

Package ‘haplotyper’

October 13, 2022

Type Package

Title Tool for Clustering Genotypes in Haplotypes

Version 0.1

Date 2016-03-28

Author Sebastian Simondi <sebastian.simondi@gmail.com> and Gaston Quero, with contributions from Victoria Bonnacerrere and Lucia Gutierrez

Maintainer Gaston Quero <gastonquero@gmail.com>

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

Date/Publication 2016-04-06 17:23:47

R topics documented:

haplotyper	2
rice_qtl	3
sim_qtl	3

haplotyper	<i>haplotyper function identifies haplotypes within QTL.</i>
------------	--

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)

Sebastian Simondi, Victoria Bonnacarrere, Lucia Gutierrez, Gaston Quero

See Also

read.table function

Examples

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

rice_qtl	<i>Real experimental data</i>
----------	-------------------------------

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)

sim_qtl	<i>simple QTL simulated</i>
---------	-----------------------------

Description

A dataset containing the marcadores

Usage

sim_qtl

Format

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

Source

simulated data

Index

* datasets

rice_qtl, 3

sim_qtl, 3

haplotyper, 2

rice_qtl, 3

sim_qtl, 3