A REPORT ON THE DEMONSTRATION OF GREEN MANURING FOR RICE

by

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Introduction

From the preceeding report, we obtained a conclusion that the blue bean and the black bean could be used as winter green manure crops for rice plant throughout this island and the field pea was only suitable in Hsinchu and other southern prefectures. Besides, the effect of calcium superphosphate on the green manure crops and following rice plant was most apparent in Hsinchu and least in Taipei. It is well known that, due to the shortage of seeds and difficulties in multiplication, the plantation of green manure crops is not widely practiced in the northern part of this province. The demonstration of green manuring for rice plant is carried out only in the northern prefectures; namely, Taipei, Touryuan, Hsinchu, and Miaulih and for ascertaining the adaptibility of these green manure crops tested in the preceeding year, the blue bean, black bean, and field pea are still selected for demonstration.

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Method of Demonstration

This demonstration was carried out in the winter of 1950 and ended in the summer of the next year. A total of 71 demonstrations was conducted and accomplished throughout 9 villages of the four prefectures stated above.

The black bean and the blue bean were selected for demonstration in Taipei prefecture,

while in the other three prefectures the black bean and the field pea were used. Each kind of these crops was separately treated with calcium superphosphate at the rate of 60 kg. per hectare of P_2O_5 and none. In order to facilitate the cultivation by farmers, the area of plot was enlarged to 1/50 ha. Each demonstration locality consisted for five plots representng the four different treatments stated above and an additonal one which was allowed to fallow in the winter as a check plot for ascertaining the effect of green manuring of the following rice plant.

Befere transplanting the rice plant, the green manure crops were ploughed under the soil for the green manuring purpose. Local variety of rice plant was selected for planting in each treatment plot. Manuring practice was to follow the farmer's habit.

Unfortunately, due to the unseasonal rain, the seeding of green manure crops was delayed and could not be kept on time in this year. It will be noticed in table 1 that, in most cases, the crops were seeded in the middle of December and even a few, in the end of December.

Table 1. Time of seeding of the green manures in 1950

Time of seeding	Number of case practiced in 1950
At the first of Dec.	28
At the middle of Dec.	33
At the end of Dec.	17

* The meteorological data are reserved in accordance with the government's order.

Results and Discussion

a. A comparison of the growing state of these green manures in different localities.

The development of these green manures in different demonstration centers was surveyed at interval about 30 days through the whole growing days and recorded in the appendix and compiled in table 2 which shows that there is little variation of the height between the two kinds of bean throughout all the demonstrations, and that the growing rate of either the black bean or the blue bean in successive development periods is almost the same. The average height of the field pea does not differ very much in the villages of Touryuan and Dahyuan, but it is markedly increased in the last three villages as shown in table 2. It indicates that the field pea is more suitable in the southern part than in the northern part of this province. The growing rate of the field pea is not the same as that of the beans. It grows more vigorously after 30 days of seeding. Judging from the fact that the effect of calcium superphosphate is more significant on the field pea than on the beans and more apparent in the prefectures of Touryuan, Hsinchu, and Miaulih than in that of Taipei. It just coincides with the previous conclusion obtained in last year.

Table 2. Average height (cm.) of these green manure crops in different villages demonstrated

Name of village	Surveyed at about 30 days after seeding						Surveyed at about 60 days after seeding						Surveyed prior to the harvest					
	Blue bean		Black bean		Field pea		Blue bean		Black bean		Field pea		Blue bean		Black bean		Field pea	
	O	P	O	P	O	P	O	P	O	P	O	P	O	P	O	P	O	P
Shyhlin	10.6	10.7	10.8	10.7	—	—	15.9	14.4	14.2	14.8	—	—	—	—	—	—	—	—
Taipei	10.3	10.4	9.9	10.1	—	—	16.9	17.5	16.1	18.4	—	—	20.7	22.4	21.2	21.4	—	—
Sanjang	10.2	10.4	9.6	9.8	—	—	18.7	19.7	17.1	19.3	—	—	30.6	30.1	29.1	28.8	—	—
Panchiao	10.3	10.7	10.9	11.0	—	—	19.7	20.8	19.1	19.1	—	—	—	—	—	—	—	—
Touryuan	—	—	10.1	10.5	17.4	18.0	—	—	18.2	19.1	35.1	40.5	—	—	23.1	24.6	55.8	62.5
Dahyuan	—	—	10.2	10.6	16.0	16.5	—	—	15.9	17.4	28.4	37.6	—	—	21.2	22.3	40.5	54.3
Hsinchu	—	—	9.5	10.5	12.3	14.3	—	—	15.7	19.0	33.5	40.9	—	—	25.5	27.4	72.3	75.7
Chunan	—	—	10.4	10.6	15.9	16.7	—	—	18.4	20.5	33.9	53.6	—	—	27.1	27.0	83.9	90.6
Miaulih	—	—	12.3	12.1	17.2	19.8	—	—	19.6	23.1	46.6	61.3	—	—	24.7	28.3	73.2	87.9

Note : "O" denotes the plot treated with nothing.

"P" denotes the plot treated with superphosphate

b. A comparison of the average fresh weight of these green manures in different localites.

The data in table 3 giving the average fresh weight of the black bean, blue bean and field pea in respective different treatment plots may be of interest in considering the adaptibility of these crops and the responese to superphosphate in different localities. It will be noticed first of all that the yields of the blue bean and the black bean in different demonstration centers, except the black bean in the village of Touryuan being comparatively higher, are nearly similar, respectively. However, the yield of the blue bean, in most cases, is about a half less than that of the black bean. Nevertheless, we could not thus conclude that the black bean is absolutely superier to the blue bean. Judging from the growing state of these two beans, they showed not only little variation in the appearance of later development, but also little difference in the preliminary laboratory germination test. However, the germination rate of the blue bean, owing to the copious rain, has been greatly lessened in the field experiment. The lower yield of the blue bean in comparison with that of the black bean may be attributed to this reason.

It will be noticed too that, in the last five villages shown in table 3, both the yield of the blue bean and the field pea in the plot receiving superphosphate treatment are significantly higher than in that receiving nothing. The yield of the field pea is also markedly increased in the villages of Chunan and Miaulih, as in the case of height and especially in the case of superphosphate treatment.

From the facts stated above, the adaptable tendency of these two beans throughout the nine villages demonstrated seems quite similar but the field pea is only suitable in Hsinchu, Chunan, and Miaulih. Besides, the response of these green manures to superphosphate is most apparent in the prefectures of Touryuan, Hsinchu, and least in Taipei.

Table 3. The average fresh weight of green manure crops among different villages demonstrated (kg/ha.)

Name of village	Blue bean		Black bean		Field pea	
	O	P	O	P	O	P
Shyhlin	508	392	968	942	—	—
Taipei	933	987	1214	1265	—	—
Sanjong	1154	1104	2128	2284	—	—
Panchiao	497	530	1914	1756	—	—
Touryuan	—	—	2801	3596	1738	2391
Dahyuan	—	—	1465	2212	679	1262
Hsinchu	—	—	1872	2515	913	1738
Chunan	—	—	1771	1758	5694	6387
Miaulih	—	—	2224	2646	2482	5465

c. The effect of green manuring on the growing state of suceeding rice plant.

From the data shown in table 4, it is shown that the effect of green manuring on the growing state of the succeeding rice crop is not apparent. It is probably due to the fact that the fresh weight of the green manures ploughed under the soil is not so enough as to obviously differentiate from the appearance of the development of rice plant.

Table 4. Residual effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant

Name of village	Surveyed at about 30 days after transplantation					Surveyed at about 60 days after transplantation					Surveyed prior to the harvest				
	Plot of														
	Blue bean		Black bean		Winter fallow	Blue bean		Black bean		Winter fallow	Blue bean		Black bean		Winter fallow
	O	P	O	P		O	P	O	P		O	P	O	P	
Shyhlin	30.6	29.3	30.1	29.7	29.2	54.0	54.3	54.8	53.9	55.4	70.9	77.1	77.4	77.6	76.7
	8.6	8.9	8.9	8.7	8.0	28.9	29.8	30.9	29.9	30.4	22.4	22.0	23.3	22.3	23.1
Taipei	44.8	44.5	44.9	44.8	44.4	69.5	70.6	70.5	70.8	70.3	89.4	90.4	88.9	91.0	87.2
	15.4	15.9	15.9	15.8	15.5	16.0	16.8	16.3	17.8	17.0	15.8	16.0	15.1	16.8	15.0
Sanjong	36.7	37.1	35.2	36.7	35.5	64.3	64.2	63.5	64.0	64.4	90.1	91.0	90.7	89.2	92.5
	14.8	15.6	14.1	15.8	13.6	16.3	16.4	16.1	16.3	17.7	15.5	14.1	13.7	14.6	14.8
Panchiao	37.4	37.0	37.6	36.5	38.0	78.3	75.6	75.4	76.3	75.9	87.3	86.5	87.7	86.6	87.1
	7.5	7.5	7.8	7.6	7.3	13.3	13.8	12.8	12.9	12.7	12.0	12.0	12.2	12.3	12.4

	Plot of														
	Field pea		Black bean		Winter fallow	Field pea		Black bean		Winter fallow	Field pea		Black bean		Winter fallow
	O	P	O	P		O	P	O	P		O	P	O	P	
Touryuan	35.8	36.3	34.7	35.5	34.0	57.9	58.8	56.4	57.3	56.7	92.5	94.2	92.2	93.7	91.2
	6.2	6.5	6.0	6.3	5.8	12.6	13.3	13.3	13.5	11.9	14.3	14.7	14.3	14.9	13.3
Dahyuan	34.4	35.9	34.4	35.6	34.2	69.1	69.9	69.2	71.0	67.1	89.0	88.8	87.0	90.4	85.9
	6.7	8.0	7.2	7.4	6.6	11.5	12.0	11.7	12.4	10.8	11.4	11.9	11.6	12.5	11.5
Hsinchu	38.5	38.1	39.3	38.6	37.1	62.9	63.7	63.0	64.8	61.2	96.0	98.3	98.6	99.9	93.8
	11.4	12.0	12.7	12.5	10.8	16.7	17.7	18.3	18.6	16.4	15.2	15.4	15.8	15.6	14.5
Chunan	52.6	53.5	51.7	52.9	52.0	97.3	98.3	94.0	93.2	97.6	126.5	125.1	125.8	126.0	127.1
	22.8	22.5	22.5	22.8	22.0	18.2	18.3	18.6	17.3	17.4	18.6	18.0	17.9	19.2	19.7
Miaulih	32.8	32.6	32.2	33.2	31.9	65.5	68.3	65.3	65.7	64.3	99.1	98.8	98.4	98.5	97.4
	7.4	7.6	7.1	7.0	6.6	17.2	18.3	16.3	16.9	16.6	11.3	13.2	11.1	11.5	10.4

Note : In each village, the first row denotes the average height of rice in centimeter and the second row denotes the numbers of tillering.

d. Effect of green manuring on the yields of rice plant.

•A total of 71 demonstrations has been carried out in this year. Each demonstration consists of five plots, thus, a total of 355 plots has been included. When dealing with such a large numbers of variates, we find that it is convenient to make up a frequency table in table 5. It will be noticed in the table 5 that the majority of the cases distributes in the ranges of 0-20%. It indicates that, in most cases, due to the application of green manure, the yield of grain and straw will increased by 0-20%, respectively. Concerning the effect of different green manure crops on the yield of rice, it will be noticed that the field pea has more beneficial effect in the prefecture of Hsinchu and Miaulih than in that of Touryuan. However, the difference between the effects of the blue bean and the black bean could not be obviously seen in table 5.

Table 5. Frequency table for the nnmbers of cases showing the response of rice yield to green manuring

Class ranges* Showing the yield of rice increased or decreased in percentage, due to green manuring	Frequency Plot of							
	Field pea			Black bean				Blue bean
	Prefecture of							
	Tour-yuan	Hsinchu	Miaulih	Taipei	Touryuan	Hsinchu	Miaulih	Taipei
	For grain							
(-35) .. (-29.9)	—	—	—	—	—	—	—	1
(-30) .. (-24.9)	—	—	—	1	—	—	—	1
(-25) .. (-19.9)	—	—	1	1	1	—	2	—
(-20) .. (-14.9)	2	—	1	1	—	—	1	2
(-15) .. (- 9.9)	1	—	—	—	—	1	1	—
(-10) .. (- 4.9)	1	—	—	2	—	—	—	1
(- 5) .. (- 0.9)	4	—	1	3	2	—	1	2

(0) .. (4.9)	3	2	2	4	5	1	3	3
(5) .. (9.9)	2	4	2	5	4	—	2	4
(10) .. (14.9)	3	1	3	1	2	—	—	3
(15) .. (19.9)	3	1	3	4	3	2	2	2
(20) .. (24.9)	—	—	—	—	2	1	2	2
(25) .. (29.9)	—	1	—	1	—	2	—	—
(30) .. (34.9)	1	—	—	2	—	1	—	—
(35) .. (39.9)	—	1	—	—	—	1	—	—
(40) .. (44.9)	—	—	—	—	—	—	—	—
(45) .. (49.9)	—	—	1	—	1	—	—	—
(50) .. (54.9)	—	—	—	—	—	—	—	—
(55) .. (59.9)	—	—	—	1	—	—	1	—
(60) .. (64.9)	—	—	1	—	—	1	—	—
(65) .. (69.9)	—	—	—	—	—	—	—	—
				For straw				
(-45) .. (-39.9)	—	—	—	1	—	—	—	—
(-40) .. (-34.9)	—	—	1	—	—	—	—	—
(-30) .. (-24.9)	1	—	—	—	—	—	2	1
(-25) .. (-19.9)	—	—	1	1	—	—	—	1
(-20) .. (-14.9)	—	—	1	—	—	—	—	1
(-15) .. (- 9.9)	—	—	—	2	2	—	2	1
(-10) .. (- 4.9)	—	—	1	1	3	—	1	4
(- 5) .. (- 0.9)	5	—	—	1	—	2	—	2
(0) .. (4.9)	3	4	3	9	7	2	2	7
(5) .. (9.9)	7	—	3	4	3	1	1	2
(10) .. (14.9)	3	3	2	1	1	1	1	3
(15) .. (19.9)	6	1	1	2	2	1	2	2
(20) .. (24.9)	—	2	1	—	1	2	1	—
(25) .. (29.9)	1	—	—	—	1	—	3	—
(30) .. (34.9)	—	—	—	—	—	1	—	1
(35) .. (39.9)	—	—	—	2	—	—	—	1
(40) .. (44.9)	—	—	1	1	—	—	—	—
(45) .. (49.9)	—	—	—	—	—	—	—	—
(50) .. (54.9)	—	—	—	—	—	—	—	—
(55) .. (59.9)	—	—	—	—	—	—	—	—
(65) .. (69.9)	—	—	—	1	—	—	—	—

* With thh yield of the fallow plot indiced as 100.

e. Residual effect of calcium superphosphate on the yield of rice plant.

The results are summarized in a frequency table as shown in table 6. It shows that in the prefecture of Taipei and Touryuam, the chances of increasing the yield of rice in the plot receiving green manure and superphosphate compared with that plot receiving the same green manures alone are only one half or so, while, in the other two prefectures, no matter what kinds of bean or pea are raised, the application of superphosphate as basic manure will greatly increase

the chances of increasing the yield of following rice crop. In other words, the effect of superphosphate on rice plant is most apparent in Hsinchu and least in Taipei and Touryuan.

Table 6. Frequency table for the numbers of cases showing the response of the rice yield to residual superphosphate

Class ranges* Showing the yield of rice increased or decreased in percentage, due to residual superphosphate	Frequency							
	Plot of							
	Field pea			Black bean				Blue bean
	Prefecture of							
	Tour-yuan	Hsinchu	Miaulih	Taipei	Touryuan	Hsinchu	Miaulih	Taipei
	For grain							
(-30) .. (-24.9)	2	—	—	—	—	—	—	—
(-25) .. (-19.9)	—	—	—	—	1	—	—	—
(-20) .. (-14.9)	—	—	1	4	1	—	1	1
(-15) .. (- 9.9)	—	—	—	—	2	—	—	1
(-10) .. (- 4.9)	3	—	1	3	2	—	—	4
(- 5) .. (- 0.9)	1	—	3	6	3	—	2	4
(0) .. (4.9)	3	1	4	7	8	—	4	9
(5) .. (9.9)	2	3	3	1	1	3	2	2
(10) .. (14.9)	4	2	—	2	1	5	2	1
(15) .. (19.9)	—	1	—	2	1	1	—	—
(20) .. (24.9)	1	2	—	—	—	1	2	1
(25) .. (29.9)	2	1	1	—	—	—	1	—
(30) .. (34.9)	—	—	—	—	—	—	—	2
(35) .. (39.9)	2	—	—	1	—	—	—	1
(40) .. (44.9)	—	—	—	—	—	—	—	—
(45) .. (49.9)	—	—	—	—	—	—	1	—
	For straw							
(-30) .. (-24.9)	—	—	—	—	—	—	—	—
(-25) .. (-19.9)	1	—	—	1	1	—	—	1
(-20) .. (-14.9)	1	—	—	2	1	1	—	—
(-15) .. (- 9.9)	1	—	1	2	1	—	4	2
(-10) .. (- 4.9)	—	1	3	3	1	—	1	1
(- 5) .. (- 0.9)	4	4	—	7	2	1	3	2
(0) .. (4.9)	4	3	6	7	5	6	2	13
(5) .. (9.9)	2	1	—	2	6	1	—	3
(10) .. (14.9)	1	—	1	—	—	—	3	2
(15) .. (19.9)	4	—	—	1	1	1	1	1
(20) .. (24.9)	2	1	2	—	1	—	—	1
(25) .. (29.9)	—	—	—	—	1	—	1	—
(30) .. (34.9)	—	—	1	—	—	—	—	—
(35) .. (39.9)	—	—	—	—	—	—	—	—
(40) .. (44.9)	—	—	—	—	—	—	—	—
(45) .. (49.9)	—	—	—	1	—	—	—	—
(50) .. (54.9)	—	—	1	—	—	—	—	—

* With the yield of the plot receiving green manures alone indiced as 100.

Conclusion

Owing to the insufficient length of growing days for raising green manure crops and the unfavorable raining season, the extension of winter green manure crops in the northern part of this province is rather limited, consequently, the introduction of new legume varieties and the improvement of the present cultivation method for some legumes common in Taiwan should be taken into consideration.

According to the results of our demonstration, we found that the black bean is somewhat superior to the blue bean in the four northern prefectures and the field pea is only suitable in Hsinchu and other southern part of Taiwan. The application of superphosphate during cultivation of green manure crops is more advantageous in the prefectures of Touryuan, Hsinchu, and Miaulih than in that of Taipei. Before we have found out other ideal varieties of legumes suitable in the northern part of Taiwan, these three kinds of legumes may be temporarily recommended to the farmers as winter green manures.

Summary

Owing to the unfavorable raining season in this year, the seeding period of these green manures was not only delayed but the development of these crops was also hindered. Generally speaking, the yield of these crops are somewhat lower than that of the preceeding year demonstrated, but the tendency of the results in this year is just similar with that in the last year. It results may be outlined as follows:

1. Throughout all the demonstrations, the growing state of the black bean and the blue bean are somewhat similar but the wet-resistance of the latter is inferior to that of the former. Field pea is only suitable in Hsinchu and other southern part of Taiwan.

2. If we take the yield of the winter fallow plot as 100, the yield of rice and straw, in most cases, due to the application of green manure, has increased by 0-20%.

3. The application of superphosphate is most apparent in Hsinchu, and Miaulih and least in Taipei, on the yield of green manure crops as in the following rice crop.

水稻綠肥示範試驗成績報告

中 文 摘 要

本試驗曾于民國38年在臺北、新竹、臺南、高雄（舊制）等縣舉辦示範田18處，本年則僅在臺北、桃園、新竹、苗栗（新制）4縣實續舉辦，共計完成示範試驗71處。

本年示範試驗之設計較爲簡單，臺北縣採用青皮豆與烏豆兩種，其他三縣則用烏豆與豌豆兩種，每種綠肥作物更分爲施用與不施用磷肥兩處理，另添設一冬閑區，故每示範田共有5處理小區，每小區面積爲1/50公頃，至於後作水稻所選用之品種及施肥法均參照當地農民所慣用之品種及慣行法。

本年因雨水頻仍，綠肥作物未能適時下種，致影響綠肥作物之發育及其收量甚大，一般言之，其收量均較民國38年試驗者爲低，但其結果之姿勢則甚相一致。茲摘要于下：

1. 青皮豆與烏豆之生育狀況在各地示範田中，均甚相類似，但前者或因種皮較薄，抗濕力弱，下種後實續陰雨，發芽不齊，致影響其收量甚大，而豌豆對于地域之影響較大，由兩年試驗結果，均以在新竹及其以南縣份較爲適宜。

2. 至於施用綠肥對于後作穀與藁收量之影響，若以冬閑區之穀與藁收量各作爲100，則依照常率之分配（The distribution of Frequency），在大多數示範田中，約可分別增收0—20%。

3. 綠肥作物與後作水稻對于磷肥之效應，以新竹與苗栗兩縣最爲明顯。

Appendix

Table 1. Numbers of demonstration centers practiced in each village of the four prefectures

Name of village	Numbers of demonstration centers practiced	
	For green manure crops	For following rice crop
Taipei prefecture		
Shyhlin	5	3
Taipei	9	8
Sanjong	5	5
Panchiao	10	10
Touryuan prefecture		
Touryuan	10	10
Dahyuan	10	10
Hsinchu prefecture		
Hsinchu	10	10
Miaulih prefecture		
Chunan	9	5
Miaulih	10	10
Total	78	71

Table 2. A record of seeding, transplanting, field surveying, and harvest practiced in all the demonstrations

No. of demonstration	Practiced in the part of green manure crops				
	Date of				
	Seeding	Field surveying			Harvest
Taipei prefecture		1st	2nd	3rd	
Shyhlin					
1	24/Dec.	5/Feb.	—	26/Feb.	26/Feb.
2	20/Dec.	9/Feb.	—	26/Feb.	26/Feb.
3	6/Jan.	5/Feb.	—	20/Feb.	20/Feb.
4	26/Dec.	5/Feb.	—	27/Feb.	27/Feb.
5	27/Dec.	5/Feb.	—	29/Feb.	29/Feb.
Taipei					
6	29/Dec.	1/Feb.	24/Feb.	24/Mar.	24/Mar.
7	28/Dec.	26/Jan.	26/Feb.	6/Mar.	6/Mar.
8	28/Dec.	27/Jan.	26/Feb.	6/Mar.	6/Mar.
9	28/Dec.	13/Jan.	24/Feb.	8/Mar.	8/Mar.
10	28/Dec.	27/Jan.	24/Feb.	8/Mar.	8/Mar.

11	24/Dec.	26/Jan.	25/Feb.	7/Mar.	7/Mar.
12	28/Dec.	27/Jan.	24/Feb.	8/Mar.	8/Mar.
13	28/Dec.	26/Jan.	26/Feb.	6/Mar.	6/Mar.
74	28/Dec.	27/Jan.	25/Feb.	7/Mar.	7/Mar.
Sanjong					
14	7/Dec.	18/Jan.	2/Mar.	20/Mar.	20/Mar.
15	13/Dec.	22/Jan.	22/Feb.	20/Mar.	20/Mar.
16	7/Dec.	8/Jan.	13/Feb.	21/Mar.	21/Mar.
17	13/Dec.	22/Jan.	22/Feb.	20/Mar.	20/Mar.
18	13/Dec.	18/Jan.	21/Feb.	21/Mar.	21/Mar.
Panchiao					
19	7/Dec.	7/Jan.	—	23/Feb.	23/Feb.
20	7/Dec.	7/Jan.	—	23/Feb.	23/Feb.
21	7/Dec.	7/Jan.	—	23/Feb.	23/Feb.
22	6/Dec.	6/Jan.	—	23/Feb.	23/Feb.
23	13/Dec.	19/Jan.	—	23/Feb.	23/Feb.
24	17/Dec.	17/Jan.	—	23/Feb.	23/Feb.
25	14/Dec.	14/Jan.	—	6/Mar.	6/Mar.
26	14/Dec.	14/Jan.	—	6/Mar.	6/Mar.
27	23/Dec.	24/Jan.	—	6/Mar.	6/Mar.
28	23/Dec.	24/Jan.	—	6/Mar.	6/Mar.
Touryuan prefecture					
Touryuan					
29	9/Dec.	13/Jan.	16/Feb.	8/Mar.	8/Mar.
30	8/Dec.	12/Jan.	16/Feb.	6/Mar.	6/Mar.
31	8/Dec.	12/Jan.	16/Feb.	6/Mar.	6/Mar.
32	10/Dec.	12/Jan.	16/Feb.	8/Mar.	8/Mar.
33	7/Dec.	11/Jan.	16/Feb.	6/Mar.	6/Mar.
34	11/Dec.	12/Jan.	16/Feb.	3/Mar.	8/Mar.
35	10/Dec.	12/Jan.	16/Feb.	6/Mar.	6/Mar.
36	10/Dec.	12/Jan.	16/Feb.	6/Mar.	6/Mar.
37	17/Dec.	12/Jan.	16/Feb.	6/Mar.	6/Mar.
38	12/Dec.	12/Jan.	16/Feb.	8/Mar.	8/Mar.
Dahyuan					
39	10/Dec.	10/Jan.	13/Feb.	5/Mar.	5/Mar.
40	17/Dec.	12/Jan.	15/Feb.	5/Mar.	5/Mar.
41	13/Dec.	11/Jan.	14/Feb.	5/Mar.	5/Mar.
42	10/Dec.	10/Jan.	13/Feb.	5/Mar.	5/Mar.
43	16/Dec.	12/Jan.	15/Feb.	5/Mar.	5/Mar.
44	11/Dec.	10/Jan.	13/Feb.	5/Mar.	5/Mar.
45	13/Dec.	11/Jan.	14/Feb.	5/Mar.	5/Mar.
46	7/Dec.	10/Jan.	13/Feb.	5/Mar,	5/Mar.
47	7/Dec.	10/Jan.	13/Feb.	5/Mar.	5/Mar.
48	17/Dec.	12/Jan.	15/Feb.	5/Mar.	5/Mar.

Hsinchu prefecture					
Hsiuchu					
49	11/Dec.	18/Jan.	20/Feb.	10/Mar.	10/Mar.
50	6/Dec.	18/Jan.	20/Feb.	10/Mar.	10/Mar.
51	19/Dec.	18/Jan.	20/Feb.	10/Mar.	10/Mar.
52	16/Dec.	18/Jan.	20/Feb.	10/Mar.	10/Mar.
53	17/Dec.	18/Jan.	20/Feb.	10/Mar.	10/Mar.
54	14/Dec.	18/Jan.	20/Feb.	10/Mar.	10/Mar.
55	28/Dec.	28/Jan.	20/Feb.	10/Mar.	10/Mar.
56	26/Dec.	26/Jan.	20/Feb.	10/Mar.	10/Mar.
57	20/Dec.	10/Jan.	20/Feb.	10/Mar.	10/Mar.
58	27/Dec.	27/Jan.	20/Feb.	10/Mar.	10/Mar.
Miaulih Prefecture					
Chunan					
59	3/Dec.	12/Jan.	17/Feb.	1/Mar.	1/Mar.
60	12/Dec.	11/Jan.	16/Feb.	2/Mar.	2/Mar.
61	12/Dec.	11/Jan.	16/Feb.	2/Mar.	2/Mar.
62	12/Dec.	11/Jan.	16/Feb.	2/Mar.	2/Mar.
63	12/Dec.	11/Jan.	15/Feb.	2/Mar.	2/Mar.
75	14/Dec.	15/Jan.	17/Feb.	1/Mar.	1/Mar.
76	3/Dec.	12/Jan.	17/Feb.	1/Mar.	1/Mar.
77	4/Dec.	10/Jan.	17/Feb.	1/Mar.	1/Mar.
78	4/Dec.	10/Jan.	17/Feb.	1/Mar.	1/Mar.
Miaulih					
64	7/Dec.	9/Jan.	15/Feb.	28/Feb.	28/Feb.
65	8/Dec.	13/Jan.	15/Feb.	28/Feb.	28/Feb.
66	7/Dec.	14/Jan.	14/Feb.	27/Feb.	27/Feb.
07	5/Dec.	14/Jan.	14/Feb.	27/Feb.	27/Feb.
68	8/Dec.	13/Jan.	15/Feb.	28/Feb.	28/Feb.
69	9/Dec.	16/Jan.	13/Feb.	28/Feb.	28/Feb.
70	9/Dec.	10/Jan.	15/Feb.	28/Feb.	28/Feb.
71	7/Dec.	9/Jan.	14/Feb.	26/Feb.	26/Feb.
72	6/Dec.	9/Jan.	14/Feb.	27/Feb.	27/Feb.
73	6/Dec.	9/Jan.	14/Feb.	27/Feb.	27/Feb.

Table 2. A record of the date of seeding, transplanting, field surveying, and harvest practiced in all the demonstrations (Continued)

No. of demonstration	Practiced in the part of following rice crop				
	Date of				
	Transplanting	Field surveying			Harvest
Taipei prefecture		1st	2nd	3rd	
Shyhlin					
1	28/Mar.	27/Apr.	1/June	16/July	16/July
2	28/Mar.	27/Apr.	1/June	16/July	16/July
3	3/Apr.	27/Apr.	1/June	17/July	17/July
Taipei					
6	20/Mar.	15/May	30/May	20/July	20/July
7	3/Apr.	3/May	2/June	22/July	22/July
8	26/Mar.	3/May	1/June	19/July	19/July
9	20/Mar.	3/May	31/May	13/July	13/July
10	16/Mar.	3/May	30/May	11/July	11/July
11	21/Mar.	3/May	31/May	18/July	18/July
12	20/Mar.	3/May	1/June	21/July	21/July
13	26/Mar.	3/May	1/June	18/July	18/July
Sanjong					
14	29/Mar.	30/Apr.	31/May	16/July	16/July
15	3/Apr.	30/Apr.	31/May	18/July	18/July
16	1/Apr.	30/Apr.	31/May	18/July	18/July
17	30/Mar.	30/Apr.	31/May	18/July	18/July
18	29/Mar.	30/Apr.	31/May	18/July	18/July
Panchiao					
19	21/Mar.	21/Apr.	5/June	18/July	18/July
20	19/Mar.	21/Apr.	4/June	18/July	18/July
21	19/Mar.	21/Apr.	4/June	18/July	18/July
22	25/Mar.	26/Apr.	4/June	18/July	18/July
23	25/Mar.	26/Apr.	4/June	19/July	19/July
24	25/Mar.	26/Apr.	4/June	19/July	19/July
25	27/Mar.	28/Apr.	5/June	20/July	20/July
26	27/Mar.	28/Apr.	5/June	20/July	20/July
27	29/Mar.	28/Apr.	4/June	20/July	20/July
28	29/Mar.	28/Apr.	4/June	20/July	20/July
Touryuan prefecture					
Touryuan					
29	27/Mar.	3/May	24/May	23/July	23/July
30	15/Mar.	17/Apr.	25/May	23/July	23/July
31	2/Apr.	11/May	25/May	21/July	21/July
32	10/Apr.	11/May	25/May	21/July	21/July
33	21/Mar.	21/Apr.	25/May	9/July	9/July

34	16/Mar.	17/Apr.	25/May	7/July	7/July
35	27/Mar.	3/May	20/May	9/July	9/July
36	9/Mar.	17/Apr.	24/May	9/July	9/July
37	21/Mar.	21/Apr.	24/May	14/July	14/July
38	25/Mar.	3/May	24/May	16/July	16/July
Dahyuan					
39	25/Mar.	25/Apr.	30/May	15/July	15/July
40	30/Mar.	1/May	31/May	15/July	15/July
41	17/Mar.	19/Apr.	30/May	14/July	14/July
42	2/Apr.	1/May	31/May	15/July	15/July
43	5/Apr.	5/May	31/May	23/July	23/July
44	14/Mar.	19/Apr.	30/May	12/July	12/July
45	12/Mar.	19/Apr.	30/May	11/July	11/July
46	13/Mar.	19/Apr.	30/May	11/July	11/July
47	26/Mar.	19/Apr.	30/May	12/July	12/July
48	20/Mar.	19/Apr.	30/May	12/July	12/July
Hsinchu prefecture Hsinchu					
49	22/Mar.	26/Apr.	22/May	13/July	13/July
50	23/Mar.	26/Apr.	22/May	13/July	13/July
51	26/Mar.	26/Apr.	22/May	18/July	18/July
52	24/Mar.	26/Apr.	22/May	16/July	16/July
53	20/Mar.	26/Apr.	21/May	15/July	15/July
54	21/Mar.	26/Apr.	21/May	15/July	15/July
55	27/Mar.	26/Apr.	23/May	18/July	18/July
56	27/Mar.	26/Apr.	23/May	16/July	16/July
57	22/Mar.	26/Apr.	21/May	15/July	15/July
58	27/Mar.	26/Apr.	23/May	18/July	18/July
Miaulih prefecture Chunan					
59	7/Apr.	8/May	6/June	14/July	14/July
60	6/Apr.	7/May	6/June	14/July	14/July
91	8/Apr.	8/May	6/June	15/July	15/July
62	6/Apr.	7/May	6/June	15/July	15/July
63	6/Apr.	7/May	6/June	16/July	16/July
Miaulih					
64	10/Mar.	13/Apr.	13/May	11/July	11/July
65	13/Mar.	14/Apr.	14/May	11/July	11/July
66	17/Mar.	15/Apr.	15/May	9/July	9/July
67	11/Mar.	13/Apr.	13/May	10/July	10/July
68	15/Mar.	15/Apr.	15/May	10/July	10/July
69	12/Mar.	14/Apr.	14/May	10/July	10/July
70	12/Mar.	13/Apr.	13/May	11/July	11/July
71	14/Mar.	15/Apr.	15/May	12/July	12/July
72	13/Mar.	14/Apr.	13/May	12/July	12/July
73	16/Mar.	15/Apr.	15/May	13/July	13/July

Table 3. Average height of green manure crops in all the demonstrations (cm.)

No. of demonstration	a. Surveyed at about 30 days after seeding								
	Black bean		Blue bean		No. of demonstration	Black bean		Field pea	
	O	P	O	P		O	P	O	P
Taipei prefecture					Touryuan prefecture				
Shyhlin					Touryuan				
1	10.3	10.5	10.0	10.7	29	10.0	10.5	17.7	18.3
					30	10.3	10.7	17.5	17.9
2	12.4	11.5	11.7	10.8	31	10.0	10.5	17.6	18.2
					32	10.5	10.7	17.3	17.4
3	10.8	10.7	10.6	10.7	33	10.4	11,0	17.9	18.5
					34	10.2	10.4	16.9	17.2
4	11.5	11.6	11.7	11.8	35	10.0	10.6	17.8	18.3
					36	9.8	10.2	17.6	18.7
5	11.3	11.7	11.4	11.3	37	9.9	10.0	16.3	17.0
					38	9.5	10.0	17.1	18.1
Taipei					Dahyuan				
6	10.5	11.5	12.3	12.6	39	10.6	10.9	15.9	16.1
7	9.8	10.1	11.8	9.5	40	9.8	10.2	15.9	16.5
					41	10.2	10.9	13.1	14.6
8	10.4	10.0	10.6	11.7	42	10.3	10.5	16.1	16.6
					43	9.9	10.5	15.8	16.1
9	5.9	5.8	5.5	6.6	44	10.2	10.7	16.5	17.1
					45	10.0	10.6	17.0	16.6
10	11.2	11.7	9.5	10.7	46	10.9	11.0	17.0	17.6
					47	10.4	10.7	17.1	17.5
11	10.3	11.3	10.8	11.4	48	10.1	10.4	15.4	16.2
12	9.8	10.2	10.5	10.4	Hsinchu prefecture				
					Hsinchu				
13	10.2	9.9	10.2	11.1	49	11.3	11.9	13.1	17.3
74	9.8	10.2	10.5	10.4	50	10.1	12.3	13.7	18.7
					51	9.3	11.4	12.6	14.8
Sanjong					52	10.2	10.8	12.2	15.0
14	10.3	10.6	10.4	10.1	53	9.5	9.9	15.0	16.4
					54	9.3	9.9	12.6	12.8
15	10.5	11.6	12.6	12.4	55	8.8	9.8	9.9	10.3
					56	8.4	9.3	10.4	10.0
16	11.4	10.7	10.7	11.9	57	8.5	9.5	11.5	13.2
					58	9.6	10.1	11.7	14.1
17	11.2	11.5	11.1	11.1	Miaulih prefecture				
					Chunan				
18	7.4	7.4	7.9	7.8	59	11.6	11.3	17.6	19.4
Panchiao					60	9.5	10.3	14.4	15.1
19	11.1	10.9	10.9	11.0	61	9.7	9.7	16.2	18.4
					62	9.8	10.0	16.8	15.3
20	11.1	11.2	9.8	10.3	63	10.6	10.3	17.7	17.4
					75	10.5	11.3	12.8	14.0
21	11.5	11.2	11.1	11.1	76	10.8	10.5	17.9	17.1
					77	10.4	11.2	12.7	14.0
22	11.1	11.2	11.6	12.0	78	11.5	11.0	17.9	19.0
23	11.3	11.1	10.4	10.1	Miaulih				
					64	11.9	12.9	15.7	19.9
24	10.4	10.3	9.1	9.5	65	12.9	12.7	19.2	21.0
					66	12.0	10.5	18.9	20.5
22	11.1	11.4	10.4	11.4	67	11.9	11.2	17.9	20.7
					68	11.6	12.2	21.8	21.0
26	10.9	11.6	10.4	10.9	69	11.8	11.9	19.6	21.3
					70	12.5	12.4	14.8	19.5
27	10.4	11.2	10.1	10.3	71	12.6	12.6	12.1	15.9
					72	14.1	13.4	16.3	20.6
28	10.1	10.2	10.1	10.1	73	11.8	11.3	15.6	17.2

Table 3. Average height of green manure crops in all the demonstrations (cm.) (continued)

No. of demonstration	b. Surveyed at about 60 days after seeding								
	Black bean		Blue bean		No. of demonstration	Black bean		Field pea	
	O	P	O	P		O	P	O	P
Taipei prefecture					Touryuan prefecture				
Shyhlin					Touryuan				
1	—	—	—	—	29	16.5	19.7	29.6	30.3
					30	17.1	19.4	39.2	43.1
2	—	—	—	—	31	16.2	16.2	33.8	39.3
					32	18.5	19.4	37.5	37.4
3	—	—	—	—	33	19.8	21.2	21·7	34.1
					34	26.3	28.1	50.7	53.9
4	—	—	—	—	35	16.9	18.0	30.8	40.5
					36	18.5	19.6	42.0	45.0
5	—	—	—	—	37	17.1	19.1	32.9	40.3
					38	15.1	15.8	32.9	40.0
Taipei					Dahyuan				
6	20.4	22.8	21.3	22.4					
					39	13.5	15.1	29.8	47.9
7	14.1	15.6	16.0	16.3	40	15.8	15.8	28.3	32.5
					41	16.3	15.9	29.1	33.8
8	14.6	17.1	17.4	17.8	42	15.7	18.5	29.6	34.8
					43	15.2	15.9	19.4	22.6
9	14.1	17.7	14.5	17.2	44	15.3	17.0	24.4	29.3
					45	16.7	17.9	31.1	32.0
10	16.5	22.8	16.0	16.9	46	17.5	19.3	29.0	52.3
					47	16.4	20.2	34.0	52.1
11	15.8	17.4	16.4	16.0	48	17.1	18.0	31.9	38.5
12	16.7	17.3	15.4	15·8	Hsinchu prefecture				
					Hsinchu				
13	15.6	16.6	18.2	18.0	49	22.6	28.6	51.7	59.4
					50	16.1	22.7	47.1	58.5
74	16.7	18.5	16.6	17.3	51	17.0	20.0	26.9	45.4
					52	16.3	20.3	28.4	39.8
Sanjong					53	18.0	23.4	46.5	53.8
14	19.7	22.4	23.0	20.9	54	16.0	17.5	36.3	38.6
					55	11.3	13.4	21.4	25.6
15	22.2	23.1	23.6	22.1	56	11.5	12.8	22.7	25.1
					57	15.1	17.7	27.3	35.1
16	16.4	19.9	20.4	22.5	58	13.4	13.6	26.9	28.0
17	18.1	19.4	19.8	19.1	Miaulih prefecture				
					Chunan				
18	16.3	16.0	17.0	17.4					
					59	17.9	21.6	59.6	59.7
Panchiao					60	16.8	18.3	54.7	50.7
					61	16.8	21.8	50.4	60.6
19	—	—	...	—	62	19.4	22.9	50.0	53.1
					63	22.3	24.6	63.0	59.1
20	—	—	—	—	75	19.5	22.3	36.8	19.3
					76	20.2	19.4	62.3	63.4
21	—	—	—	—	77	15.2	16.1	49.6	49.7
					78	17.9	18.2	58.9	66.5
22	—	—	—	—					
					Miaulih				
23	—	—	—	—					
					64	17.9	19.9	38.1	57.8
24	—	—	—	—	65	17.3	21.7	48.6	63.1
					66	23.3	33.8	55.6	65.3
25	—	—	—	—	67	21.8	25.3	53.1	53.7
					68	23.4	26.8	54.6	76.1
26	—	—	—	—	69	18.5	18.8	39.0	59.5
					79	19.3	22.7	53.7	59.7
27	—	—	—	—	71	17.6	18.9	47.3	58.5
					72	21.1	24.3	43.6	65.0
28	—	—	—	—	73	15.7	18.3	36.2	53.8

Table 3. Average height of green manure crops in all the demonstrations (cm.) (continued)

No. of demonstration	c. Surveyed prior to the harvest				No. of demonstration				
	Black bean		Blue bean			Black bean		Field pea	
	O	P	O	P		O	P	O	P
Taipei prefecture					Touryuan prefecture				
Shyhlin					Touryuan				
1	13.9	14.2	13.9	14.2	29	19.7	24.1	51.6	59.4
2	15.1	19.1	15.5	15.2	30	23.4	25.2	76.7	78.3
3	12.2	12.1	11.9	11.3	31	18.8	19.3	57.8	57.4
4	15.0	14.5	14.2	15.7	32	22.5	20.7	75.0	71.9
5	14.9	14.0	14.1	14.5	33	23.0	26.5	55.3	48.8
Taipei					34	36.5	36.3	65.0	71.0
6	27.3	24.4	26.6	33.3	35	22.5	21.3	46.4	62.7
7	18.4	19.4	20.3	20.8	36	23.2	24.5	53.2	62.4
8	18.0	20.2	21.3	22.4	37	19.0	23.0	52.6	56.5
9	18.1	22.3	20.4	22.1	38	19.6	20.7	49.1	59.7
10	20.5	25.9	20.1	20.8	Dalyuan				
11	18.9	19.3	17.2	20.0	39	24.7	28.3	35.0	54.5
12	20.7	23.1	19.7	21.0	40	24.5	27.6	35.2	53.3
13	19.3	19.8	21.3	21.6	41	18.3	18.7	51.6	55.0
74	18.4	19.0	19.0	19.2	42	18.6	21.1	39.7	55.1
Sanjong					43	16.6	18.6	29.9	36.7
14	32.6	31.1	35.2	31.6	44	21.5	22.9	35.4	53.6
15	33.9	34.0	34.8	36.3	45	21.3	32.2	45.4	45.6
16	33.3	29.6	30.2	33.7	46	20.1	22.2	34.4	68.3
17	23.6	23.9	25.9	23.7	47	19.4	22.4	52.1	64.7
18	24.6	25.2	25.7	25.4	48	22,1	23.0	44.7	55.7
Panchiao					Hsinchu prefecture				
19	20.9	19.4	23.5	25.1	Hsinchu				
20	21.3	20.2	19.4	19.6	49	28.4	32.4	66.1	77.7
21	18.3	20.0	19.5	21.3	50	28.5	32.2	88.3	81.7
22	18.5	19.2	20.7	23.7	51	22.3	25.2	64.3	63.1
23	17.9	18.5	16.4	18.5	52	28.5	30.5	85.2	95.2
24	17.3	17.5	19.0	17.0	53	33.1	34.3	86.7	90.3
25	15.6	18.2	16.2	17.4	54	26.1	28.3	75.3	66.1
26	19.2	21.3	19.5	18.1	55	21.9	21.6	56.1	63.2
27	19.0	23.0	21.6	21.2	56	25.7	23.0	56.2	64.2
28	19.6	21.0	20.5	21.5	57	21.9	23.4	68.8	74.8
					58	18.1	23.2	76.2	80.8
					Miaulih prefecture				
					Ciaonan				
					59	25.4	27.5	70.9	90.2
					60	28.1	26.4	86.3	82.7
					61	26.3	27.3	75.5	90.1
					62	33.8	29.3	90.4	91.2
					63	30.0	32.7	96.3	90.4
					75	25.4	25.4	64.9	84.1
					76	26.9	27.0	86.5	97.9
					77	22.2	22.4	79.6	85.3
					76	24.3	27.5	95.5	103.2
					Miaulih				
					64	27.6	23.7	65.3	65.3
					65	24.3	19.9	61.2	93.5
					66	30.6	35.6	86.6	93.2
					67	30.0	35.3	84.3	91.4
					68	27.5	30.1	87.9	96.5
					69	30.9	29.9	60.3	97.3
					70	25.6	25.4	83.9	98.1
					71	20.2	25.1	67.3	79.1
					72	24.3	31.2	72.3	86.3
					73	19.3	24.3	57.6	74.7

Note "O" indicates the plot treated with nothing

"P" indicates the plot treated with superphosphate.

Table 4. Average fresh weight of green manure crops in all the demonstrations (kg/ha.)

No. of demonstration	Black bean		Blue bean		No. of demonstration	Black bean		Field pea	
	O	P	O	P		O	P	O	P
Taipei prefecture					Touryuan prefecture				
Shyhlin					Touryuan				
1	920	760	430	410	29	1640	3650	770	970
					30	960	3020	2520	3510
2	2150	1720	540	460	31	2640	1800	2340	3110
					32	3990	3110	2040	2860
3	350	280	90	140	33	3720	5280	900	1310
					34	7920	8280	2520	3060
4	920	760	490	450	35	3240	342(	1130	1580
					36	1960	3270	1980	2390
5	500	1190	990	500	37	1350	2070	1620	3060
					38	1490	205(	1560	2090
Taipei					Dahyuan				
6	1430	1340	1300	1340					
					39	1080	1880	360	760
7	1150	1280	940	580	40	1080	1320	600	960
					41	1770	1980	1080	1800
8	1260	1440	730	910	42	1980	2520	540	1030
					43	1260	1540	530	640
9	1220	1360	990	1160	44	2180	3020	420	2100
					45	1880	2740	1350	1510
10	1280	1240	1110	1060	46	1080	2160	540	1260
					47	1260	2030	770	1640
11	1440	1440	720	900	48	2160	3010	600	870
12	1130	1160	1200	1160	Hsinchu prefecture				
					Hsinchu				
13	890	910	590	890					
					49	2080	3400	840	1040
74	1130	1220	820	890	50	2400	5600	1680	4200
					51	5600	5700	660	3450
Sanjong					52	1960	2710	420	1440
					53	1200	1900	1530	2000
14	2710	3480	1000	1050	54	2040	2280	940	970
					55	1080	1000	400	460
15	2999	2590	1280	680	56	1000	950	1080	1440
					57	820	1010	1200	1900
16	2640	288)	670	1600	58	510	600	380	460
17	1030	990	920	270	Miaulih prefecture				
					Chunan				
18	1270	1480	1900	1920					
					59	5360	2190	333e	3760
Panchiao					60	1680	1380	4250	5040
					61	930	1220	1890	4170
19	2640	1690	1100	1100	62	2640	1790	9210	9240
					63	2270	2510	11180	10640
20	1950	1590	220	390	75	870	1640	2880	4320
					76	2980	2950	6210	5540
21	970	1780	360	670	77	930	870	5720	6430
					78	1260	1230	6580	8350
22	3790	3580	820	1330					
					Miaulih				
23	1060	1240	240	290					
					64	1800	2320	1080	1460
24	900	770	190	130	65	1570	1800	1620	6660
					66	1730	1710	2970	2860
25	1830	1530	330	200	67	4250	3410	4840	6410
					68	2570	2610	3650	7630
26	1850	1740	330	330	69	1620	3470	3130	11570
					70	2090	2150	1370	3020
27	2110	1630	620*	380	71	1360	2820	2210	3880
					72	2630	4280	2570	5670
28	2040	2010	760	480	73	2120	1890	1380	5310

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant

No. of demonstration	Plot of				
	Black bean		Blue bean		Winter fallow
	O	P	O	P	
	a. Surveyed at about 30 days after tranaplantation				
Taipei prefecture					
Shyhlin					
1	32.6	32.5	30.3	30.9	30.0
	7.8	7.6	8.1	7.4	6.3
2	30.2	28.1	28.8	26.1	26.1
	8.0	7.3	6.9	6.8	6.6
3	22.7	22.8	23.2	22.2	23.8
	6.3	6.9	7.0	6.8	6.4
Taipei					
6	64.2	63.3	63.4	64.8	61.9
	14.5	12.0	12.2	12.0	11.6
7	31.4	31.7	32.3	31.2	31.7
	10.8	8.9	10.0	10.8	10.5
8	45.9	45.7	44.9	40.0	44.2
	19.2	21.9	21.4	17.7	14.6
9	42.9	43.7	42.3	44.5	43.9
	14.0	12.7	12.0	16.5	17.2
10	49.2	49.3	51.0	49.6	49.5
	20.7	26.7	18.1	19.0	17.9
11	40.9	41.1	41.3	42.5	43.6
	13.4	12.6	13.9	13.6	14.6
12	39.3	38.2	38.9	40.1	38.6
	14.3	17.4	16.9	19.6	18.0
13	45.4	45.1	44.5	43.1	42.1
	20.1	20.3	18.9	16.6	17.6
Sanjong					
14	39.3	39.2	40.4	40.0	39.7
	15.8	17.6	17.9	18.2	14.6

15	39.6	38.3	37.7	37.7	37.7
	14.2	14.8	14.2	14.7	13.4
16	33.7	38.2	36.5	37.1	35.7
	16.2	16.6	14.6	15.6	15.4
17	33.1	39.1	38.7	39.6	33.0
	13.3	13.9	15.3	16.5	14.9
18	30.2	23.5	30.1	31.3	30.5
	10.9	11.0	12.6	12.9	9.7
Panchjao					
19	32.3	32.0	33.0	32.3	32.3
	6.3	7.4	7.2	7.3	7.3
20	35.0	33.4	34.3	34.6	34.6
	9.8	8.2	7.9	8.0	8.0
21	36.9	37.9	36.9	37.8	37.8
	9.0	7.6	7.8	7.1	7.1
22	39.8	38.6	38.9	39.7	39.7
	7.7	7.6	7.9	7.3	7.3
23	36.6	36.3	37.1	37.0	37.0
	9.4	8.8	8.6	9.5	9.5
24	37.2	37.1	37.8	37.6	37.0
	7.9	8.2	8.1	8.7	8.3
25	38.8	38.1	40.0	41.5	39.8
	7.3	6.9	6.9	6.5	6.7
26	40.0	35.5	35.7	36.2	39.8
	6.8	7.1	6.3	6.7	6.6
27	38.9	34.8	35.1	35.7	39.1
	6.4	6.5	6.3	6.7	6.3
28	40.1	41.0	41.0	41.7	39.9
	7.0	7.9	7.5	7.5	6.6

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
	a. Surveyed at about 30 days after transplantation				
Touryuan prefecture					
Touryuan					
29	29.6	31.9	30.1	31.6	29.9
	5.1	6.4	5.8	5.1	5.5
30	32.2	34.3	35.1	34.1	31.5
	6.2	7.2	6.9	7.1	6.0
31	45.3	45.4	47.5	45.0	47.5
	5.8	5.7	5.8	6.0	5.3
32	43.7	42.3	42.5	44.0	42.3
	6.3	5.9	6.7	7.2	5.5
33	31.5	31.8	33.2	30.9	31,0
	5.4	5.5	4.8	5.6	3.8
34	28.9	29.5	30.2	30.2	27.1
	6.9	8.1	8.4	8.7	7,4
35	39.7	42.5	40.7	45.8	37.3
	4.5	4.8	4.6	5.0	4.8
36	29.8	30.2	30.4	31.5	28.5
	6.5	7.2	6.4	6.8	6.6
37	28.5	29.3	29.1	30.3	28.7
	6.3	6.5	6.4	6.5	6.1
38	32.0	37.3	39.4	38.3	33.7
	5.6	5.2	6.5	6.3	5.3
Daiyuan					
39	33.3	35.3	34.4	34.7	33.4
	6.7	8.1	7.4	6.3	5.7
40	38.6	38.3	38.5	39.2	37.1
	7.9	7.8	8.1	9.1	5.7
41	37.8	33.4	37.3	37.4	33.4
	6.8	6.4	5.2	6.3	4.6

42	36.2	38.9	35.5	42.4	37.7
	5.9	7.0	7.0	9.9	5.7
43	36.8	40.1	37.1	38.7	37.5
	10.7	10.7	9.3	12.8	9.5
44	28.0	29.9	29.2	30.1	27.8
	5.6	6.1	6.6	6.6	6.6
45	37.6	35.5	38.2	37.0	38.6
	11.2	9.9	7.9	12.5	10.5
46	31.7	30.0	29.0	31.4	29.5
	5.9	6.3	5.1	5.7	6.1
47	32.0	34.2	34.2	35.5	35.1
	4.5	5.3	5.2	5.7	5.0
48	31.7	34.6	30.9	32.5	31.7
	6.3	6.0	5.1	5.4	6.1
Hsinchu prefecture					
Hsinchu					
49	39.1	39.6	39.4	38.3	38.8
	18.6	17.6	18.3	16.7	16.0
50	41.5	41.0	40.5	49.9	38.9
	17.6	15.4	14.6	16.9	13.1
51	35.5	33.4	34.6	33.2	34.4
	6.8	8.0	6.2	7.0	6.3
52	37.0	37.7	35.9	39.2	35.2
	6.9	6.3	6.0	6.4	5.2
53	40.3	39.3	38.9	37.8	38.3
	17.3	17.0	11.6	13.5	15.1
54	37.4	37.2	36.3	38.6	33.4
	11.9	12.2	11.9	11.2	8.4
55	38.9	38.8	39.1	33.7	85.3
	13.6	15.2	14.2	13.2	10.3
56	40.4	39.5	38.2	39.0	39.6
	12.8	13.3	11.7	13.8	13.5
57	44.6	43.2	43.7	43.4	42.6
	10.9	10.4	8.3	10.1	10.5
58	37.8	36.6	38.1	35.9	34.2
	10.8	9.1	10.3	10.9	9.5

Miaulih prefecture					
Chunan					
59	53.6	54.5	53.3	54.2	51.5
	23,6	23.8	24.7	24.0	23.9
60	50.2	51.4	52.2	53.7	51.0
	22.2	23.6	22.9	23.0	23.2
61	51.6	53.3	52.8	54.0	53.7
	20.7	19.8	20.5	20.4	18.7
62	52.4	52.6	52.1	51.9	50.3
	23.2	23.6	23.3	21.0	21.9
63	50.9	52.5	52.8	53.6	53.3
	22.6	23.3	22.8	23.9	23.0
Miaulih					
64	35.8	38,5	34.7	35.5	35.5
	6.0	7.0	6.9	6.6	5.9
65	35.5	35.4	37.6	37.1	36.1
	5.4	4.9	5.8	4.6	4.8
66	31.7	31.7	30.0	30.4	28.3
	8.8	9.3	9.4	10.0	9.4
67	32.9	37.7	37.9	38.2	35.8
	9.1	8.7	9.6	11.1	9.4
68	35.6	34.6	36.0	31.8	35.9
	9.8	6.7	9.1	7.5	6.0
69	30.8	31.7	31.4	30.9	29.0
	6.9	4.7	5.5	7.5	4.8
70	30.2	31.3	31.3	32.7	30.1
	7.6	7.1	7.9	7.1	7.1
71	29.5	29.8	30.2	29.8	31.4
	5.5	6.8	6.0	5,1	4.9
72	29.3	29.5	30.0	30.2	28.5
	6.9	8.3	7.8	8.9	7.6
73	30.8	31.7	29.2	29.3	28.3
	5.2	6.5	6.5	7.3	9.4

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Blue bean		Winter fallow
	O	P	O	P	
	b. Surveyed at about 60 days after transplantation				
Taipei prefecture					
Shihlin					
1	60.6	55.1	55.1	56.3	54.4
	30.2	29.5	24.7	29.2	29.7
2	55.4	56.5	56.9	56.4	56.9
	33.3	34.7	33.2	33.5	37.7
3	47.5	47.8	49.1	44.8	58.1
	33.7	34.8	36.7	32.5	32.5
Taipei					
6	72.4	72.8	69.9	71.0	67.9
	11.2	11.8	14.3	11.3	10.0
7	57.6	60.9	56.0	56.7	55.6
	14.2	15.4	15.9	13.1	13.7
8	74.3	75.3	70.7	75.3	71.3
	16.3	20.3	16.3	15.0	15.7
9	71.7	67.0	68.5	69.0	72.4
	16.3	15.8	15.4	14.9	13.1
10	73.0	71.6	72.5	73.2	72.4
	13.4	14.3	16.6	15.8	15.4
11	67.1	70.4	70.5	66.8	67.7
	19.9	23.2	16.1	19.5	22.3
12	72.4	71.0	71.4	73.7	72.2
	20.7	22.2	18.7	22.3	20.3
13	75.3	76.5	76.2	78.5	83.0
	18.2	19.9	16.7	22.1	19.6
Sanjong					
14	64.7	64.5	65.5	65.2	62.5
	14.5	14.9	15.7	16.8	16.6

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Blue bean		Winter fallow
	O	P	O	P	
	b. Surveyed at about 60 days after transplantation				
Sanjong					
15	61.9	64.3	63.2	64.3	62.3
	18.3	18.5	17.5	18.1	18.1
16	67.2	67.6	68.8	68.7	67.0
	16.1	15.3	16.0	16.0	15.9
17	64.1	67.0	67.4	65.5	67.0
	14.7	15.2	14.7	14.3	17.6
18	59.8	56.7	56.6	56.3	57.0
	18.9	17.3	17.5	16.9	16.7
Panchiao					
19	71.2	74.3	76.1	72.7	70.0
	12.7	12.9	13.8	12.1	12.5
20	82.2	85.2	88.2	82.4	86.9
	9.1	11.0	14.2	12.9	10.7
21	84.1	86.8	90.1	85.4	80.5
	12.2	14.8	13.3	15.3	11.7
22	85.6	84.2	86.5	85.9	85.9
	12.2	11.9	11.5	12.3	12.6
23	63.3	64.3	69.1	64.3	64.5
	11.2	11.7	12.8	14.4	14.6
24	68.9	71.7	73.6	73.1	73.3
	14.1	14.0	13.2	15.7	14.4
25	73.8	72.9	72.9	72.8	74.0
	12.6	12.1	12.6	13.3	11.7
26	71.2	74.3	76.1	72.7	70.0
	12.7	12.9	13.5	12.1	12.5
27	76.9	74.1	72.1	72.6	76.4
	16.2	15.8	15.1	16.5	13.2
28	77.1	75.6	74.9	74.0	77.0
	15.2	12.2	13.7	13.4	13.1

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
Touryuan prefecture	b. Surveyed at about 60 days after transplantation				
Touryuan					
29	51.3	49.6	51.4	59.8	45.9
	8.3	8.7	7.7	9.4	7.2
30	67.2	69.0	69.5	71.5	65.1
	14.6	15.0	13.7	14.3	11.7
31	55.8	57.7	59.7	61.6	61.9
	19.6	12.5	10.6	11.8	12.4
32	49.8	50.9	52.2	52.9	52.5
	13.0	11.0	12.7	11.5	10.3
33	61.3	62.0	62.2	62.2	65.1
	11.0	12.8	10.7	10.4	10.0
34	58.1	58.2	57.1	58.2	55.9
	16.8	16.5	16.0	16.4	14.7
35	54.2	53.2	54.4	58.6	52.8
	17.9	18.7	16.5	21.0	17.9
36	61.9	60.4	61.9	61.4	59.5
	13.6	12.9	10.4	11.5	10.6
37	49.5	52.6	53.6	52.5	51.6
	13.2	13.6	15.4	14.7	11.7
	55.1	59.1	56.9	58.1	56.7
Dahyuan	14.1	13.0	12.7	12.3	12.2
	76.7	76.3	75.7	76.6	74.2
	10.0	9.2	10.5	10.8	10.2
40	75.9	78.5	74.0	75.5	70.8
	10.7	10.9	10.1	10.2	10.3
41	75.6	76.5	73.4	72.1	69.5
	11.4	11.5	10.4	10.3	9.9
42	65.3	66.6	66.0	67.8	65.0
	12.2	11.9	11.2	11.4	11.4
43	78.7	80.1	76.8	77.7	76.2
	13.2	13.4	12.3	12.8	11.7

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
	b. Surveyed at about 60 days after transplantation				
Dahyuan					
	73.6	76.8	73.3	73.5	73.9
	11.9	12.7	13.7	12.9	11.0
45	74.5	75.5	79.1	79.2	72.8
	13.0	14.1	13.0	14.9	12.3
46	59.9	59.6	53.7	57.9	55.5
	10.0	11.4	10.3	11.0	9.3
47	49.9	54.9	56.7	55.7	55.5
	10.9	15.1	11.3	12.9	10.3
48	61.8	65.3	61.8	63.0	58.0
	13.3	13.6	12.5	12.8	11.6
Hsinchu prefecture					
49	69.3	69.0	64.8	66.4	64.7
	17.0	19.2	17.6	17.7	17.0
50	62.0	63.8	62.0	62.6	60.5
	21.2	18.9	16.6	16.7	17.7
51	58.9	59.5	56.9	59.6	55.9
	13.0	12.9	13.3	13.9	14.2
52	64.9	64.5	63.0	63.5	62.9
	18.3	18.2	14.8	15.8	15.1
	61.8	63.1	62.8	62.8	62.3
	18.0	19.0	17.7	21.0	19.4
54	60.1	60.5	59.4	59.7	58.4
	21.2	19.5	18.7	21.9	17.9
55	58.4	63.2	64.3	63.6	63.8
	17.9	20.0	17.1	14.7	15.1
56	62.6	65.4	61.4	62.2	60.0
	18.0	19.8	15.8	16.3	15.4
57	66.2	70.1	66.7	68.9	64.4
	22.0	20.4	20.4	22.5	17.7
58	63.2	69.3	67.2	67.5	59.3
	16.1	18.1	14.6	16.4	14.7

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
	b. Surveyed at about 60 days after transplantation				
Miaulih prefecture					
Chunan					
59	89.6	89.6	91.2	91.4	93.2
	15.7	15.3	18.9	17.5	15.5
60	95.5	97.6	98.6	100.3	93.7
	20.5	20.3	19.2	18.5	20.6
61	95.7	96.7	100.0	102.1	102.4
	20.9	19.1	16.0	19.2	19.0
62	92.6	90.8	100.0	97.9	95.9
	17.4	16.0	18.5	20.0	17.6
63	96.8	91.4	96.5	99.8	100.5
	18.9	16.1	15.5	16.1	14.5
Miaulih					
64	76.1	73.5	73.5	75.8	73.5
	17.5	15.8	15.2	15.0	15.1
65	77.4	80.7	74.8	83.7	73.8
	11.4	10.1	12.0	12.8	10.1
66	61.9	60.9	69.4	64.8	65.3
	17.1	20.7	20.3	22.3	19.3
67	62.9	65.5	69.1	66.9	65.3
	21.5	18.7	19.4	19.1	19.1
68	58.4	60.8	61.7	61.6	59.6
	12.5	14.7	16.0	16.0	14.5
69	54.2	56.7	55.3	61.3	55.4
	14.4	17.0	15.3	16.6	13.2
70	74.0	75.6	70.1	75.6	69.9
	16.3	14.3	15.7	13.4	16.4
71	71.6	67.1	69.7	71.3	69.1
	18.3	19.3	19.1	21.0	19.6
72	55.1	58.3	53.5	62.2	60.9
	17.1	17.6	18.1	21.2	18.1
73	61.3	59.0	59.3	59.6	56.2
	20.2	20.1	18.5	19.5	20.2

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Blue bean		Winter fallow
	O	P	O	P	
	c. Surveyed prior to the harvest				
Taipei prefecture					
Shihlin					
1	73.1	71.7	72.6	76.5	73.8
	26.4	24.2	22.8	24.2	23.3
2	77.0	78.9	75.6	75.5	75.3
	22.8	20.8	21.9	22.2	21.5
3	82.2	82.3	82.4	79.4	80.6
	20.8	22.0	22.4	19.7	23.6
Taipei					
6	93.9	95.8	89.9	91.5	88.9
	10.0	10.1	11.0	9.2	10.1
7	85.8	91.0	94.1	85.5	84.9
	14.8	14.5	15.0	14.5	13.4
8	86.5	90.5	86.6	85.5	84.6
	14.8	17.4	15.3	15.5	15.7
9	88.0	90.7	85.6	96.4	91.1
	12.9	15.2	14.2	14.6	15.3
10	95.1	93.0	97.2	97.3	93.3
	24.3	24.3	21.7	21.2	20.0
11	90.6	91.0	91.5	91.7	89.2
	16.1	20.4	17.7	20.3	18.9
12	84.4	84.5	84.6	88.4	85.3
	13.3	16.9	16.9	17.7	12.7
13	86.5	86.2	85.9	86.4	85.0
	14.8	15.6	14.2	15.3	13.3
Sanjong					
14	85.3	85.7	84.6	88.1	88.2
	13.6	15.2	16.3	14.9	16.1

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Blue bean		Winter fallow
	O	P	O	P	
	c. Surveyed prior to the harvest				
Sanjong					
15	90.1	86.8	86.6	84.8	87.5
	13.7	14.8	13.4	14.2	13.5
16	101.0	98.3	100.3	99.0	103.4
	13.1	15.8	13.0	13.1	12.7
14	85.5	83.6	86.0	91.5	90.6
	13.7	13.1	19.6	13.7	16.6
18	91.0	90.6	90.4	91.3	89.0
	14.4	14.1	15.9	14.6	15.3
Panchiao					
19	86.9	86.6	86.4	85.7	86.9
	12.0	11.5	11.7	11.8	11.5
20	90.5	86.8	86.0	89.0	85.7
	11.6	12.0	11.7	12.0	12.6
21	71.6	88.0	88.1	92.9	92.2
	13.9	13.4	13.3	11.2	12.6
22	89.3	91.7	91.7	91.2	89.2
	12.9	13.5	13.5	12.9	12.4
23	79.2	80.3	80.3	77.3	75.5
	10.7	12.0	11.1	10.3	10.3
24	85.8	81.2	89.5	84.7	89.3
	12.6	12.3	11.4	13.4	13.5
25	85.6	89.6	86.7	36.0	88.8
	11.1	9.7	12.2	11.4	13.2
26	87.0	86.4	87.0	83.8	88.0
	11.7	13.0	11.2	11.1	12.6
27	91.8	88.3	89.1	87.8	88.7
	12.1	12.1	11.5	13.6	13.9
28	89.3	87.2	88.0	87.0	86.8
	13.7	13.3	12.1	12.2	11.1

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
	c. Surveyed prior to the harvest				
Touryuan prefecture					
Touryuan					
29	81.8	86.7	87.0	87.6	81.1
	16.7	15.5	16.6	12.0	13.4
30	109.5	112.5	112.0	110.9	104.3
	14.9	16.7	13.7	16.1	13.3
31	88.9	88.4	88.7	90.7	84.6
	12.5	12.6	14.4	13.2	12.8
32	84.3	85.7	89.8	87.5	86.8
	13.2	14.4	13.1	13.0	10.3
33	91.4	96.2	88.2	89.0	98.1
	11.3	13.6	10.8	12.9	11.4
34	91.1	91.8	90.6	92.5	92.0
	16.5	17.7	15.3	17.2	14.3
35	102.3	106.4	100.9	112.9	102.0
	19.8	19.3	20.6	22.9	19.2
36	99.7	97.4	96.8	100.0	95.3
	12.0	13.8	13.0	14.8	12.9
37	89.4	87.3	87.7	85.7	81.7
	13.5	14.6	12.2	13.3	13.3
38	83.5	84.4	83.2	83.5	85.3
	12.3	10.7	12.8	11.3	10.6
Dahyuan					
39	86.4	95.0	87.3	90.3	83.3
	12.1	13.4	11.2	13.5	14.0
40	88.3	89.0	86.2	86.9	86.6
	11.5	12.2	11.4	12.2	10.3
41	87.3	94.9	95.7	95.4	91.8
	12.1	11.4	10.7	12.7	11.3
42	93.9	94.2	95.8	91.6	95.1
	10.0	11.9	9.1	9.8	11.2
43	86.8	87.6	84.6	86.2	85.2
	12.3	12.5	11.5	12.2	11.1

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
	c. Surveyed prior to the harvest				
Dahyuan					
44	83.6	88.3	92.7	87.9	84.6
	11.0	13.4	12.6	12.0	11.3
45	93.7	98.3	101.7	97.9	96.6
	13.4	12.8	12.7	15.3	13.3
46	80.1	83.2	77.9	80.4	78.6
	10.1	10.1	11.5	10.1	10.1
47	75.3	83.0	81.1	80.1	86.6
	10.3	14.1	11.3	12.8	11.6
48	89.5	90.7	88.4	90.3	84.5
	13.0	13.5	12.0	10.3	9.7
Hsinchu prefecture					
Hsinchu					
49	101.0	103.0	99.0	101.0	98.7
	15.4	15.6	15.3	15.8	15.2
50	98.9	102.6	98.6	99.4	95.3
	17.8	17.8	17.4	17.0	16.8
51	104.7	103.7	103.3	105.9	97.7
	12.6	13.2	11.9	11.6	14.6
52	109.9	107.6	104.0	108.0	98.6
	15.3	14.4	14.1	15.9	12.8
53	96.3	98.1	95.7	96.7	93.6
	17.2	15.2	16.0	14.7	14.9
54	95.1	95.1	93.8	94.0	92.2
	15.6	15.5	15.6	15.2	14.2
55	101.2	107.0	94.6	101.0	94.2
	17.3	16.7	15.2	16.3	14.6
56	88.3	92.5	87.9	90.2	87.2
	15.4	16.8	16.0	15.2	14.4
57	95.2	99.4	92.5	94.5	90.4
	14.9	15.2	14.4	16.2	13.9
58	95.0	93.0	90.8	92.1	89.6
	16.4	16.1	15.6	15.9	13.3

Table 5. Effect of green manuring and calcium superphosphate on the height in centimeter and tillering in number of rice plant (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
	c. Surveyed prior to the harvest				
Miaulih prefecture					
Chunan					
59	120.8	117.3	123.9	117.3	120.0
	14.9	16.4	18.8	17.2	18.0
60	125.6	123.0	121.4	123.1	127.2
	21.9	19.9	19.8	18.8	24.9
61	127.3	131.1	129.5	126.9	129.8
	16.5	19.9	17.1	18.4	17.4
62	128.3	127.8	127.2	127.0	128.9
	18.6	20.4	20.0	17.0	20.7
63	126.9	130.8	130.3	127.0	129.3
	17.6	19.6	17.3	18.2	17.3
Miaulih					
64	102.2	102.4	103.1	99.8	102.8
	13.0	12.2	10.3	11.6	9.8
65	103.1	105.2	104.8	108.3	100.6
	7.8	7.0	7.5	8.2	6.2
66	99.5	98.6	98.5	96.0	99.7
	10.0	12.7	12.0	13.7	11.6
67	91.4	93.6	97.5	90.6	91.4
	12.3	13.1	15.1	13.5	12.6
68	88.3	83.6	91.0	95.6	93.1
	11.4	10.1	12.6	16.7	9.5
69	87.0	86.4	87.0	94.4	84.6
	10.6	11.6	11.0	14.9	9.3
70	102.4	104.2	104.4	104.7	103.0
	7.8	9.2	9.9	11.0	8.7
71	109.0	109.0	108.6	107.3	105.3
	14.1	13.7	12.2	13.7	12.3
72	99.5	98.5	96.9	95.9	99.1
	10.2	12.8	11.9	13.6	11.8
73	101.6	98.7	98.7	95.7	94.7
	13.3	12.8	14.2	14.8	12.0

Note : "O" denotes the plot treated with nothing.

"P" denotes the plot treated with superphosphate.

The data in the upper row of each demonstration indicate the height of rice plant.

The data in the lower row of each demonstration indicate the number of tillering.

Table 6. Effects of green manuring and superphosphate on the fresh weight of following rice crop (kg/ha.)

No. of demonstration	Plot of				
	Black bean		Blue bean		Winter fallow
	O	P	O	P	
Taipei prefecture					
Shyhlin					
1	6750	7200	6300	5850	7090
	13500	13280	13500	11700	12150
2	6500	6080	5960	6190	5960
	11930	11030	11250	11700	11480
3	6190	5960	6080	5850	5700
	11360	10580	10580	9340	10580
Taipei					
6	5850	5850	5400	4500	4500
	13500	11700	11250	10800	9900
7	3460	3940	3810	4280	3260
	7540	7760	7430	9000	6350
8	6190	7200	7200	7200	6300
	12960	11360	10800	12600	7760
9	9230	10500	8100	7760	7760
	12940	13160	12940	13160	12600
10	7200	7200	5400	7200	4800
	12400	12580	12400	12630	10530
11	7760	7430	7540	7540	6190
	13160	12600	12940	13160	12940
12	3600	3600	2700	3600	2700
	12600	12600	12600	13500	12000
13	3150	3280	3000	3120	2930
	9560	9580	9300	9360	8970
Sanjong					
14	7500	7500	8600	8600	9500
	12500	13500	13100	13250	14250

Table 6. Effects of green manuring and superphosphate on the fresh weight of following rice crop (kg/ha) (Continued)

No. of demonstration	Plot of				
	Black bean		Blue bean		Winter fallow
	O	P	O	P	
Sanjong					
15	6600	6600	6750	6500	6750
	10900	10500	9350	9500	10000
16	6000	5600	5600	5250	5750
	10100	9850	9350	9750	9350
17	7100	6000	4850	6000	6750
	12750	9750	9350	10500	12750
18	6350	6350	6000	6500	5600
	9750	9350	9250	10600	7100
Panchiao					
19	4280	3600	3600	3600	3600
	8230	8550	8550	8100	8210
20	2930	4050	3380	3600	4050
	5400	6300	6530	6300	6300
21	6750	6530	6750	6980	5630
	9450	10130	9680	9680	12500
22	5630	5510	5850	5400	5400
	9900	10010	10800	11250	9900
23	3380	3380	3600	3330	4280
	4280	6300	6300	4730	7200
24	4950	4050	3600	4950	5400
	9900	8100	9000	9450	10910
25	4950	4730	5180	5400	5290
	8330	8100	8440	8780	8650
26	4730	4500	5180	5290	4950
	8100	7700	8550	8550	7760
27	4950	4500	4730	4500	4730
	9000	8330	8100	8550	9000
28	6080	5180	5630	4950	5180
	9450	7880	6980	7200	6750

Table 6. Effects of green manuring and superphosphate on the fresh weight of following rice crop (kg/ha.) (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
Touryuan prefecture					
Touryuan					
29	3380	3830	3830	3830	3380
	7200	7400	7880	6980	6900
30	8100	8100	5850	8100	6750
	11700	12600	10800	12600	9900
31	5400	3830	5510	5850	4730
	5850	6080	5180	5400	5400
32	4390	4160	4610	4280	4050
	6190	5290	5290	6080	4950
33	5180	5400	4050	4500	4950
	5850	6300	4500	5400	6300
34	4950	5180	5290	5630	5060
	6530	6980	6530	6750	6530
35	4950	4730	4730	5400	4950
	10350	10130	9680	11700	9900
36	5400	4730	5400	6750	5290
	8100	6750	7200	7200	7090
37	7200	5400	5400	3830	5850
	7200	7200	7650	7880	7650
38	4050	3940	3940	4500	3830
	6980	6400	7300	7200	6740
Dayhuan					
39	4670	4780	5060	4890	4440
	9230	10300	9600	11250	8780
40	3600	3600	3490	3540	3540
	6240	6860	5960	6300	6190
41	5180	5960	5960	4390	4440
	7200	8780	8100	6300	7200
42	4500	4610	5400	5850	4610
	6750	7200	7760	7430	7200
43	4730	4280	3490	4730	3260
	7090	7030	6750	7200	5900

Table 6. Effects of green manuring and superphosphate on the fresh weight of following rice crop (kg/ha.) (Continued)

o. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
Dayhuan					
44	4220	4110	4220	3990	3600
	6530	6530	6750	5530	6300
45	5850	5850	5400	5400	5510
	7990	8100	8550	8550	9000
46	3150	3710	2930	3710	3090
	4840	6060	5630	6530	4500
47	2480	2760	3380	3090	3090
	3830	3830	4730	4050	4390
48	3830	4110	2870	3710	3210
	5400	5850	4390	5180	4540
Hsinchu prefecture					
Hsinchu					
49	4390	4610	4050	4390	3150
	9230	9450	9450	9340	9450
50	3600	4050	2930	3600	2700
	10800	9900	9900	9000	8100
51	5350	6680	5400	6380	4730
	9000	9000	8550	8330	7430
52	3900	4150	3880	4050	3720
	8420	8520	9280	9340	8300
53	4500	5060	3930	4730	3830
	9340	11030	9340	9560	8330
54	4280	4500	3710	4390	2700
	8100	8580	8440	8330	8100
55	4280	4730	3600	4500	3380
	7540	7880	7200	7650	7090
56	4500	5180	4050	4610	3830
	8100	7550	8430	8330	6750
57	4280	4500	3960	4280	3380
	7090	7430	6750	8200	6100
58	3480	3820	4270	4500	3980
	7650	7890	8030	8430	7820

Table 6. Effects of green manuring and superphosphate on the fresh weight of following rice crop (kg/ha.) (Continued)

No. of demonstration	Plot of				
	Black bean		Field pea		Winter fallow
	O	P	O	P	
Miaulih prefecture					
Chunan					
59	5960	5740	5630	5850	6860
	9900	9790	10530	10690	11140
60	9000	8550	10130	9680	8780
	22500	22500	22730	22730	22500
61	7200	6080	6980	6750	5850
	9000	8210	8440	7650	12150
62	7880	9000	9680	9000	6530
	16200	13500	14180	16200	13730
63	7430	7650	7310	7990	6980
	13730	13500	13950	14180	13160
Miaulih					
64	4160	4610	4150	4500	4160
	6750	7650	7200	7540	7200
65	3710	4050	3940	5060	3490
	5400	6300	5850	7200	5180
66	5620	5850	6060	6300	5400
	7510	8210	7990	8210	6530
67	6190	5740	6190	6300	5180
	9000	7880	8100	9000	7200
68	4050	3830	4050	5850	5180
	5630	5850	5960	7760	7650
69	2810	3380	3150	4610	2930
	4280	5400	5290	8100	3710
70	2810	4160	3940	4160	3600
	8550	7760	7200	7200	6750
71	5400	5400	5350	5960	3900
	13500	11700	12600	11700	10800
72	5400	6750	6080	6850	6300
	8550	9450	8100	9900	9900
73	5850	6130	5630	4730	5000
	10350	10350	8780	7830	8100

Note : In each number, the upper row denotes the fresh weight of grain, while the lower row denotes the fresh weight of straw.