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Productivity of Rice Variety Jomyeong when Cultivation After Barley in Jeollanam-do

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[Introduction]

As the area under cultivation of barley after rice occupies 80.3% (51.8 thousand ha) in the Honam region compared to the national (64.5 thousand ha), it is necessary to develop techniques for stable production of double cropping rice using early-ripening varieties of the Southern region. Therefore, we tried to find out the optimal transplanting period and the application period of topdressing when cultivation rice variety Jomeyong after barley.

[Materials and methods]

This study was conducted from 2021 to 2022 in the rice paddies of the Crop research Division of the Jeonnam Agricultural Research & Extension Services. Prior to rice cultivation, barley variety Hopum was cultivated and then applied as organic matter. After barley cultivation early-ripening rice varieties Jomyeong was transplanted on June 20th, June 30th, July 10th at intervals of 10 days. At each transplanting day, topdressing is divided into 25 days, 20 days, 15days before heading date.

[Results and discussion]

As a result of the test in 2021, The average ripening period temperature was 23.8°C transplanting on June 20th, 23.4°C on June 30th, and 23.1°C on July 10th there was no significant difference but in 2022, 24.9°C on June 20th, 23.5°C on June 30th, and 22.6°C on July 10th, The later the transplant period was, the lower the temperature of the ripening period So in 2021, transplanted rice yields on June 20th, June 30th and July 10 were 575kg/10a, 612kg/10a, 587kg/10a respectively, which were no significantly difference. in 2022, transplanted rice yields on June 30th and July 10 were 520kg/10a and 551kg/10a, respectively, which were significantly lower than the rice yields of 592kg/10a on June 20th. The Vegetative growth average period was 25days Transplanting on June 20th, 2 days longer than on June 30th and 4 days longer than on July 10th. Rice protein content was average of 7.0% in transplanting on June 20th, 7.4% on June 30th, and 7.7% on July 10th, respectively. At each transplanting day, topdressing application period is not significantly difference in yields and rice quality. As a result that transplanting on June 20th would be appropriate for rice yields and rice quality when double cropping rice after barley.

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