



# Group A

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A. Dependence of THC concentration in blood on the amount of cannabis smoked was analyzed in one person who smoked different amounts of dried cannabis of the same source. The intervals between measurements were long enough to decrease of THC concentration to 0 before each trial.

THC (mg/litre blood)	Cannabis DW (g)
10.1	5.3
3	1.2
8.7	3.8
12.3	8.5
20.8	9.1
5.9	3.1
10.1	4.5
12.3	8.5
5.9	6.5
10.1	7.8

# Analysis

**0 hypothesis: THC concentration in blood does not depend on the amount of cannabis smoked.**

```
thc <- read.delim2("clipboard")  
summary(thc)  
View(thc)
```

```
lm.thc <- lm(THC~DW,data=thc)  
plot(lm.thc)  
anova(lm.thc)
```

# Results

## Analysis of Variance Table

Response: THC

Df	Sum Sq	Mean Sq	F value	Pr(>F)
DW	1	128.999	128.999	12.509 <b>0.007655</b> **
Residuals	8	82.497	10.312	

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Signif. codes:

0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 '' 1

summary(lm.thc)

Call:

lm(formula = THC ~ DW, data = thc)

Residuals:

Min	1Q	Median	3Q	Max
-4.9687	-1.4006	-0.2593	1.4734	6.2498

Coefficients:

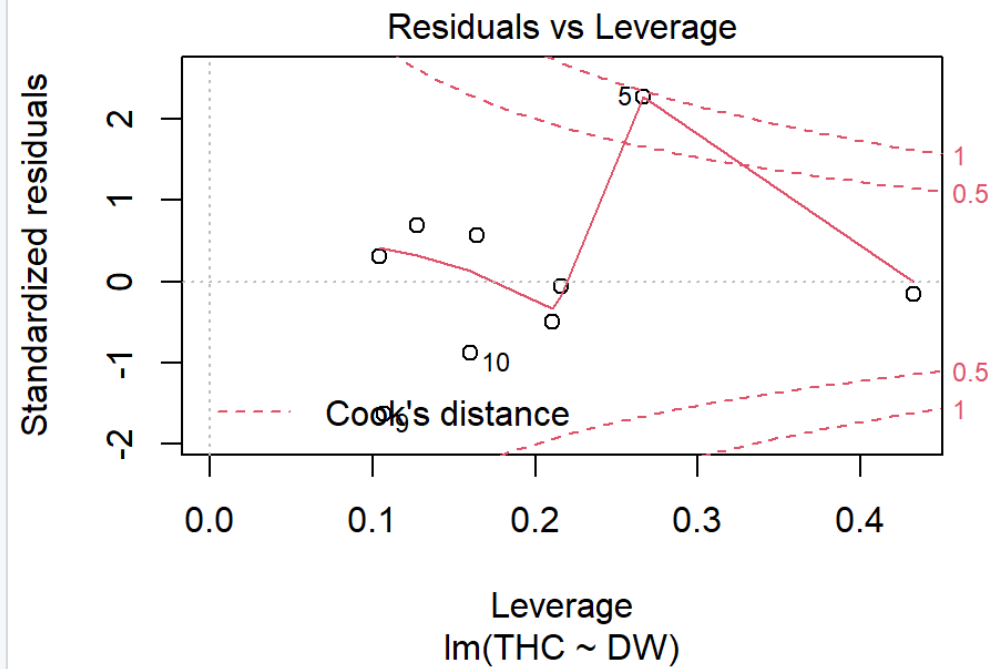
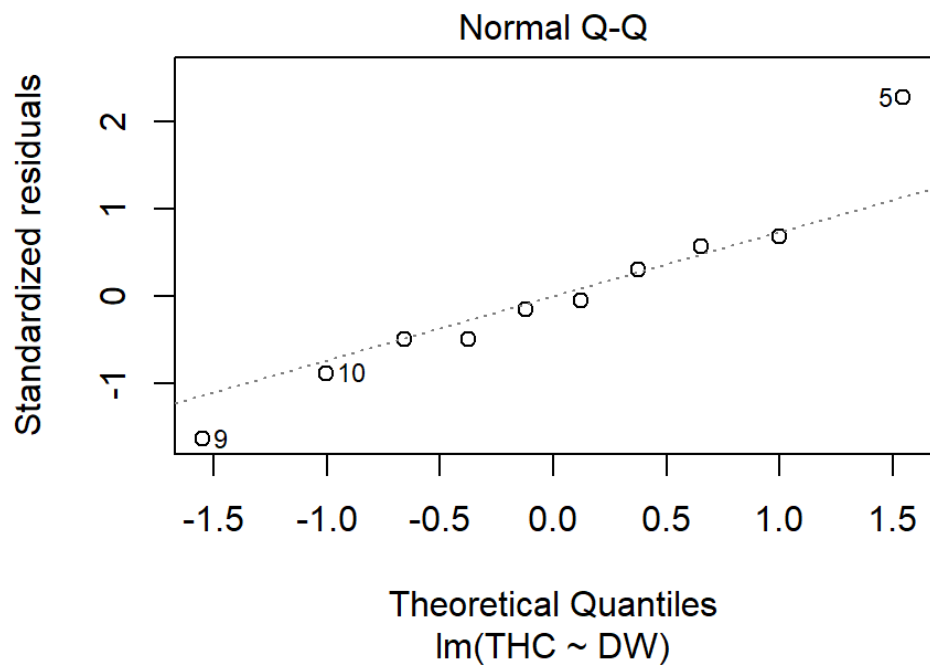
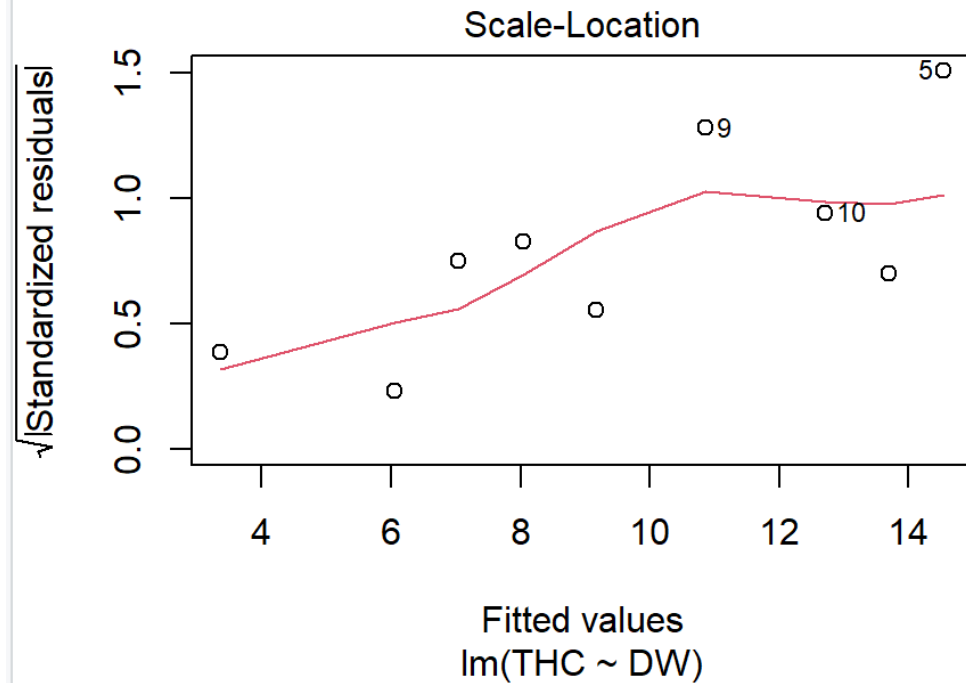
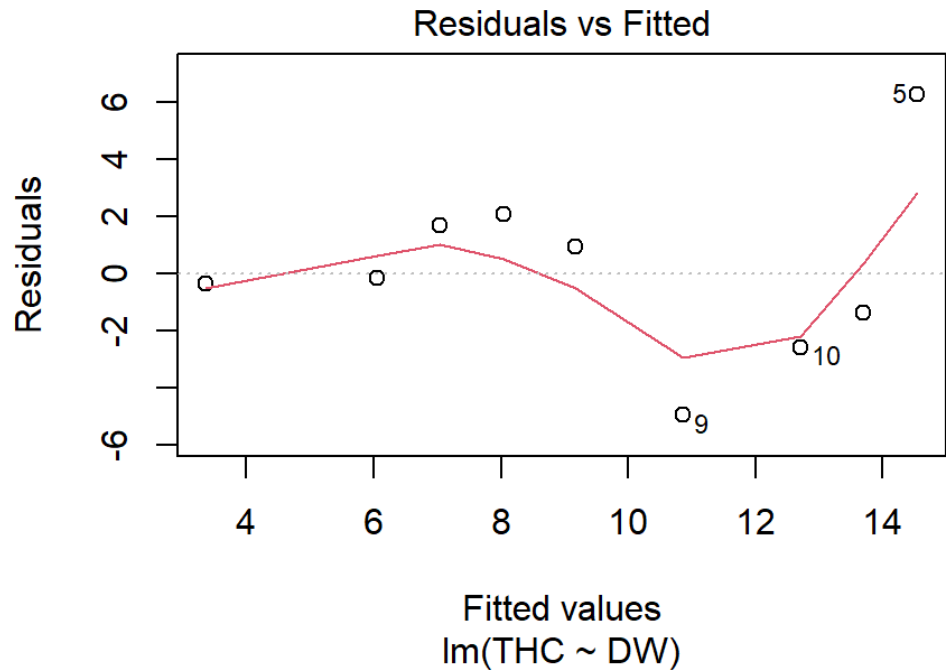
	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	1.6650	2.5453	0.654	0.53138
DW	1.4160	0.4003	3.537	<b>0.00765</b> **

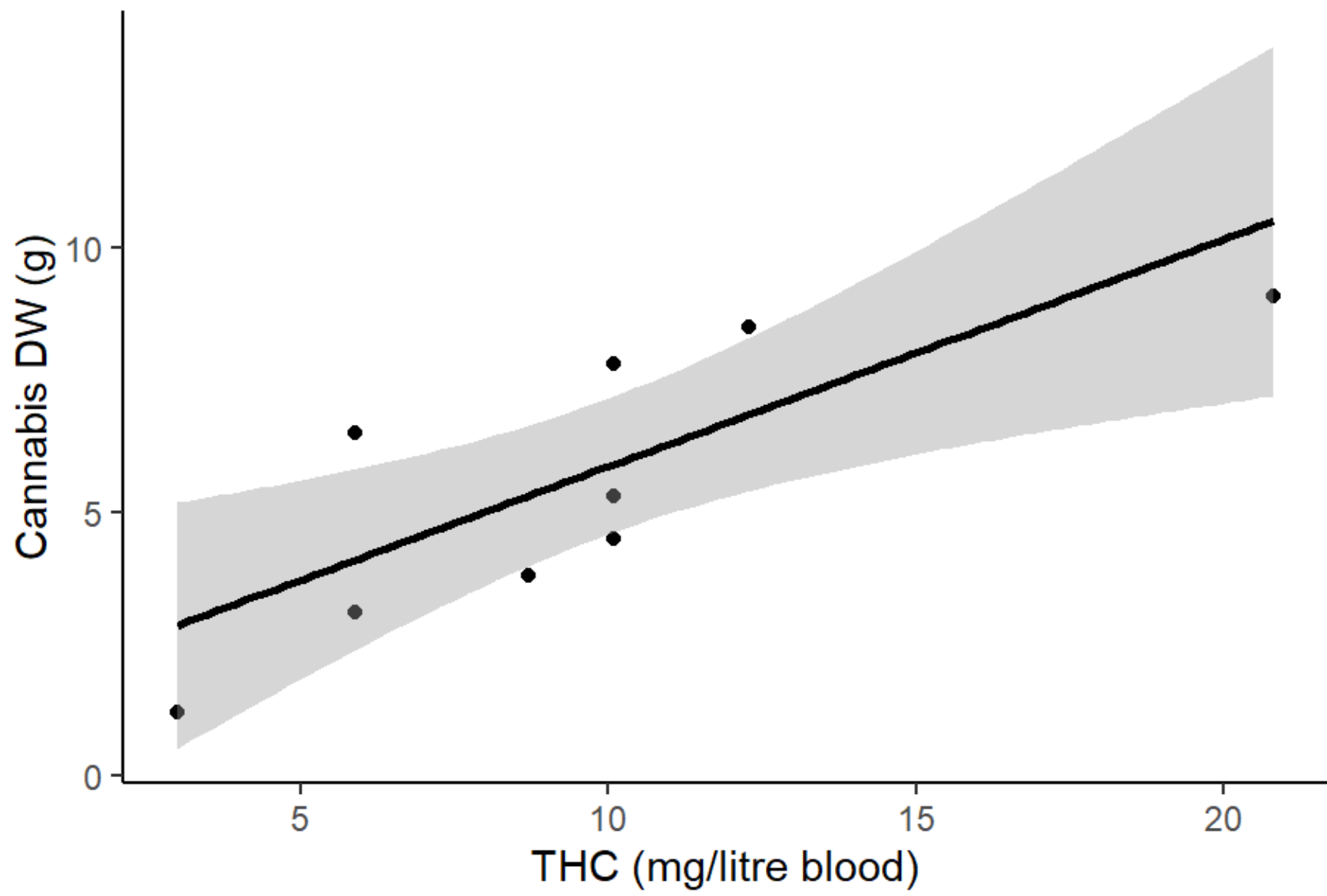
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Signif. codes:

0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 '' 1

Residual standard error: 3.211 on 8 degrees of freedom  
Multiple R-squared: **0.6099**, Adjusted R-squared: 0.5612  
F-statistic: 12.51 on 1 and 8 DF, p-value: 0.007655





# Conclusion

- We reject the null hypothesis, there is a significant relationship between the THC concentration in blood and the amount of cannabis smoked





Thanks for  
your attention