

## Combined Analysis of Sudoku Square Designs with Same Treatments

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**Abstract :** Several experiments are conducted at different environments such as locations or periods (seasons) with identical treatments to each experiment purposely to study the interaction between the treatments and environments or between the treatments and periods (seasons). The commonly used designs of experiments for this purpose are randomized block design, Latin square design, balanced incomplete block design, Youden design, and one or more factor designs. The interest is to carry out a combined analysis of the data from these multi-environment experiments, instead of analyzing each experiment separately. This paper proposed combined analysis of experiments conducted via Sudoku square design of odd order with same experimental treatments.

**Keywords :** combined analysis, sudoku design, common treatment, multi-environment experiments

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020