

## Running cochineal in XeLaTeX or LuaLaTeX

The preceding pages of this document were processed using pdf $\LaTeX$ , which was the only engine supported by cochineal.sty. As of version 1.07, XeLaTeX and LuaLaTeX are also supported. All cochineal options and macros formerly limited to pdf $\LaTeX$  have been modified and now work essentially the same under both unicode engines, though the output may not always be precisely the same as with pdf $\LaTeX$ . There are some macros and options available under unicode engines that go beyond what can be done under pdf $\LaTeX$ .

### MODIFIED MACROS AND OPTIONS:

- `\textfrac` works better under unicode tex because it is possible to adjust kerning between all characters. The effect should not be very noticeable, at least in regular style.
- `sup`s: the package treats this differently in unicode LaTeX and pdf $\LaTeX$ , with handling in the unicode case passed off to the `realscripts` package where the footnote marker font is set to `\normalfont`, meaning that superiors from the current (Cochineal) text font are employed.
- `theoremfont`, `thmtabular`, `thmlining` all function in a similar manner to pdf $\LaTeX$ .
- `swashQ` operates as before.
- `foresolidus`, `aftsolidus` are not used in unicode tex.
- `scosf` operates without change.
- `\textcircled` works the same as under pdf $\LaTeX$ .<sup>Ⓢ</sup>

### NEW MACROS AND OPTIONS:

- An alternate version of Q, Q (`\Qswash`) and their small cap versions is available using option `altQ`, which sets `StylisticSet=3`. The alternate versions are  $\mathring{Q}$ ,  $\mathring{Q}$ .
- An alternate version of J is available in italic shapes only using option `altJ`, which sets `StylisticSet=2`. The alternate version of *J* is *J*.
- `oldSS` controls whether the new German capital sharp S is used or whether the old SS is retained. The former is the default but the option `oldSS` forces the latter by setting `StylisticSet=1`. The effects are summarized in the following tables.

Glyph name	glyph	macro
uni1E9E	Œ	<code>\symbol{"1E9E}</code> or <code>\SS</code>
uni1E9E.ss01	Œ	<code>{\addfontfeature{StylisticSet=1}\symbol{"1E9E}}</code>
germandbls.sc	ſ	<code>{\textsc{\ss}}</code>
germandbls.sc.ss01	ſ	<code>{\addfontfeature{StylisticSet=1}\textsc{\ss}}</code>

Effect of choice of `StylisticSet`:

StylisticSet	<code>\ss</code>	<code>\SS</code>	<code>\MakeUppercase{\ss}</code>	<code>\textsc{\ss}</code>
None	ſ	Œ	Œ	ſ
=1	ſ	SS	SS	ss