

# 이식시기에 따른 재식밀도가 텍사의 수량 및 수량구성요소에 미치는 영향

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## Effect of Planting Density under Transplanting Time of *Alisma plantago* on Yield and Yield Component.

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### 시험목적

이식시기의 조만에 따른 재식밀도를 구명코자함.

### 재료 및 방법

- 공시재료 : 선월 재래종
- 파종기 : 7월 10일, 20일, 30일
- 이식기 : 8월 20일, 30일, 9월 10일
- 시비량(kg/10a) : 기비-퇴비 2,000kg  
복합비료(21-17-17) 100kg  
추비 : 요소 100kg
- 기타 : 생육특성, 수량구성요소 및 수량 등

### 결과요약

- 초장, 엽폭, 엽장의 형질들은 7월 10일, 20일, 30일 순으로 파종기가 늦어질수록 감소하는 경향이였다.
- 개화소요시간은 이식시기가 늦어질수록 단축되었고 밀식할수록 단축되었다.
- 지상부의 생산물인 초장, 엽수와 지하부의 생산물인 건근중 모두 20×15cm의 밀

식구에서는 8월 30일이나 9월 10일로 늦게 이식할수록 수량이 많았으나, 20×25 cm나 20×35cm의 소식구에서는 늦게 이식할수록 수량이 적었다.

**Table 6.** Effect of sowing dates and planting dates on the nursery characters of *Alisma plantago* cultivated after early maturing rice cropping.

Sowing date	Transplanting date	Plant height (cm)	Leaf width (cm)	Leaf length (cm)
July 10	Aug. 20	29	3.9	9.4
July 20	Aug. 30	28	3.8	8.2
July 30	Sep. 10	25	3.7	7.1

**Table 7.** Response of flowering in different transplanting date and planting density.

Transplanting spacing (Row × Intra row) (cm)	Sowing date	Transplanting date	Days to flowering	Flowering date
20 × 15	July 10	Aug. 20	18	Sep. 7
	July 20	Aug. 30	17	Sep. 16
	July 30	Sep. 10	16	Sep. 27
20 × 25	July 10	Aug. 20	19	Sep. 8
	July 20	Aug. 30	18	Sep. 17
	July 30	Sep. 10	17	Sep. 28
20 × 35	July 10	Aug. 20	19	Sep. 8
	July 20	Aug. 30	18	Sep. 17
	July 30	Sep. 10	17	Sep. 28

**Table 8.** Meteorological factors of a period of ten days from different transplanting time.

period of ten days	Aver. tem. (°C)	Max. tem. (°C)	Min. tem. (°C)	Precip. (mm)	Sunshine hours (ha)
Last part of Aug.	22.2	26.2	19.2	197.5	15.6
First part of Sep.	24.2	29.5	20.1	63.0	41.6
Middle part of Sep.	24.2	30.1	20.0	207.0	46.9

**Table 9.** Variation of growth habit and yield of *Alisma plantago* under different planting density from cultivated after early maturing rice cropping.

Planting spacing (Row × Intra row) (cm)	Sowing date	Transplant -ing date	No. of plants /10a	Plant height (cm)	No. of leaves (0~5)	Brown leaf blight	Yield	
							Dry root	Index (kg/10a)
20 × 15	July 10	Aug. 20	33.333	62	12	2	232.3	100
	July 20	Aug. 30	33.333	63	16	2	325.1	140
	July 30	Sep. 10	33.333	65	18	2	356.2	153
20 × 25	July 10	Aug. 20	20.000	67	15	2	326.6	139
	July 20	Aug. 30	20.000	62	14	2	306.7	132
	July 30	Sep. 10	20.000	60	13	2	274.2	118
20 × 35	July 10	Aug. 20	14.285	69	16	2	348.3	150
	July 20	Aug. 30	14.285	58	12	2	279.6	120
	July 30	Sep. 10	14.285	56	11	2	244.2	105

**Table 10.** Analysis of variance for yield and agronomic characters of *Alisma plantago* under different sowing date and density from cultivated after early maturing rice cropping.

Factor	d.f	Plant height(cm)	No. of leaves	Dry root yield (kg/10a)
Block	2	0.83	0.11	115.45
A	2	148.05	56.33**	384.31
Error(a)	4	1.48	0.78	215.12
Main plot	8			
B	2	16.05**	2.11	469.87*
AB	4	26.20**	26.20**	11177.30**
Error(b)	12	0.04	0.41	123.28
Sub plot	18		3.22	
Total	26			