

Quiz 22) April 22, 2004

A student from an Agricultural Engineering school is studying the use of cow and pig manure as fertilizer (manure source is of interest). The manure was applied in one of two forms, fresh or processed (also of interest). The fresh manure was applied before planting and again after 3 months. The processed manure was applied every 3 days as a liquid effluent from a “biodigester”. The four combinations were then cow-fresh, pig-fresh, cow-effluent and pig-effluent.

The four combinations were applied to a cassava crop for 5 months (1/12/97 to 30/4/98). The cassava plants were arranged in three irrigated fields (fields are a potential source of variation, but not a variable of interest) such that each treatment occurred once in each field in a 4 x 2.5 m plot.

How would this experiment be analyzed if the variable of interest was the total combined biomass from two harvests (at 3 and 5 months)?