

GYP SUM APPLICATION ON THE SOIL SURFACE AS AFFECTING UPLAND RICE DEVELOPMENT UNDER NO-TILLAGE SYSTEM

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Key words: *Oryza sativa* L., Mineral nutrition, plant population.

The use of gypsum in the no-tillage system (NTS) may be a viable alternative for the cultivation of upland rice, once it provides the carrying of nutrients to the deeper layers and stimulates root growth. The objective of the study was to determine the effect of the application of gypsum on the soil surface without tillage on plant height and lodging, yield components, yield and grain quality of upland rice. The study was conducted during three growing seasons under field conditions in Selvíria, MS. The experimental design was a randomized complete block design in 4 x 2 factorial design with five replication. The treatments consisted of doses of gypsum (0, 1000, 2000 and 3000 kg ha⁻¹) with the growing season (2010/11, 2011/12 and 2012/13). The gypsum application does not affect plant height, lodging, yield components, grain yield and grain quality of upland rice in NTS when sown in soil with low aluminum saturation and high levels of calcium in the layer 20-40 cm.

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