```
require(ggdendro)
```

```
## Loading required package: ggdendro
```

Selección de clústers desde objeto dendrogramas

@param hc objeto hcclust @param k número de clústers

@return @export

@examples

```
dendro_data_k <- function(hc, k) {

  hcdata    <-  ggdendro::dendro_data(hc, type = "rectangle")
  seg       <-  hcdata$segments
  labclust  <-  cutree(hc, k)[hc$order]
  segclust  <-  rep(0L, nrow(seg))
  heights   <-  sort(hc$height, decreasing = TRUE)
  height    <-  mean(c(heights[k], heights[k - 1L]), na.rm = TRUE)

  for (i in 1:k) {
    xi      <-  hcdata$labels$x[labclust == i]
    idx1    <-  (seg$x    >= min(xi)) & (seg$x    <= max(xi))
    idx2    <-  (seg$xend >= min(xi)) & (seg$xend <= max(xi))
    idx3    <-  seg$yend < height
    idx     <-  idx1 & idx2 & idx3
    segclust[idx] <- i
  }

  idx                    <-  which(segclust == 0L)
  segclust[idx]          <-  segclust[idx + 1L]
  hcdata$segments$clust  <-  segclust
  hcdata$segments$line   <-  as.integer(segclust < 1L)
  hcdata$labels$clust    <-  labclust

  hcdata
}
```

Colocar Etiquetas de Dendrograma

Función de creación de dendrograma gráfico con clústers
@param hcdata @param direction @param fan @param scale.color @param branch.size @param label.size @param nudge.label @param expand.y
“‘r plot_ggdendro <- function(hcdata, direction = c(“lr”, “rl”, “tb”, “bt”), fan = FALSE, scale.color = NULL, branch.size = 1, label.size = 3, nudge.label = 0.01, expand.y = 0.1) {
direction <- match.arg(direction) # if fan = FALSE ybreaks <-
pretty(segment(hcdata)$y, n = 5)$ymax < -max(segment(hcdata)$y)
Ramas p <- ggplot() + geom_segment(data = segment(hcdata), aes(x = x, y = y, xend = xend, yend = yend, linetype = factor(line), colour = factor(clust)), lineend = “round”, show.legend = FALSE, size = branch.size)

Colocar Etiquetas de Dendrograma

Orientación if (fan) { p <- p + coord_polar(direction = -1) + scale_x_continuous(breaks = NULL, limits = c(0, nrow(label(hcdata)))) + scale_y_reverse(breaks = ybreaks) } else { p <- p + scale_x_continuous(breaks = NULL) if (direction %in% c("rl", "lr")) { p <- p + coord_flip() } if (direction %in% c("bt", "lr")) { p <- p + scale_y_reverse(breaks = ybreaks) } else { p <- p + scale_y_continuous(breaks = ybreaks) nudge.label <- -(nudge.label) } }
Etiquetas labelParams <-
set_labels_params(nrow(hcdata$labels), direction, fan)hcdata$labels$angle < -labelParams$angle
p <- p + geom_text(data = label(hcdata), aes(x = x, y = y, label = label, colour = factor(clust), angle = angle), vjust = labelParams$vjust, hjust = labelParams$hjust, nudge_y = ymax * nudge.label, size = label.size, show.legend = FALSE)
# colors and limits if (!is.null(scale.color)) { p <- p + scale_color_manual(values = scale.color) }
ylim <- -round(ymax * expand.y, 1) p <- p + expand_limits(y = ylim)
p } "'

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