

Improvement of soil productivity for low-yielding paddy field in I-Lan area¹

Yih-Shyong Chuang²

summary

Amendment of soil with silicate slag, rice husk, lime and calcium cyanamide was applied to improve the productivity of low-yielding paddy field of I-Lan area. Taiwan 9 cultivar was grown from the second crop of 1988 to the first crop of 1990 in I-Lan for the experiment, and dry matter accumulation, harvest index, the components of yield were determined. Results indicated that agronomic characters were greatly improved by soil amendments than control. The yields treated with silicate slag, rice husk, lime and calcium cyanamide were higher by 14.2%, 11.9%, 9.9%, 7.1%, than control, respectively and silicate slag was the best among them.

(Key words: Low-yielding, Paddy field, Soil productivity)

¹. Research article No.61 of Hualien District Agricultural Improvement station. This experiment was supported by Council of Agriculture(Project number 78-AE-7.1-F-03)5, 79-AE-7.1-F-08(17)).

². Assistant agronomist, Lan-Yang Branch station, Hualien DAIS.