*Chapter 12 notes* ***for Agri-food research***

Summary from page 310

*Poor statistical practice has some responsibility for the crisis in the reproducibility of science.*

For example, choosing convenient or cheap sample rather than something that is representative; failing to collect information on possible confounding factors.

‘To consult the statistician after an experiment is finished is often merely to ask him to conduct a post mortem examination. He can perhaps say what the experiment died of.’ R A Fisher

Spiegelhalter, David. The Art of Statistics (Pelican Books) (p. 345). Penguin Books Ltd. Kindle Edition.

*Deliberate fabrication of data appears to be fairly rare, but errors in statistical methods are frequent.*

*An even greater problem is questionable research practices that tend to lead to exaggerated claims of statistical significance.*

*In the pipeline by which statistical evidence reaches the public, press offices, journalists and editors add to the flow of unjustified statistical claims through their use of questionable interpretation and communication practices.*