

# Package ‘haplotyper’

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**Type** Package

**Title** Tool for Clustering Genotypes in Haplotypes

**Version** 0.1

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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 SNP's. Moreover, haplotyper 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

**NeedsCompilation** no

**Repository** CRAN

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haplotyper	<i>haplotyper function identifies haplotypes within QTL.</i>
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### Description

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

### Usage

```
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

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

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rice_qtl	<i>Real experimental data</i>
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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	<i>simple QTL simulated</i>
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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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