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Growth Characters and Life Cycle of Mungbean Per Sowing Period

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[Abstract]

Mungbean is used for not only seed but sprout. so, consumption of mungbean has been on the rise in Korea. Life cycle of mungbean tends to be short among Legume. For that reason, Mungbean can be harvested for various cropping system and season per regions and farmers regardless of sowing date and harvesting date. So, Prior research is needed about growth characters and life cycle of mungbean per sowing period.

Mungebean cultivar 'Dahyun' and 'Sanpo' supplied by Korea Agriculture Technology Promotion Agency(KOAT) is cultivated in wagner pot. Sowing period is proper time of seeding in Jeollanam-do and Gyeongsangnam-do that is major cultivation region of mungbean in korea from early May to mid July every 2 weeks.

Length at maturity stage tends to increase from early May(sowing date: 4th May) to early July(sowing date: 5th July), but after that, It tends to decrease from mid July(sowing date: 19th July). Number of branches and nods shows a similar trend. Length of pod has no tendency and no difference per sowing date. Number of pod per plants has also no tendency per sowing date. Test plots sowing in late May has the most number of pods.(Sanpo 22.9pods, Dahyun 16.8) Number of seeds per pod tends to increase to late May and Test plots sowing in mid July has the most number of seed per pod.

In case of sowing at early May, Days of emergence is 7d. its summation of temperature is 132.2°C. After that, it tends to decrease to mid June. After mid June, Days of emergence is fixed to 3d. Average temperature growing up in this season, Summation of temperature from sowing to emergence takes the lowest point in test plots sowing in mid June.(Sanpo 88.6°C, Dahyun 88.6) Days of flowering tends to fasten from early May to mid July. Two cultivar shows same level. Days of maturity tends to fasten to mid June. after that tends to slow.

In case that many research results about growth characters and life cycle mungbean per sowing period are drawn, it is expected that it result in increase of cultivation area and income of farmer.

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