Package ‘haplotyper’

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Type Package
Title Tool for Clustering Genotypes in Haplotypes
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Description Function to identify haplotypes within QTL (Quantitative Trait Loci). One haplotype is a combination of SNP (Single Nucleotide Polymorphisms) within the QTL. This function 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, haplotyper groups individuals, that to be imputed, have a non-zero probability of having the same alleles in the entire sequence of SNPs. Moreover, haplotyper calculates such probability from relative frequencies.

Depends R (>= 2.10)
License GPL-3
LazyData TRUE
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VignetteBuilder knitr
Imports graphics, utils
NeedsCompilation no
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**haplotyper**

 haplotyper function identifies haplotypes within QTL.

**Description**

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

**Usage**

```r
haplotyper(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 haplotyper 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
## Not run:
data(rice_qtl)
haplotyper(rice_qtl)
## End(Not run)
```
**rice_qtl**  

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### rice_qtl

**Real experimental data**

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#### 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**  

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### sim_qtl

**simple QTL simulated**

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#### 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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