

Package ‘ImCluster’

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Type Package

Title Efficiency of Cluster Sampling for Crop Surveys

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Description Cluster sampling is a valuable approach when constructing a comprehensive list of individual units is challenging. It provides operational and cost advantages. This package is designed to test the efficiency of cluster sampling in terms cluster variance and design effect in context to crop surveys. This package has been developed using the algorithm of Iqbal et al. (2018) <[doi:10.19080/BBOAJ.2018.05.555673](https://doi.org/10.19080/BBOAJ.2018.05.555673)>.

License GPL-3

Encoding UTF-8

Imports stats, dplyr

RoxygenNote 7.2.1

Depends R (>= 2.10)

NeedsCompilation no

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ImCluster

Efficiency of Cluster Sampling for Crop Surveys

Description

Efficiency of Cluster Sampling for Crop Surveys

Usage

```
ImCluster(x, N = NULL)
```

Arguments

x	Datasets
N	Number of clusters

Value

- results: Results

References

- Iqbal, J. M., Faizan, D and Mansha, G. (2018) . A Review on the Recent Development on the Cluster Sampling. Biostatistics and Biometrics. 5(5): 555673. DOI: 10.19080/BBOAJ.2018.05.555673

Examples

```
N_clusters <- 105
orchards_per_cluster <- 4
data <- matrix(rnorm(N_clusters * orchards_per_cluster), nrow = orchards_per_cluster, byrow = TRUE)
colnames(data) <- paste0("Cluster_", 1:N_clusters)
demo_data <- data.frame(data)
result_imcluster <- ImCluster(demo_data, N_clusters)
```

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