



# Multiplot in GNUPLOT

IKN

## Take a look to the data

# period gracilaria eucheuma gelidium sargassum

0 3 2 2 2

2 5 3 4 4

4 7 6 7 7

6 9 8 9 9

8 11 12 10 10

10 13 14 13 14

# How to define linestyle?

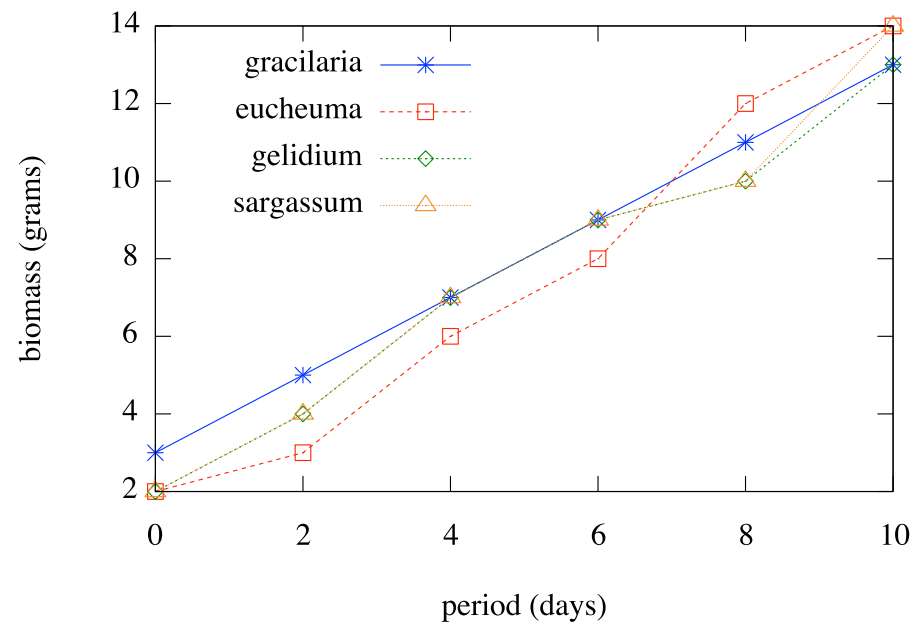
- `gnuplot> set style line 1 dashtype 1 lc rgb "blue" pt 3`
- `gnuplot> set style line 2 dashtype 2 lc rgb "red" pt 4`
- `gnuplot> set style line 3 dashtype 3 lc rgb "#008000" pt 5`
- `gnuplot> set style line 4 dashtype 4 lc rgb "#EE7621" pt 6`

# How to plot several data in one figure?

```
gnuplot> p "data2.dat" u 1:2 w lp ls 1 t "gracilaria",\  
        "data2.dat" u 1:3 w lp ls 2 t "eucheuma",\  
        "data2.dat" u 1:4 w lp ls 3 t "gelidium",\  
        "data2.dat" u 1:5 w lp ls 4 t "sargassum"
```

```
gnuplot> set key top left  
gnuplot> set xlabel "period (days)"  
gnuplot> set ylabel "biomass (grams)"  
gnuplot> replot
```

# How to plot several data in one figure?



# How to multiplot in one file?

```
set multiplot
set size 1.0, 1.0
# first figure
set size 0.5, 0.5
set origin 0.0, 0.0
set nokey
set title "gracilaria" offset 0,-2.5
set xtics font "Times-Roman, 22"
set ytics font "Times-Roman, 22"
set xlabel "waktu kultur (hari)" font "Times-Roman, 22"
set ylabel "biomassa (gram)" font "Times-Roman, 22"
p "data2.dat" u 1:2 w lp ls 1
```

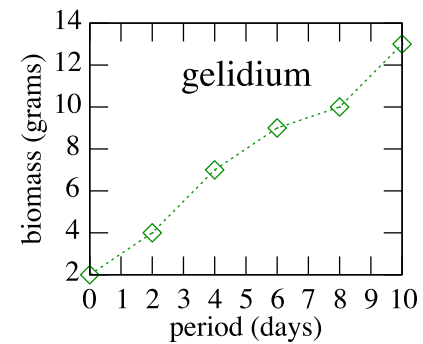
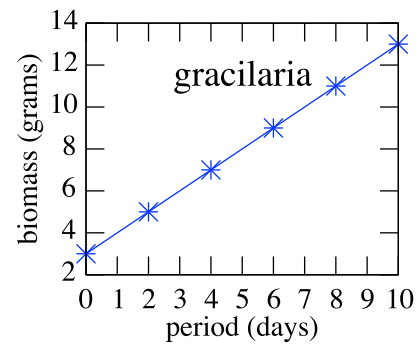
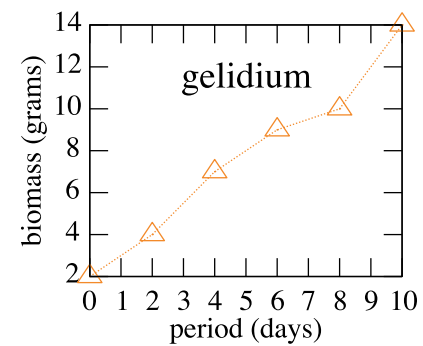
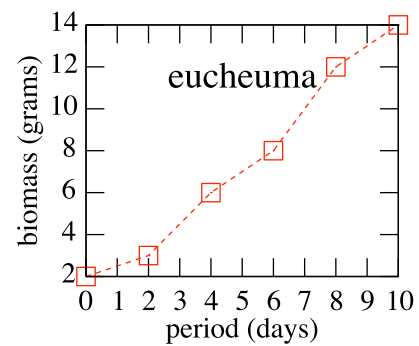
```
# second figure
set size 0.5, 0.5
set origin 0.0, 0.5
set nokey
set title "eucheuma" offset 0,-2.5
p "data2.dat" u 1:3 w lp ls 2
```

# How to multiplot in one file?

```
# third figure
set size 0.5, 0.5
set origin 0.5, 0.0
set nokey
set title "gelidium" offset 0,-2.5
p "data2.dat" u 1:4 w lp ls 3
```

```
# forth figure
set size 0.5, 0.5
set origin 0.5, 0.5
set nokey
set title "gelidium" offset 0,-2.5
p "data2.dat" u 1:5 w lp ls 4
set nomultiplot
```

# How to multiplot in one file?





# How to multiplot with different y axis scale?

```
# period biomass growth_rate
```

```
0 3 0.2
```

```
2 5 0.4
```

```
4 7 0.3
```

```
6 9 0.4
```

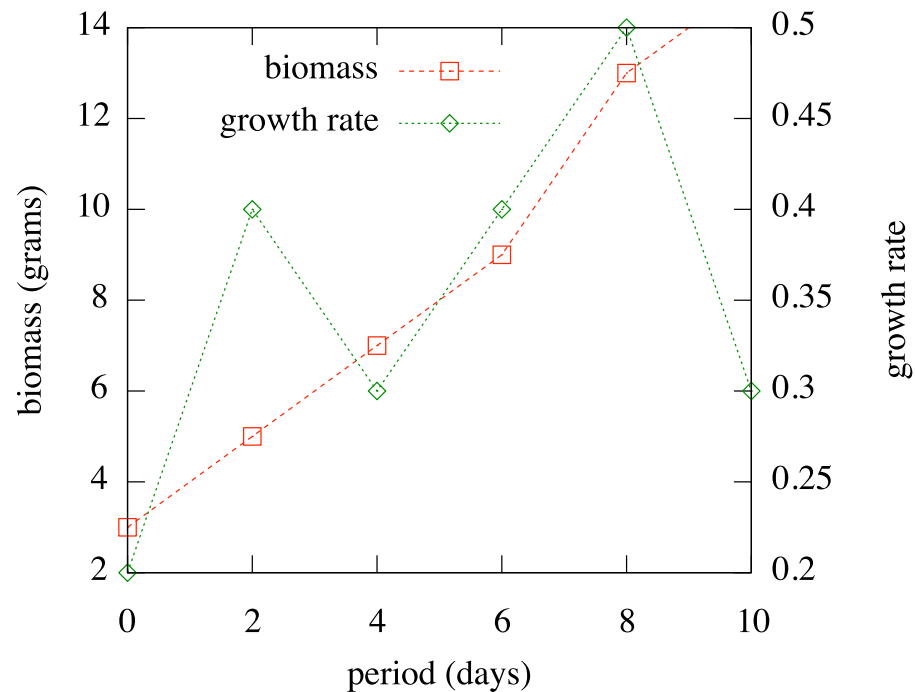
```
8 13 0.5
```

```
10 15 0.3
```

# How to multiplot with different y axis scale?

```
set xrange [0:10]
set yrange [2:14]
set y2range [0.2:0.5]
set key top left
set ytics nomirror
set y2tics
set ylabel "biomass (grams)" offset 2,0
set y2label "growth rate" offset -2,0
set xlabel "period (days)" offset 0,.5
p "data3.dat" u 1:2 w lp ls 2 t "biomass" axes x1y1,\
"data3.dat" u 1:3 w lp ls 3 t "growt rate" axes x1y2
```

# How to multiplot with different y axis scale?



# How to put small figure in a figure?

```
set key top left
set yrange [-10:120]
set xlabel "time"
set ylabel "values"
#set yrange [0:16]
```

```
set multiplot
set origin 0.0,0.0
set size 1.0,1.0
p "data4.dat" u 1:1 w lp ls 2 t "time",\
"data4.dat" u 1:2 w lp ls 3 t "time**2",\
"data4.dat" u 1:3 w lp ls 4 t "time**3",\
```

```
set origin 0.15,0.3
set size 0.4,0.4
set xrange [1.5:2.5]
set yrange [0:10]
set xtics 1.5,1,2.5 font "Times-Roman, 16"
offset 0,.5
set ytics 5 font "Times-Roman, 16" offset .5,0
unset xlabel
unset ylabel
p "data4.dat" u 1:1 w lp ls 2 t "",\
"data4.dat" u 1:2 w lp ls 3 t "",\
"data4.dat" u 1:3 w lp ls 4 t ""
```

# How to put small figure in a figure?

