

Effects of irrigation on the fertilization and usage of fertilizer in later stage of corn growth in paddy

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SUMMARY

The experiment is conducted to study the effects of irrigation on the fertilization and the application of fertilizer in later stage on corn yield. The experiment was carried out at silty clay loam soil in Taitung D.A.I.S. from 1985 to 1986. The field layout was S.B.D.A. with three main plots of irrigation: before fertilization, after fertilization or fertilizing without irrigation. Three sub plots of fertilization were as follows: before tasselling, after 20% tasselling or at 80% tasseling.

Our results showed that irrigation either before or after fertilization increased corn yield 10 to 27% when compared to non-irrigated control. Among three sub plots, treatments of fertilizer applied before tasselling produced best yield. A 3-7% increase in yield was found when comparison fertilizing after tasselling.

The effects of treatments on plant height, stalk diameter and ear weight showed similar results as yield.

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