The **plantslabels** package

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Contents

1 Introduction

This package (`v1.0`) *helps you writing plants' labels* when needed. For example, you may want to give a label to each plant of your collection.

2 Use

2.1 Loading the Package

To *load the package*, please use

```
\usepackage{plantslabels}
```

2.2 Available Options

The set of options is currently empty.

3 Examples

There is only one command in this package: `\plant`. This command takes 9 arguments, and only the three first are mandatory. Here is the syntax:

```
\plant{cols_labels}{rows_labels}{no_labels}{generic_plant_name}
{generic_price}{generic_currency}{$generic_temperature$}
{generic_substratum}{generic_picture}
```

where

1. `cols_labels` is the number of cols of labels, Mandatory!
2. `rows_labels` is the number of rows of labels, Mandatory!
3. `no_labels` is the number of labels (under the condition `cols_labels` × `rows_labels` = `no_labels`), Mandatory!
4. `generic_plant_name` is the plant's name which will be written on each of the `no_labels` labels,
5. `generic_price` is the plant's price which will be written on each of the `no_labels` labels,
6. `generic_currency` is the price currency which will be written on each of the `no_labels` labels, after `generic_price`,
7. `$generic_temperature$` is the temperature which will be written on each of the `no_labels` labels (it should be $t_{\min} \to t_{\max}$, *i.e.* the min and max temperatures for the plant),
8. `generic_substratum` is the plant's substratum which will be written on each of the `no_labels` labels,
9. `generic_picture` is the plant's picture which will be drawn on each of the `no_labels` labels.

As all the arguments after `no_labels` are not mandatory, you can skip them. For this, you need to write brackets, though. For example,

```
\plant{cols_labels}{rows_labels}{no_labels}{Plant}{}{}{}{}{}
```

will simply draw one `no_labels` (= `cols_labels` × `rows_labels`) labels with "Plant" into it.

3.1 Practical Example

Let's say that you have two kinds of plants that you want to label: "Myplant1" and "Myplant2." One habitually lives in the desert, and the other lives in tropical regions. You have, say, 2 specimens of the first, and 4 of the second. You can invoke, assuming `cactus.eps` is your image for the first one, that you have no image for the second one, and that they respect the conditions mentioned below:

```
\plant{1}{1}{2}{Myplant1}{5}{EUR}{$-10\to +50$}{Peat moss, sand,
perlite}{cactus.eps}
\plant{2}{2}{4}{Myplant2}{10}{EUR}{$20\to +40$}{Peat moss,
fertilizer}{}
```

4 Implementation

Here is the code of `plantslabels.sty`:

```
%% This is file `plantslabels.sty' v1.0 by Merciadri Luca.

\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{plantslabels}[2010/04/05 Writing plant labels]
\PackageInfo{plantslabels}{This is Plantslabels by Merciadri Luca.}

\PassOptionsToPackage{newdimens}{labels}
\RequirePackage{labels}[2003/05/22]
\RequirePackage{graphicx}[2005/12/01]

\LeftPageMargin=2mm% These four parameters give the
\RightPageMargin=2mm% page gutter sizes. The outer edges of
\TopPageMargin=2mm% the outer labels are the specified
\BottomPageMargin=2mm% distances from the edge of the paper.
\InterLabelColumn=1mm% Gap between columns of labels
\InterLabelRow=1mm% Gap between rows of labels
\LeftLabelBorder=5mm% These four parameters give the extra
\RightLabelBorder=5mm% space used around the text on each
\TopLabelBorder=5mm% actual label.
\BottomLabelBorder=5mm%

\newsavebox{\mybox}

\newcommand{\lm@measurebox}[5]{%
  \sbox\mybox{%
    \begin{tabular}{cc}
    \ifx\relax#1\relax\else \textbf{Name} & \textit{#1}\\ \fi
    \ifx\relax#2\relax\else \textbf{Price} & #2\,\ #3\\ \fi
    \ifx\relax#4\relax\else \textbf{Temperature} & #4\\ \fi
    \ifx\relax#5\relax\else \textbf{Substratum} & #5\\ \fi
    \end{tabular}%
  }%
}

\newcommand{\lm@ig}[1]{\multicolumn{2}{c}{%
    \includegraphics[width=0.33\wd\mybox,
      height=0.33\ht\mybox,
      keepaspectratio]{#1}}}

\newcommand{\plant}[9]{%
  \renewcommand{\LabelCols}{#1}%
  \renewcommand{\LabelRows}{#2}%
  \renewcommand{\numberoflabels}{#3}%
  \lm@measurebox{#4}{#5}{#6}{#7}{#8}%
  \addresslabel[\fboxsep=0pt]{%
    \fbox{%
      \begin{tabular}{cc}
      \ifx\relax#4\relax\else \textbf{Name} & \textit{#4}\\ \fi
      \ifx\relax#5\relax\else \textbf{Price} & #5\,\ #6\\ \fi
      \ifx\relax#7\relax\else \textbf{Temperature} & #7\\ \fi
      \ifx\relax#8\relax\else \textbf{Substratum} & #8\\ \fi
      \ifx\relax#9\relax\else \lm@ig{#9} \fi
      \end{tabular}%
    }%
  }%
}
\relax
```

5 Limitations

This package has currently no limitation.

6 Remarks

The temperature unit is habitually so obvious that you do not need to specify it manually.

7 Bugs

Not yet.

8 Version History

1. `v1.0`: package is introduced to the LaTeX world.

9 Contact

If you have any question concerning this package (limitations, bugs, ...), please contact me at Luca.Merciadri@student.ulg.ac.be.

10 Credits

Thanks to Philipp Stephani and **Enrico Gregorio** for their answers at

http://groups.google.com/group/comp.text.tex/browse_thread/thread/5703b5328b93a000#.