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**105. © Observations on root disease of container whitebark pine seedlings treated with biological controls.** Dumroese, R. K. Native Plants Journal 9(2):92-97. 2008.

*Observations on*  
Root Disease of  
Container  
Whitebark  
Pine Seedlings  
*treated with*  
Biological  
Controls

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ABSTRACT

I observed that whitebark pine (*Pinus albicaulis* Engelm. [Pinaceae]) germinants treated with biological controls, one commercially available (*Trichoderma harzianum* strain T-22), and the other being studied for potential efficacy (*Fusarium oxysporum* isolate Q12), experienced less seedling mortality caused by root disease than did a non-treated control. Seedlings treated with the biological controls and non-symptomatic seedlings in the control treatment had similar morphology. The simple use of biological controls may be useful to nursery managers looking to reduce incidence of root disease in their container crops.

Dumroese RK, 2008. Observations on root disease of container whitebark pine seedlings treated with biological controls. *Native Plants Journal* 9(2):92-97.

KEY WORDS

*Pinus albicaulis*, whitebark pine, *Fusarium oxysporum*, *Trichoderma harzianum*, *Cylindrocarpon*

NOMENCLATURE

USDA NRCS (2008)