

HTMLreport Example 1

The Puromycin data

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The Puromycin data

The first lines of data are:

```
> head(Puromycin, 3)
```

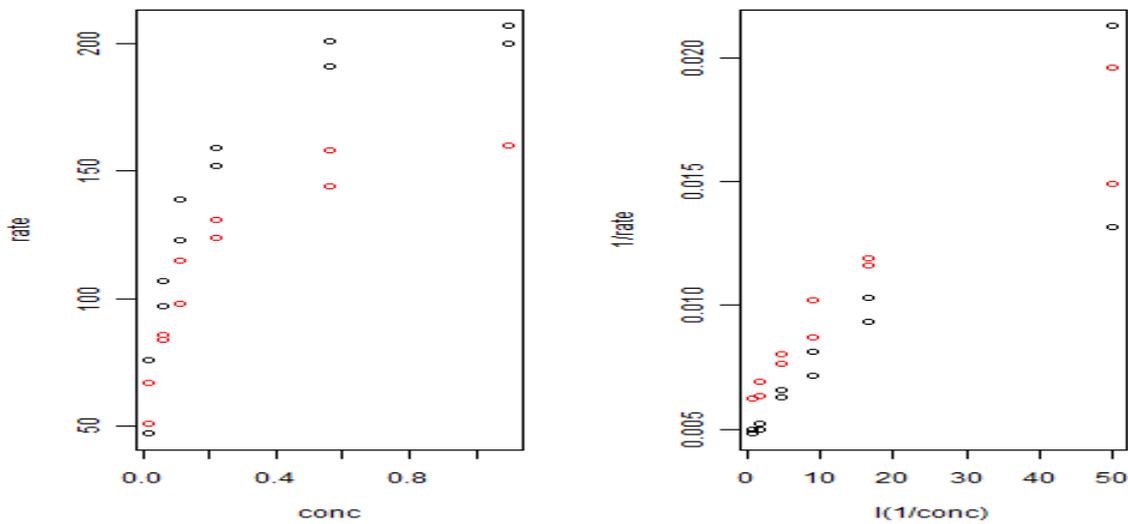
	conc	rate	state
1	0.02	76	treated
2	0.02	47	treated
3	0.06	97	treated

Transformation almost gives linearity

```
> par(mfrow = c(1, 2))
```

```
> plot(rate ~ conc, data = Puromycin, col = as.numeric(state))
```

```
> plot(1/rate ~ I(1/conc), data = Puromycin, col = as.numeric(state))
```



Fit a model to **transformed** data

```
> m1 <- lm(1/rate ~ state + I(1/conc) + state * I(1/conc), data = Puromycin)
> summary(m1)
```

- Call: lm(formula = 1/rate ~ state + I(1/conc) + state * I(1/conc), Call: data = Puromycin)
- Residuals

Min	1Q	Median	3Q	Max
-0.0043	-0.0005	-0.0002	0.0009	0.0038

- Coefficients

	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	5.11e-03	6.27e-04	8.14	1.3e-07	***
stateuntreated	1.86e-03	9.20e-04	2.03	0.057	.
I(1/conc)	2.47e-04	2.86e-05	8.64	5.2e-08	***
stateuntreated:I(1/conc)	-3.22e-05	4.10e-05	-0.79	0.442	

--- Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

- Residuals standard error: 0.002 on 19 degrees of freedom
- Multiple R-Squared:**0.876**
- Adjusted R-Squared:**0.856**
- F-statistics: **44.614** on 3 and 19 DF. P-value:**0**.