

Package ‘limitplot’

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Type Package

Title Jitter/CI Plot with Ordered Points Below the Limit of Detection

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Description Values below a specified limit of detection are stacked in rows in order to reduce overplotting and create a clear graphical representation of your data.

Depends R (>= 2.9.0)

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limitplot	<i>Jitter/CI Plot with Ordered Points Below the Limit of Detection</i>
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Description

Values below a specified limit of detection are stacked in rows in order to reduce overplotting and create a clear graphical representation of your data.

Usage

```
limitplot(..., lod, CI = 95, ratio = 1/25, shape = 1,
size = 1, col = "black", main = "", xlab = "",
ylab = "", names = "", axis = 5, stack = 5,
jitterwidth = 0.2, jittershape = 1, jittersize = 1,
jittercol = "black", log = "", blod = 1/2)
```

Arguments

...	vector(s) containing the data which to perform the limitplot on. This data set can not contain missing data, and vectors can be of varying lengths.
lod	a value that indicates the lower limit of detection. Any value within your data set below this value is reassigned a value of $\text{blod} * \text{lod}$.
CI	specifies the confidence interval for the boxplot. This interval is calculated from the altered data set after conversion based on the specified limit of detection.
ratio	the ratio of the distance between the stacked points below the limit of detection and the distance between the limit of detection and the largest value in the data set.
shape	specifies the shape of the points below the limit of detection.
size	specifies the size of the points below the limit of detection.
col	specifies the color of the points below the limit of detection.
main	an overall title for the plot.
xlab	label for the x-axis.
ylab	label for the y-axis.
names	a vector of names for the groups.
axis	See the yaxp graphical parameter in par .
stack	an integer indicating the number of points below the limit of detection to be stacked per row.
jitterwidth	specifies the width of the jitter points.
jittershape	specifies the shape of the jitter points.
jittersize	specifies the size of the jitter points.
jittercol	specifies the color of the jitter points.
log	use <code>log="y"</code> for a log-axis.
blod	a value indicating the fraction of the limit of detection used to calculate the reassigned values for those below the limit of detection. Any value within your data set below the limit of detection is reassigned a value of $\text{blod} * \text{lod}$.

Author(s)

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References

Becker, R. A., Chambers, J. M. and Wilks, A. R. (1988) *The New S Language*. Wadsworth & Brooks/Cole.

See Also

[plot](#), [points](#), [rect](#), [par](#)

Examples

```
## Create a basic limitplot with four different categories
## from log-normally distributed data and set the limit of detection to 0.35:
conc<-rlnorm(150,0.5,5)
category<-sample(4,150,replace=TRUE)
limitplot(conc[category==1],conc[category==2],
conc[category==3], conc[category==4],
lod = 0.35, log = "y")

## Add labels and change the graphical parameters:
limitplot(conc[category==1], conc[category==2],
conc[category==3], conc[category==4],
lod = 0.35, log = "y",
ylab = "Bla g 2 (ug/g)", xlab = "Report of Cockroach in homes",
names = c("Never", "Rarely", "Weekly", "Daily"),
main = "Exposure to Cockroach in homes",
size = 0.5, shape = 16,
jittersize = 0.5, jittershape = 16, jittercol = "red")
```

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