

“`biokey2html`”,
the primer of hypertext web/typography
identification key

Anna Shipunova, Alexey Shipunov

Example A

This is the plain text source:

```
1. Leaves pinnatifid ... 2.
-- Leaves entire ... 3.

2. Plants perennial, leaves dissected to numerous lanceolate lobes
... Polemonium L.---Jacob's ladder.

-- Annual plants, leaves with narrow lobes ... Gilia L.---Gilia.

3(1). The compact inflorescence is surrounded by leaflike bracts
... Collomia Nutt.---Collomia.

-- The sparse inflorescence without specialised bracts ... Plox
L.---Phlox, Sweet-william.
```

Example B

This is the $\text{T}_{\text{E}}\text{X}/\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ variant (with stable numbers) of the same key. Please look to the *Collomia*—the italicizing is pretty simple (for binomials one needs to use `\NN` command):

```
\Z1. Leaves pinnatifid \T 2.
```

`\AN Leaves entire \T 3.`

`\Z2. Plants perennial, leaves dissected to numerous lanceolate lobes \T
Polem\'onium L.---Jacob's ladder.`

`\AN Annual plants, leaves with narrow lobes \T G\'i{lia} L.---Gilia.`

`\ZZ3(1). The compact inflorescence is surrounded by leaflike bracts
\T\KN Coll\'omia Nutt.---Collomia.`

`-- The sparse inflorescence without specialised bracts \T Plox L.---Phlox,
Sweet-william.`

Example C

This is the typographic PDF output. To produce this, you need special style file, `biokey.sty`:

1. Leaves pinnatifid	2.
– Leaves entire	3.
2. Plants perennial, leaves dissected to numerous lanceolate lobes	
.....Polemónium L.—Jacob's ladder.	
– Annual plants, leaves with narrow lobes	Gília L.—Gilia.
3 (1). The compact inflorescence is surrounded by leaflike bracts	
..... Collómia Nutt.—Collomia.	
– The sparse inflorescence without specialised bracts	
..... Plox L.—Phlox, Sweet-william.	

Example D

This is the variant with **automatic** numeration (you need to run \LaTeX twice to obtain results) *with PDF hyperlinks*. You can produce it from example B manually, or can use the Perl-script (see below):

`\TEZA{AA} Leaves pinnatifid \SSYLKA{AB}`

`\AN Leaves entire \SSYLKA{AC}`

`\TEZA{AB} Plants perennial, leaves dissected to numerous lanceolate lobes \T Polem\`onium L.---Jacob's ladder.`

`\AN Annual plants, leaves with narrow lobes \T G\`i{lia} L.---Gilia.`

`\STEZA{AC}{AA} The compact inflorescence is surrounded by leaflike bracts \T Coll\`omia Nutt.---Collomia.`

`\AN The sparse inflorescence without specialised bracts \T Plox L.---Phlox, Sweet-william.`

And output:

```
1. Leaves pinnatifid ..... 2.
- Leaves entire ..... 3.

2. Plants perennial, leaves dissected to numerous lanceolate lobes .....
   .....Polemónium L.—Jacob's ladder.
- Annual plants, leaves with narrow lobes ..... Gília L.—Gilia.

3 (1). The compact inflorescence is surrounded by leaflike bracts .....
   ..... Collómia Nutt.—Collomia.
- The sparse inflorescence without specialised bracts .....
   ..... Plox L.—Phlox, Sweet-william.
```

Example F

Three simple Perl scripts do the main work. You can run them all by command `biokey2html.sh` under UNIX shell on Mac OS X or Linux, or command `biokey2html.bat` under Windows console:

```
$ chmod 755 biokey2html.sh biokey2html*.pl $
./biokey2html.sh biokey2html-ex-en.tex Making relative LaTeX key...
Making HTML title and paragraphs tags... Making reference tags...
```

If you want only to produce "automatic" PDF-key with hyperlinks, you should use the file with `.2` extension, which appears after `biokey2html.sh` run (see `biokey2html-ex-en.pdf`).

And the HTML result (part of code):

```
<p class="ST"><span class="TEZA"><a name="AA">1</a>.</span> Leaves  
pinnatifid ... <span class="SSYLKA"><a href="#AB">2</a>. </span>
```

```
<p class="ST">-- Leaves entire ... <span class="SSYLKA"> <a  
href="#AC">3</a>.</span>
```

```
<p class="ST"><span class="TEZA"><a name="AB">2</a>. </span>  
Plants perennial, leaves dissected to numerous lanceolate lobes  
... <!--<a href="">--><span class="SP"> Polemonium L.--Jacob's ladder.  
</span><!--</a>-->
```

```
<p class="ST">-- Annual plants, leaves with narrow lobes ... <!--<a  
href="">--><span class="SP"> Glia L.--Gilia.</span> <!--</a>-->
```

The commented anchors placed there just in case if you are interested to insert links for images etc. The real examples of keys (which is widely used) are on the web-pages:

- Abramova L.A. et al. The key for most frequent plants in Chupa Gulf environs. [Electronic resource]. 2005. Mode of access: http://herba.msu.ru/shipunov2/belomor/2005/flora/ws_key/ws_key.htm
- Abramova L.A. et al. The key for most frequent plants in Chupa Gulf environs. [Electronic resource]. 2004. Mode of access: http://herba.msu.ru/shipunov/belomor/2004/flora/ws_key.pdf