## PERFORMANCE OF NERICA RICE VARIETY IN AUS SEASON UNDER INTEGRATED NUTRIENT MANAGEMENT SYSTEM

Jharna Rani Sarker<sup>1</sup>

## **Extended Summary**

A field experiment was conducted to assess the effect of integrated nutrient management on the growth and yield of NERICA 10 at the research farm of Sher-e-Bangla Agricultural University, Dhaka-1207. There were 11 treatments. The maximum grain yield of NERICA 10 produced significantly due to the application of 100 kg N from urea along with 20 kg N/ha from vermicompost. But the effect of vermicompost along with nitrogenous fertilizer was the most prominent than that of cowdung or only nitrogenous fertilizer. The maximum panicle length, number of effective tillers, number of filled grain per panicle, 1000 grain weight were observed due to the application of 100 kg N from urea along with 20 kg N/ha from vermicompost + recommended P,K,S,Zn. Similar effects were also observed on N, P, K content of NERICA 10. In post harvest soils, the contents of total nitrogen, available phosphorus, available sulphur, available zinc and exchangeable potassium were increased due to application of cowdung and vermicompost compared to initial soil. The overall results indicate that 100 kg N from urea along with 20 kg N/ha as the source of vermicompost was the best treatment in producing higher rice yield with sustenance of soil fertility.



Assistant Professor, Dept. of Soil Science, Sher-e-Bangla Agricultural University, Dhaka