

Nitrogen Contents in Soil, Grains, and Straw of Hybrid Rice Differ When Applied with Different Organic Nitrogen Sources

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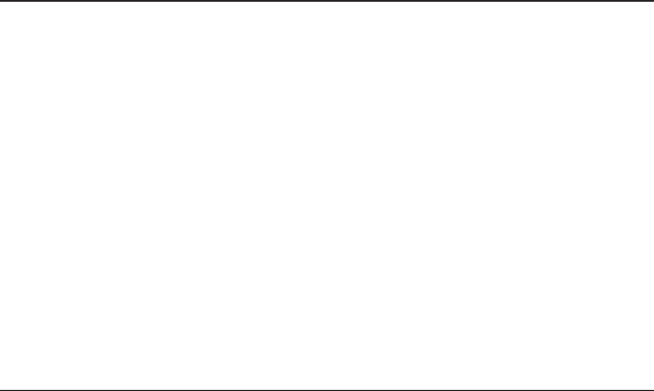
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Abstract:

In the rice–wheat (R–W) system, inorganic nitrogen (N fertilizer (urea, etc.) is the largest component of the cycle, because the supply of N from organic fertilizers LQ V X I I L F L H Q W % X W W K H ; Q L organic matter and stimulate carbon sequestration in so using best agronomic practices (sustainable management practices) which are economically, environmentally, and socially friendly. This research project was, therefore, designed to assess the impact of various organic sources (OS, animal manure versus plant residues), inorganic N (urea), and their different combinations on the N concentrations in soils and plants (i.e., grains and straw) of hybrid rice plants. The experiments were conducted R Q I D U P H U V I L H O G V L Q % D W N K H O D ± 3 D N L V W D Q R Y H U \ H D U V < 7 K H U H V X O W V U H Y H D O H G W K D W U P P R Q F H Q W U D W L R Q V L Q V R L O D Q G S O D Q W V L Q < 7 K H U H T X L U H G W R W D O 1 N J 1 K D D S S O L F D W L R Q L Q W K H I R U P R I 1 I U R P X U H D

can produce good performances in terms of higher N concentrations in soil as well as in rice plants under the R–W system. Integrated use of urea (N fertilizer) with organic carbon sources (animal manures and crop residue) could sustain rice-based (exhaustive) cropping system.

Application of N in the form of poultry manure was superior in terms of higher N concentrations in both soil and plants. Applying the required N from OS produced higher N concentrations in soil and



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lined application of N sources in the form of urea + OS
can produce good performances in terms of higher N con-
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system. Integrated use of urea (N fertilizer) with organic
carbon sources (animal manures and crop residue) could
sustain rice-based (exhaustive) cropping system.

Biography:

Amanullah is currently associated with Nanjing Agricultural University, China

Recent Publications:

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