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Rice Uptake and Recovery of Nitrogen with Different Methods of Applying ^{15}N -Labeled Chicken Manure and Ammonium Sulfate

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Abstract: The effects of different methods of fertilization on rice uptake and recovery of nitrogen were studied using ^{15}N -labelled chicken manure (CM) and ammonium sulfate (AS). The results showed that the application method of totally basal dressing of organic and inorganic fertilizers can increase the N uptake by rice from the fertilizers. The N uptake from CM was obviously higher than that from AS. The N partitioning to rice grain was also higher than other application methods. The effect on increasing yield was obviously higher than the method of application of chemical fertilizers only. This method had such benefits as increasing N use efficiency, increasing N residue in soil and reducing N loss. High rice yield can be obtained while the soil fertility can be maintained with this method. So it is an effective and practical method of fertilization technique thus can be recommended to rice growers.

Keywords: [Ammonium sulfate](#), [Chicken manure](#), [Method of fertilizer application](#), [\$^{15}\text{N}\$ -labeled](#), [Nitrogen recovery](#), [Rice](#)

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