

Effect of calcium silicate and need based nitrogen on pests management in aerobic rice (*Oryza sativa* L.)

■ B.H. KUMARA*, N.D. YOGENDRA¹, N.B. PRAKASH² AND AMARENDRA KUMAR³

International Rice Research Institute, NASC Complex, Pusa, NEW DELHI (INDIA)

¹Department of Soil Science and Agricultural Chemistry, University of Agricultural and Horticultural Sciences, SHIVAMOGA (KARNATAKA) INDIA

²Department of Soil Science and Agricultural Chemistry, University of Agricultural Science, BENGALURU (KARNATAKA) INDIA

³Department of Plant Pathology, Bihar Agricultural University, Sabour, BHAGALPUR (BIHAR) INDIA

ARTICLE INFO

Received : 25.01.2015

Revised : 14.02.2016

Accepted : 28.02.2016

KEY WORDS :

Silicon, Pests, Nitrogen, LCC (Leaf Colour Chart), Aerobic rice

ABSTRACT

The dynamic and severity of pests attack has shifted with the adaptation and spread in rice. Excessive use of chemicals for pest and diseases control in agriculture is known to degrade the environment. Use of silicon (Si) and nitrogen (N) management in aerobic rice involves a proper choice and blend of compatible tactics to keep the pests at low level. The present investigations were done to know the effect of calcium silicate and nitrogen on the pest infestation in aerobic rice. The results revealed a significant decreases of pests *i.e.* Leaf folder (*Cnophalocrosis medinalis*), Brown plant hopper (*Nilaparvata lugens*), White backed plant hopper (*Sogatella turcifera*), Green leaf hopper (*Nephotettix virescens*) with the application of calcium silicate at 2 t ha⁻¹ and 90 kg N ha⁻¹ (30 kg N ha⁻¹ as basal + LCC-3) and par with 60 kg N ha⁻¹ (No basal + LCC-3). This study suggested the importance of Si and LCC based N application for achieving to keep the pests population and higher grain yield and straw yield.

How to view point the article : Kumara, B.H., Yogendra, N.D., Prakash, N.B. and Kumar, Amarendra (2016). Effect of calcium silicate and need based nitrogen on pests management in aerobic rice (*Oryza sativa* L.). *Internat. J. Plant Protec.*, **9**(1): 133-136.

*Corresponding author:

Email: kumara.kummi@rediffmail.com