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Erratum

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Induced expression of the class II chitinase gene during cold acclimation and dehydration of bermudagrass (*Cynodon* sp.)

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Due to an unfortunate oversight, J.A. Anderson's name was omitted from the list of authors at the top of the article. M.P. Anderson's name was omitted from the address section. The article header is given below.

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Abstract Bermudagrass cultivars vary greatly in their ability to survive freezing temperatures as a result of a differential ability to cold acclimate (CA) at temperatures slightly above 0°C. Little information exists on the genetic and physiological mechanisms associated with the cold acclimation process in bermudagrass. Experiments were conducted to study the changes in chitinase gene expression during cold acclimation of freeze-tolerant bermudagrass cultivars. A chitinase gene (*CynCHT1*) was isolated from 'Midiron' bermudagrass. Because the hydrophilic protein putatively encoded by the gene lacked an N-terminal cysteine-rich domain and a hydrophobic C-terminal extension, it was classified a class II chitinase. The expression patterns of this and related chitinase genes in response to CA, drought, and ABA were investigated in freeze-tolerant 'MSU' (LT_{50}=−11°C), Midiron (LT_{50}=−10°C) and 'Uganda' (LT_{50}=−8°C) bermudagrasses. Northern-blot analysis indicated expression in the crown tissues induced by CA at 8°C/2°C day/night temperature cycles. Induction of gene expression was evident in tissues sampled at 2 and 28 days after initiating CA. Expression after 2-days de-acclimation at 28°C/24°C was similar to control levels. Significantly higher levels of CA-induced chitinase gene expression were observed in MSU and Midiron, compared to Uganda. Similar expression patterns were observed among the cultivars in responses to drought and ABA. These results suggest that chitinases have important roles in bermudagrass response to low temperature and dehydration stresses.

Keywords Bermudagrass (*Cynodon* sp.), Class II chitinase – Cold acclimation, Freeze tolerance, Gene expression

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