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Comparison of Growth Characteristics and General Component Content of Corn According to the Sowing Date in the Central Region of Korea

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[Abstract]
The yield characteristics of corn for feed by sowing period and the crude protein, crude fat, and coarse flour contents of grain in the harvesting period were compared. The varieties are Kwangpyeongok(KPO), Dapyeongok(DPO) and Pyeonggangok(PGO), and cultivation was tested by the National Food Engineering Department and the Central Crop Department. It was sown at a planting distance of 70x25cm on April 15, June 14, and July 15, 2021, and the amount of fertilizer was applied through soil inspection. For the growth characteristics, plant height, biomass and grain weight were investigated after 50 days of sowing, and general components were analyzed by drying and pulverizing each seed.
Compared to the results of sowing in April, which is the right time to sow corn, all three varieties sown on June 14 showed an increase in biomass. In the case of sowing on July 15, the fresh weight of KPO and DPO decreased, and the grain weight of KPO and PGO decreased by 10-20% compared to the sowing in April. There was no significant difference in the crude protein content of grain according to the sowing seasons in April and June, but decreased in the corn sown in July. The crude fat content was highest in KPO sown on June 14 and DPO sown on July 15.
Combining the yield and general composition results, it is thought that the cultivation of corn for feed in Suwon in the central part can be sown by mid-June.

[Acknowledgement]
본 연구는 농촌진흥청 어젠다사업(과제번호: PJ01415503)의 지원에 의해 수행되었음

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