High Production of Whole Crop Silage (WCS) of Barley in the Paddy Field in Korea

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Two field experiments were conducted from 2005 to 2007 to determine the rates of seeding and nitrogen application for high production of winter cereals used for whole crop silage (WCS) of barley. This study was done on silt loam soil in southwestern Korea, which is the largest paddy field area in the country. In the first experiment, one rate of N application (140 kg N/ha) was used for all crops but with different seeding rates of 170, 200, and 240 kg/ha for barley, respectively. The highest dry matter yield obtained was 11.2 Mg/ha for barley. In the second experiment, the seeding rates were 170 kg/ha and N application rates were 140 kg N/ha which was diagnosis of soil and added 30 %. The highest dry matter yield in this experiment was 10.6 Mg/ha for barley. Results from this study indicate that high production of WCS using winter cereals in paddy field can be obtained with seeding rates of 200240 kg/ha, and N application rates of about 140 kg/ha.

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