EFFECT OF SOWING METHOD ON THE PRODUCTIVITY OF RICE IN MAKURDI, SOUTHERN GUINEA SAVANNA ECOLOGY OF NIGERIA

T. Vange[1], G.O.S. Ojo[2] & S. Ayuba[1]
1. Department of Plant Breeding and Seed Science
2. Department of Crop Production
Federal University of Agriculture, Makurdi, **NIGERIA**

ABSTRACT

Experiments aimed at determining the effect of sowing method on the productivity of rice were conducted at the College of Agronomy Teaching and Research Farm of the Federal University of Agriculture, Makurdi during the rain fed cropping seasons of 2011 and 2012. The sowing methods (transplanting and direct seeding) constituted the main plots while seven varieties (four elite hybrids and three adapted varieties) constituted the sub-plots in a split-plot laid out in a randomised complete block design with three replications. Results showed that the direct seeded rice were generally shorter, earlier and with more tillers per stand compared to the transplanted rice. However, the significantly longer days to heading, and consequently longer days to maturity in the transplanted rice, gave more time for the transplanted rice to produce heavier panicles, higher number of panicle branches and seeds/panicle, thereby leading to better grain filling and higher grain yield compared to the direct seeded rice. Three hybrid varieties, namely, PAC 837, INDAM 200-002 and JKR1220 and one adapted variety (FARO 44) recorded the highest grain yield of 9.49t/ha, 7.46t/ha, 7.46t/ha and 7.80t/ha, respectively. These four varieties should be selected for multi – location evaluation using transplanting method of sowing in the Southern Guinea Savanna ecology of Nigeria.