The plot shows the region $y^2 + 2 < y \cdot x^2$ with red dots on a coordinate grid.

```
\usepackage{pstricks,pst-plot,multido}

\makeatletter
\def\psDot{\pst@object{psDot}}
\def\psDot@i(#1,#2){%
  \begin@SpecialObj%
  \pst@@getcoor{#1,#2}%
  \addto@pscode{
    #2 dup mul 2 add  % y^2+3
    #2 #1 dup mul mul % y*x^2
    lt {
      \psk@dotsize
      \@nameuse{psds@\psk@dotstyle}%
      \pst@coor Dot
    } if }%
  \end@SpecialObj}
\makeatother

\begin{document}
```

```
\begin{pspicture}[showgrid=true](-5,0)(5,10)
  \multido{\rx=-5.0+0.25}{41}{%
    \multido{\ry=0.0+0.25}{41}{\psDot[linecolor=red](\rx,\ry)}}
  \psaxes[ticks=none,labels=none,arrows=->](0,0)(-5,0)(5,10)
  \rput*(0,8){\Large$y^2+3<y\cdot x^2$}
\end{pspicture}
```