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The Effect of Crop Desiccation Treated on Italian Ryegrass (*Lolium multiflorum* L.) on Succeeding Crop-forage Rice

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[Introduction]

In Korea, Italian Ryegrass is widely used as a forage, but it is difficult to harvest seeds due to the rainy season. To solve this problem, research is being conducted to accelerate the harvest by treating the crop desiccant prior to harvesting Italian ryegrass seeds. Also research should be made on how these treatments affects succeeding crops.

[Materials and Methods]

In this study, preliminary candidate crop desiccants which are Glufosinate-P, Glufosinate-Ammonium, and Glyphosate-IPA + Tiafenacil were treated one week prior to harvesting Italian Ryegrass seeds, and rice was cultivated on the same land as succeeding crop for verification of residual toxicity of drying agents compare the residual and rice growth characteristics.

[Results and Discussion]

Rice was not affected by crop drying agent treatment, and in the residual toxicity analysis, both rice straw and rice seed were detected at less than 0.01mg / kg, showing no significant difference from the control. Differences in rice height, ear length, and number of ear did not show statistically significant differences with the control. Statistical differences were not recognized in dry matter yields, and those drying agents treatment did not seem to have a significant effect on the yield of rice after harvesting of Italian Ryegrass.

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Keywords: pesticide residue, crop desiccation, Italian Ryegrass, forage rice

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