

EFFECT OF NITROGEN FERTILIZER AND DATES OF SOWING ON SOME RICE CULTIVARS

II- CHEMICAL AND TECHNOLOGICAL PROPERTIES

Salwau*, M.I.; El-Kady, A.A.; El-Khatib***, M.K. and Abo
Khalifa*, A.A.B.**

* Agron Dept. Fac. Agric. Moshtohor Zagazig Univ. Egypt.

** Rice Res. Sec. Field Crop Res. Instit, A.R.C., Sakha, Kafr El-Sheikh.

*** Soil and Water Res. Instit., A.R.C. Egypt.

ABSTRACT

This investigation was carried out at the Rice Research and Training Center, Sakha, Kafr - El-Sheikh Egypt during 1993 and 1994 season to study the effect of N levels and sowing dates on chemical and technological properties of some rice cultivars. The results obtained were as follows :

- Early sowing gave the highest significant effect on N-uptake in grain and maximum protein yield /ha, whereas sowing rice at medium date produced the maximum percentages of hulling, milling and head rice. On the other hand, N-uptake in straw, crude protein and amylose content were significantly increased by delaying sowing dates up to June, 15th.
- N-uptake in grain and in straw, protein %, protein yield /ha and head rice percentage were significantly increased by increasing N levels up to 144 Kg N/ha, whereas milling rice, amylose content and gel consistency were not significantly affected.
- Giza 176 cultivar surpassed significantly the other tested cultivars in N-uptake in grain and protein yield/ha. Giza 177 cultivar gave the highest protein %, hulling %, milling % and head rice percentage, whereas no significant differences were obtained among rice cultivars in amylose content and gel consistency.