N applied in the late winter and 8 to 55% of the fertilizer N applied in the summer. In all the treatments, between 40 and 80% of the applied fertilizer N was still in the forest floor or the mineral soil one growing season after fertilization. This residual N may continue to be available for uptake by the crop trees in subsequent years.

Summary
The preliminary results from this research indicate that volatilization losses following N fertilization were less when EENFs were applied compared to urea. Differences in ecosystem N recovery and tree uptake were more variable. Between 20 and 40% of the applied fertilizer N was taken up by the crop trees during the first growing season. Overall, the majority of the applied N remained in the forest floor and the mineral soil. Total ecosystem recovery of applied N ranged from about 58 to almost 100%, with generally greater recovery following summer N applications compared to late winter applications.

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References

IPNI Science Award – Nominations Are Due September 30, 2014

Each year, the International Plant Nutrition Institute (IPNI) offers its IPNI Science Award to recognize and promote distinguished contributions by scientists. The Award is intended to recognize outstanding achievements in research, extension or education; with focus on efficient management of plant nutrients and their positive interaction in fully integrated crop production that enhances yield potential. Such systems improve net returns, lower unit costs of production, and maintain or improve environmental quality.

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