Effect of Planting Dates on Agronomic Characteristics and Yield in Sprout Soybean

Hag Sin Kim[*1)], Sug Kee Suh[2)], , Kyong Ho Kim[2)], Young Jin Kim[2)], Young Jin Oh[2)]
Ho Ki Park[2)], Hong Sik Kim[3)]

파종기에 따른 나물용 콩의 작물학적특성 및 수량

김학신[*1)], 서석기[2)], 김경호[2)], 김영진[2)], 오영진[2)], 박호기[2)], 김홍식[3)]

1) Mokpo Experiment Station, NHAES, RDA, Muan 534-833, Korea
2) National Honam Agricultural Experiment Station, RDA, Iksan 570-080, Korea
3) Chungbuk National University, Chongju 361-763, Korea

Objectives

To obtain basic information concerning the soybean breeding and culture by differences of moved sowing time of sprout soybean achieve to minimize because do decrease quantity and quality by weather of culture periods.

Materials and Methods

Materials : 6 soybean varieties including Pungsannamulkong

Methods :

- Sowing time : May 25, June 5, June 25
- Main investigation item : growth and seed characters, yield component, yield etc

Results and Discussion

A. Growth duration that "Sowing May 25" was 125 day, "Sowing June 15" 106 day, "Sowing July 5" by 95 day each 19 day and 30 day shorted. Pungsannamulkong, Somyeongkong, and Dawonkong that growth duration was long looked clear tendency in sowing period between varieties. And shortening of growth duration were tendency that major axis of days to flowering is bigger than days to maturity.

B. Flowering time on different sowing time was decreased difference between varieties later sowing time. Maturing time according to sowing time, it remarkable contrasted between varieties by same tendency with flowering time.

C. Reduction of stem length was decreased with later seeding, and number of branch, stem diameter, and number of node decreased by same tendency.

D. Number of pods per ㎡ reduced 29.4% sowing on July 5 than sowing on May 25, and Hannamkong and Somyeongkong were big decrease width between varieties and Eunhakong and Doremikong were less decrease width. And Number of seeds per pod was not clear by similar tendency according to sowing time.

E. Yield of soybeans appeared to be less sowing is late. Compare with varieties, Pungsannamulkong is most yield by average 317kg/10a. While, Hannamkong and Dawonkong were less most yield by 225kg/10a.

Table 1. Changes of Growth Characteristics, Yield components and Yield according to the Planting Dates in Sprout Soybean

	Planting time	Flowering date	Maturing date	Stem length (cm)	No. of stem node	No. of branches /plant	Stem diameter (mm)	No. of pod/m²	No. of pod /plant	No. of seed /pod	100 seed weight (g)	Yield (kg/10a)
Mean	May 25(A)	Jul. 21	Sep. 27	54.9	15.9	4.5	7.58	1647.1	74.9	2.1	9.8	290
	Jun. 15(B)	Jul. 29	Sep. 30	51.1	14.4	3.7	6.16	1354.4	41.0	2.3	9.8	269
	Jul. 5(C)	Aug.13	Oct. 7	41.2	13.0	3.7	5.68	1162.2	35.2	2.2	9.3	221
Decrease of growth	B-A	-8	-3	-3.8	-1.5	-0.8	-1.4	-292.7	-33.9	0.2	0.0	-21
	C-B	-15	-7	-9.9	-1.4	0.0	-0.5	-192.2	- 5.8	-0.1	-0.5	-48
	C-A	-23	-10	-13.7	-2.9	-0.8	-1.9	-484.9	-39.7	0.1	-0.5	-69
Percentage	B/A	-	-	93.0	90.4	82.5	81.3	82.2	54.7	110	100	92.8
	C/B	-	-	80.7	90.3	100.0	92.2	85.8	85.9	95.7	94.9	82.2
	C/A	-	-	75.0	81.7	82.5	74.9	70.6	47.0	105	94.9	76.2

Corresponding author : Tel 061-450-0128 E-mail : khs0716@rda.go.kr