Leaf Color Chart

Nitrogen (N) fertilizer is important in rice production. Apply N fertilizer several times during the growing season to ensure that the crop's nitrogen need is supplied, particularly at critical growth stages.

The Leaf Color Chart (LCC) is used to determine the N fertilizer needs of rice crops. LCC has four green strips, with color ranging from yellow green to dark green. It determines the greenness of the rice leaf, which indicates its N content.

How to use the Leaf Color Chart

STEP 1 Select plants for testing

Randomly select at least 10 disease-free rice plants or hills in a field, where plant population is uniform.

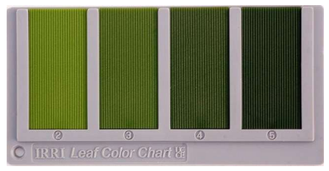
STEP 2 Match the leaf to the chart

Select the topmost, youngest, fully expanded leaf from each hill or plant. This part best reflects the N status of the plants.

Place the middle part of the leaf on the LCC and compare its color with the color panels. Do not detach or destroy the leaf.

STEP 3 Measure the leaf color

Measure the leaf color under the shade of your body. Direct sunlight affects leaf color readings.



If possible, the same person should read the LCC at the same time of the day, every time.

If the color of a rice leaf is in between two shades, take the average of the two values as the reading. For example, if the color is in between 3 and 4, the reading should be 3.5.

STEP 4 Determine the average LCC

Take the reading of the 10 leaves, and determine the average. If the color is more or less than 3, N fertilizer top dressing is needed.

Use the LCC once every 7−10 days starting from the beginning of tillering (14 DAT). Continue this process up to 5−10 days after panicle initiation.