

Title Changes in concentrations of dopamine in banana after short-term nitrogen gas treatment

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Abstract

We investigated the effects of nitrogen gas on the dopamine of surface peel banana 'Sucrier'. Mature green bananas were ripened until stage 3 (peel more green than yellow) and then were treated with 99.9% N₂ for 24 h. Short-term nitrogen gas treatment delayed the induction of senescent spotting and the concentration of dopamine was decreased rapidly compared with control banana. The dopamine content did not differ after 500 ppm ethephon following short-term nitrogen gas treatment. The result shows that shelf life was further increased by short-term nitrogen gas treatment together with lower content of dopamine.