◉ 비료(고정)와 농작물(랜덤)에 따른 산출량

비료	농작물	수확량					
A	1	22.1	24.1	19.1	22.1	25.1	18.1
	2	27.1	15.1	20.6	28.6	15.1	24.6
	3	22.3	25.8	22.8	28.3	21.3	18.3
	4	19.8	28.3	26.8	27.3	26.8	26.8
	5	20	17	24	22.5	28	22.5
B	1	13.5	14.5	11.5	6	27	18
	2	16.9	17.4	10.4	19.4	11.9	15.4
	3	15.7	10.2	16.7	19.7	18.2	12.2
	4	15.1	6.5	17.1	7.6	13.6	21.1
	5	21.8	22.8	18.8	21.3	16.3	14.3
C	1	19	22	20	14.5	19	16
	2	20	22	25.5	16.5	18	17.5
	3	16.4	14.4	21.4	19.9	10.4	21.4
	4	24.5	16	11	7.5	14.5	15.5
	5	11.8	14.3	21.3	6.3	7.8	13.8

```
data<- scan(what=list("","","",1))
A 1 22.1 A 1 24.1 A 1 19.1 A 1 22.1 A 1 25.1 A 1 18.1
A 2 27.1 A 2 15.1 A 2 20.6 A 2 28.6 A 2 15.1 A 2 24.6
A 3 22.3 A 3 25.8 A 3 22.8 A 3 28.3 A 3 21.3 A 3 18.3
A 4 19.8 A 4 28.3 A 4 26.8 A 4 27.3 A 4 26.8 A 4 26.8
A 5 20 A 5 17 A 5 24 A 5 22.5 A 5 28 A 5 22.5
B 1 13.5 B 1 14.5 B 1 11.5 B 1 6 B 1 27 B 1 18
B 2 16.9 B 2 17.4 B 2 10.4 B 2 19.4 B 2 11.9 B 2 15.4
B 3 15.7 B 3 10.2 B 3 16.7 B 3 19.7 B 3 18.2 B 3 12.2
B 4 15.1 B 4 6.5 B 4 17.1 B 4 7.6 B 4 13.6 B 4 21.1
B 5 21.8 B 5 22.8 B 5 18.8 B 5 21.3 B 5 16.3 B 5 14.3
C 1 19 C 1 22 C 1 20 C 1 14.5 C 1 19 C 1 16
C 2 20 C 2 22 C 2 25.5 C 2 16.5 C 2 18 C 2 17.5
C 3 16.4 C 3 14.4 C 3 21.4 C 3 19.9 C 3 10.4 C 3 21.4
C 4 24.5 C 4 16 C 4 11 C 4 7.5 C 4 14.5 C 4 15.5
C 5 11.8 C 5 14.3 C 5 21.3 C 5 6.3 C 5 7.8 C 5 13.8
names(data) <- c("fertil", "variety", "yield")
df <- data.frame(data)
```

```
library(sasLM)
RanTest(yield~fertil+variety+fertil*variety, df, Random="variety"
```