Package ‘clusterhap’

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Type Package
Title Clustering Genotypes in Haplotypes
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Description One haplotype is a combination of SNP (Single Nucleotide Polymorphisms) within the QTL (Quantitative Trait Loci). clusterhap groups together all individuals of a population with the same haplotype. Each group contains individual with the same allele in each SNP, whether or not missing data. Thus, clusterhap groups individuals, that to be imputed, have a non-zero probability of having the same alleles in the entire sequence of SNPs. Moreover, clusterhap calculates such probability from relative frequencies.
Depends R (>= 2.10)
License GPL-3
LazyData TRUE
RoxygenNote 5.0.1
Suggests knitr, rmarkdown, testthat
VignetteBuilder knitr
Imports graphics, utils
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clusterhap function identifies haplotypes within QTL.

Description

This function groups together all individuals of a population with the same haplotype.

Usage

```r
clusterhap(x, Print = FALSE)
```

Arguments

- **x**: a data.frame that should be loaded with read.table function. Each row represents the individuals while each column represents the markers. The first column contains the names of the genotypes.
- **Print**: option for print the clusterhap result. The default is FALSE

Details

Each group contains individual with the same allele in each SNP, whether or not missing data.

Value

a matrix with the haplotypes

Author(s)

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See Also

read.table function

Examples

```r
#### Simple simulated data
data("sim_qtl")
clusterhap(sim_qtl, Print=TRUE)

#### Real experimental data

## Not run:
data(rice_qtl)
clusterhap(rice_qtl)
```

## End(Not run)
**rice_qtl**

*Real experimental data*

**Description**
The data is a QTL for rice Grain Quality

**Usage**
rice_qtl

**Format**
A data frame 326 rows (individual) and 38 variables (SNPs)

**Source**
Uruguayan Rice Breeding GWAS (URiB)

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**sim_qtl**

*simple QTL simulated*

**Description**
A dataset containing the marcadores

**Usage**
sim_qtl

**Format**
A data frame 5 rows (individuals) and 7 variables (snps)

**Source**
simulated data
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