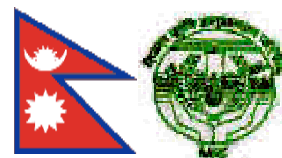


Optimize Nitrogen Application with a simple tool (Leaf color chart)



Nitrogen requirement for rice plant is not the same throughout the growth period. Application of Nitrogen(N) not synchronizing with the demand of the plant often leads to increase N losses. The optimum use of N comes from matching supply with crop demand. Thus application of nitrogen as per demand of the rice plant is called 'crop need based N management.

What is a leaf color chart?

Simple leaf color chart (LCC) is a simple tool which is a proxy for leaf N is used as an indicator of leaf color. LCC has 6 different color shades from light yellowish green (which is number 1 on the chart) to dark green (which is number 6). Reading is taken from 2 weeks after transplanting to initiation of flowering. Leaf color is measured comparing leaf color with the color shades of LCC.



How to measure leaf color?

- Take reading in the morning (8-10AM) or in the afternoon (2-4PM) preferably by the same person from randomly selected fully expanded new leaves.
- Under the shade, measure the color of each leaf by holding the LCC and placing the middle part of the leaf on the top of the color stripe for comparison.
- If the color of the leaf falls between the two shades, then take mean of the two values.
- Take reading at an interval of 7-10 days string from 2 weeks after transplanting up to start of flowering.
- Generally critical value for semi dwarf high yielding varieties is 4.0. If the average value fall below 4.0, top dress N fertilizer (20-30 kg/ha) to correct N deficiency.
- Alternately, if more than five leaves show reading below the set critical value, top dress N fertilizer to correct N deficiency.



For more information

Visit the Nepalese Rice Knowledge Bank at www.knowledgebank.irri.org/regional_Sites/Nepal/default.htm

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