

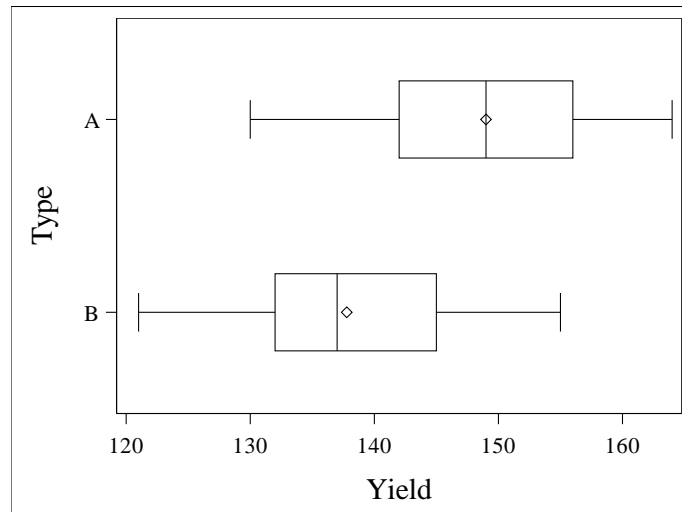
STAT 500 Homework 1

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1. (a)

Statistic	Type A	Type B
Range Sample	34	34
Q1	142	132
Q3	156	145
IQR	14	13
Median	149	137
Sample Mean	149	137.78
Std. Dev.	9.23	9.14

(b)

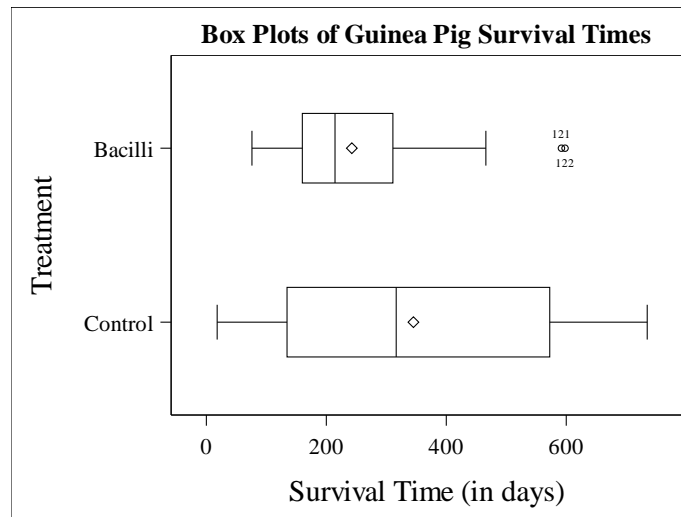


(c) The varying ranges of the yield of type A and type B are similar; there is overlapping in the yields of type A and type B; on average, type A tends to have bigger yields than that of type B.

2. (a)

Statistic	Bacilli Treatment	Control
Range Sample	522	717
Q1	160	134.5
Q3	311	572.5
IQR	151	438
Median	214.5	316.5
Sample Mean	242.53	345.22
Std. Dev.	117.93	222.21

(b)



(c) The range of survival time with Bacilli treatment gets smaller compared to the control group, the survival times are more concentrated; the survival times with treatment tend to be shorter than the control group, and mostly overlap with lower part of the control group.

(d) According to the stem and leaf display, the survival times in the control group are mainly around 100 or 600; With treatment, the survival times are around 100 or 200.