Aa Group labels

Version 1.2.2, by Giorgio Bianchini

Description: Highlights monophyletic groups with a label.

Module type: Plotting

Module ID: `7ef15916-4383-4ee7-b4bd-bd44a7be1849`

This module is used to highlight monophyletic groups by adding "bars" with labels next to the tree. It can only be used with *Rectangular* or *Circular* coordinates (module Ids `68e25ec6-5911-4741-8547-317597e1b792` and `92aac276-3af7-4506-a263-7220e0df5797`), respectively.

Parameters

Attribute

Control type: Text box

This parameter specifies the attribute used to determine the text of the labels.

Attribute type

Control type: Attribute type

Default value: String

Possible values:

- String
- Number

This parameter specifies the type of the attribute used to determine the text of the labels. By default this is `String`. If the type chosen here does not correspond to the actual type of the attribute (e.g. `Number` is chosen for the `Name` attribute, or `String` is chosen for the `Length` attribute), no label is drawn. If the attribute has values with different types for different nodes, the label is only shown on nodes whose attribute type corresponds to the one chosen here.

Attribute format

Control type: Attribute formatter

This parameter determines how the value of the selected attribute is used to determine the text of the label. By default, if the Attribute type is `String` the text of the label

corresponds to the value of the attribute, while if the Attribute type is `Number` the text of the label corresponds to the number rounded to 2 significant digits.

Only on last ancestor

Control type: Check box

Default value: Unchecked

If this check box is checked, the label is only shown for nodes that have a value for the specified attribute that differs from their ancestor's value. For example, this makes it possible to use the Propagate attribute module to propagate an attribute (e.g. a gene name or a phylum) to the last common ancestor of all taxa that have that attribute (i.e. all orthologs of that gene or all members of that phylum), and then show a group label for that LCA.

Distance

Control type: Number spin box

Default value: 100

Range: (-∞, +∞)

If the tree is drawn using *Rectangular* coordinates, this determines the distance of the line containing labels from the root node. If the tree is drawn using *Circular* coordinates, this determines the radius of the circle containing the labels.

Margin

Control type: Number spin box

Default value: 5

Range: (-∞, +∞)

This parameter determines the margin to use when drawing the label. If this is greater than 0, the label is larger than the leaves that belong to it, while if it is lower than 0, the label is smaller than the leaves that belong to it.

Height

Control type: Number spin box

Default value: 20

Range: [0, +∞)

This parameter determines the height of the label.

Prevent overlap

Control type: Check box

Default value: Checked

If this check box is checked, the module will make sure that no two labels overlap, by shifting some of the labels further away. This happens automatically; if you wish to have more control, disable this option and enable multiple instances of the module using different attributes.

Row margin

Control type: Number spin box

Default value: 5

Range: (-∞, +∞)

If Prevent overlap is enabled, this parameter determines the margin betwee consecutive rows of labels.

Fill colour

Control type: Colour (by node)

Default value: #000000 (opacity: 0%)

Default attribute: `LabelFillColour`

This parameter determines the colour of the background of the label.

Stroke colour

Control type: Colour (by node)

Default value: #000000 (opacity: 100%)

Default attribute: `LabelStrokeColour`

This parameter determines the colour of the outline of the background of the label.

Stroke thickness

Control type: Number spin box (by node)

Default value: 0

Range: [0, +∞)

Default attribute: `LabelThickness`

This parameter determines the thickness of the outline of the background of the label.

Font

Control type: Font

Default value: Helvetica-Bold 10pt

This parameter determines the font used to draw the labels.

Text colour

Control type: Colour (by node)

Default value: ■ #000000 (opacity: 100%)

Default attribute: `Color`

This parameter determines the colour of the text used to draw the labels.

Text alignment

Control type: Drop-down list

Default value: Center

Possible values:

- Near
- Center
- Far

This parameter determines the alignment of the text within the label.

Text margin

Control type: Number spin box

Default value: 0

Range: (-∞, +∞)

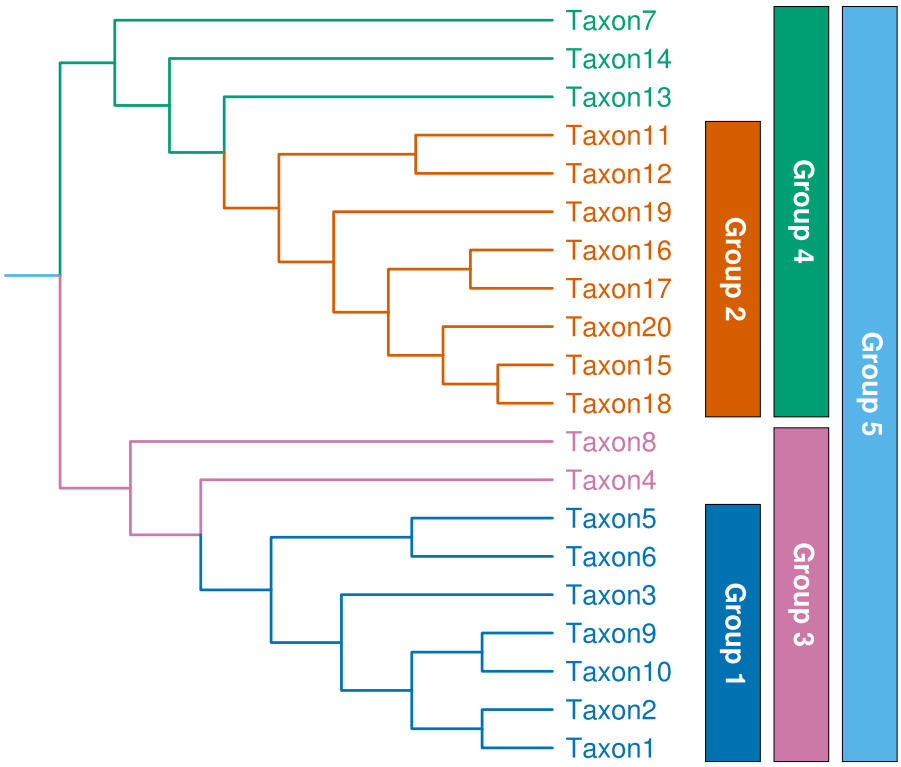
This parameter determines the margin between the edge of the label and the start of the text.

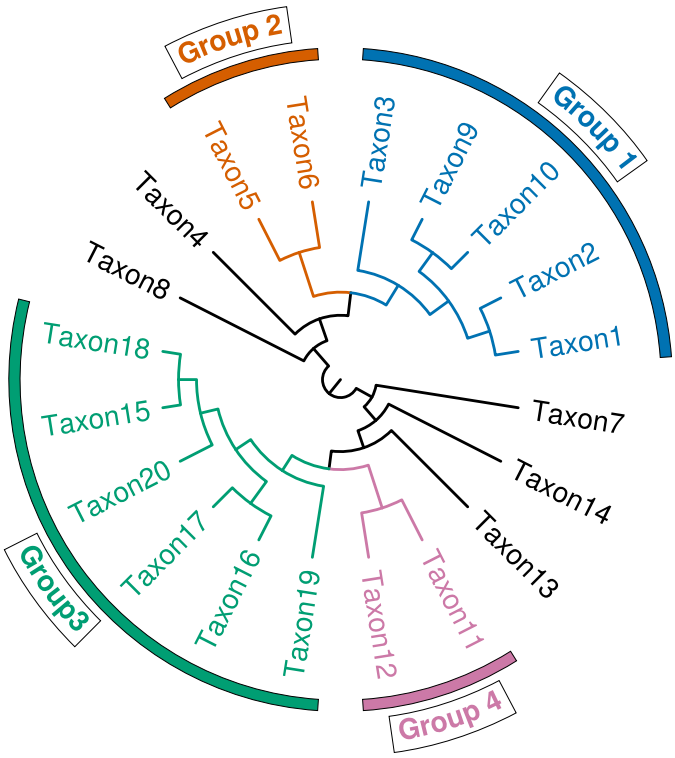
Further information

This module cannot detect automatically the best value for the various layout parameters, therefore you will have to tweak these manually. In particular, on very large trees it may seem at first that the module is not doing anything; if this is the case, please try increasing the Font size or the other parameters.

Multiple instances of this module can be used to obtain various effects; e.g. one instance could be used to draw the labels, while another can be used to draw coloured bars.

Here are two examples of this module in action on a tree with *Rectangular* and *Circular* coordinates, respectively:




Group 2
Group 1
Group3
Group 4
Taxon6
Taxon5
Taxon3
Taxon9
Taxon10
Taxon2
Taxon1
Taxon4
Taxon8
Taxon18
Taxon15
Taxon20
Taxon17
Taxon16
Taxon19
Taxon12
Taxon11
Taxon7
Taxon14
Taxon13