

22. Fecundity of fruitflies

Sokal, R.R. and Rohlf, F.J. (1981) *Biometry*, 2nd edition, San Francisco: W.H. Freeman, 239.

The data (collected by R.R. Sokal) give the per diem fecundity (number of eggs laid per female per day for the first 14 days of life) for 25 females of each of three genetic lines of the fruitfly *Drosophila melanogaster*. The lines labelled RS and SS were selectively bred for resistance and for susceptibility to DDT, respectively, and the NS line is a nonselected control strain. The aim was to test two hypotheses. First, did the two selected lines (RS and SS) differ in fecundity from the nonselected line? Second, did the line selected for resistance differ in fecundity from the line selected for susceptibility?

Resistant (RS)	Susceptible (SS)	Nonselected (NS)
12.8	38.4	35.4
21.6	32.9	27.4
14.8	48.5	19.3
23.1	20.9	41.8
34.6	11.6	20.3
19.7	22.3	37.6
22.6	30.2	36.9
29.6	33.4	37.3
16.4	26.7	28.2
20.3	39.0	23.4
29.3	12.8	33.7
14.9	14.6	29.2
27.3	12.2	41.7
22.4	23.1	22.6
27.5	29.4	40.4
20.3	16.0	34.4
38.7	20.1	30.4
26.4	23.3	14.9
23.7	22.9	51.8
26.1	22.5	33.8
29.5	15.1	37.9
38.6	31.0	29.5
44.4	16.9	42.4
23.2	16.1	36.6
23.6	10.8	47.4