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[\[Full-text PDF \(961K\) \]](#) [[References](#)]**Effect of Transplanting Time on Growth of Rice Cultivar "Kinuhikari" in Kagawa Prefecture : Meteorological factors effecting grain yield and palatability of rice**

Kazuyoshi UEDA, Akihito KUSUTANI, Koh-ichiro ASANUMA and Masahito ICHII

- 1) Kagawa Univ.
- 2) Kagawa Univ.
- 3) Kagawa Univ.
- 4) Kagawa Univ.

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Abstract:

The influence of different transplanting times on the grain yield and palatability of rice were analyzed by meteorological factors. The prediction of optimum transplanting time for both grain yield and palatability were also investigated. The grain yield showed a significant positive correlation with the number of grains per m². The number of grains per m² showed a significant negative correlation with the mean daily temperature before heading time. The relation between the grain yield (Y) and 3 meteorological factors (i.e., the mean daily temperature of period from transplanting time to heading time (T₁), the mean daily temperature (T₂) and the mean daily solar radiation (S₁) of ripening period) was expressed as a following formula: $Y = [-0.483(T_2 - 22.936)^2 + 74.838] S_1 - 1.329T_1 \cdot S_1$. The estimated grain yield calculated from this formula was close to the real grain yield. Amylose content and protein content had significant negative correlations with the mean daily temperature of the ripening period. From these results, we estimated that the optimum transplanting time for both grain yield and palatability was in early May.

Keywords:

Amylose content, Grain yield, Kinuhikari, Meteorological factors, Optimum transplanting time, Palatability, Protein content, Rice

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