedly higher than that of washed Arabicas (wet processing method) as well as that of untreated seeds. This result underlined the assumption that during postharvest treatment a significant metabolism occurs within coffee seeds. A putative relation between drought stress of the coffee seeds and postharvest treatment methods is discussed. The GABA content of green coffee beans may serve as a potent tool to characterize the type of postharvest treatment applied in coffee processing.