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Nitrogen fixation in Boreal feather moss communities

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(Abstract)

Nitrogen (N) is a primary limiting nutrient in boreal forests. N fixation by cyanobacteria associated with feather mosses is a major source of N input to these forests. However, we have limited knowledge about the abiotic and biotic controls of N-fixation of feather mosses. Our work have shown that the levels of available nutrients, competing vegetation, moisture availability and cyanobacteria composition and diversity serve as important determinants of N-fixation levels. The ecosystem input of N from cyanobacteria associated with feather mosses is important for understanding future responses of carbon sequestration.