## Improvement and Demonstration of Rice Transplanter with Deep-Layer Fertilization.

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## **Abstract**

The rice transplanter with deep-layer fertilization , which has been tested and improved continuously , is ready for commercial production. The technology of this machine had been transfered to Yuh-Nong Farm Machinery Company in Taichung. The machine has been demonstrated in the Kao-Ping (  $\operatorname{Hsin-Yung}$ , Wan-Tan, Mei-Nong, Ah-Lien) and Chianan area (Lu-Jaso, Pu-Jzu), since the first crop in 1992. The total area of field demonstration within two years is 596.51 ha. In the demonstrated area, the machine can save netrogen fertilzer up to 30%, reduce the fertilizer operation labor 2 to 3 times and increase  $5.2 \sim 12.2\%$  of rice yield. It is proved that the implement of the machine can solve the labor problem, reduce the production cost of rice and raise the income of rice farmer about \$10,000 NT/ha. Therefore, the rice transplanter with deep-layer fertilization is worth while to be released to rice farmers.

Key words: rice. transplanter. fertilization.

<sup>1.</sup> Financial supports from Council of Agriculture, Executive Yuan, Taipei, Taiwan, ROC, are appreciated.

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