Automatic report for a Randomized Complete Block Design (RCBD)

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March 14, 2019

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# 1. Model specification and data description

There are data from 4 treatments evaluated using a randomize complete block design with 2 blocks. The statistical model is

where

* is the observed response with treatment and block .
* is the mean response over all treatments and blocks.
* is the effect for treatment .
* is the effect for block .
* is the error term.

In this model we assume that the errors are independent and have a normal distribution with common variance, that is, .

# 2. Analysis for trait Wheat\_Grain\_Subsample dry weight\_g

There is more than one datum for at least one treatment in at least one replication. This could be the result of a mislabeling for the levels of the factors. The table below shows the frequencies of valid data for each treatment in each replication.

##   
## b1 b2  
## gauvar\_Conventional till 1 1  
## gauvar\_Reduced till 0 2  
## rajkumar\_Conventional till 2 0  
## rajkumar\_Reduced till 1 1

# 3. Analysis for trait Wheat\_Total biomass (including all roots and spikes)\_Subsample dry weight\_g

There is more than one datum for at least one treatment in at least one replication. This could be the result of a mislabeling for the levels of the factors. The table below shows the frequencies of valid data for each treatment in each replication.

##   
## b1 b2  
## gauvar\_Conventional till 1 1  
## gauvar\_Reduced till 0 2  
## rajkumar\_Conventional till 2 0  
## rajkumar\_Reduced till 1 1

# 4. Analysis for trait Wheat\_Total biomass (including all roots and spikes)\_Dry matter yield\_kg/ha

There is more than one datum for at least one treatment in at least one replication. This could be the result of a mislabeling for the levels of the factors. The table below shows the frequencies of valid data for each treatment in each replication.

##   
## b1 b2  
## gauvar\_Conventional till 1 1  
## gauvar\_Reduced till 0 2  
## rajkumar\_Conventional till 2 0  
## rajkumar\_Reduced till 1 1