

# Variance in Condition vs Nest Size Instar As Number

*Ruth Sharpe*

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## glmmPRQ model - not able to get AIC value

Rows removed with 2 or fewer data points

	Chisq	Df	p_value
logCtFm	6.81	1.00	0.009**
InstarNumber	1.99	1.00	0.159
I(InstarNumber^2)	3.04	1.00	0.081.
InstarNumber:InstarSex	28.12	1.00	0.000***
logCtFm:InstarNumber	0.03	1.00	0.859 RMVD
InstarSex:I(InstarNumber^2)	21.77	1.00	0.000***
logCtFm:I(InstarNumber^2)	0.05	1.00	0.831
logCtFm:InstarNumber:InstarSex	0.59	1.00	0.443
logCtFm:InstarSex:I(InstarNumber^2)	0.86	1.00	0.355

[1] "term with highest p value is: logCtFm:InstarNumber"

	Chisq	Df	p_value
logCtFm	6.81	1.00	0.009**
InstarNumber	1.99	1.00	0.159
I(InstarNumber^2)	3.04	1.00	0.081.
InstarNumber:InstarSex	28.11	1.00	0.000***
InstarSex:I(InstarNumber^2)	21.77	1.00	0.000***
logCtFm:I(InstarNumber^2)	0.05	1.00	0.831 RMVD
logCtFm:InstarNumber:InstarSex	0.62	2.00	0.733
logCtFm:InstarSex:I(InstarNumber^2)	0.86	1.00	0.355

[1] "term with highest p value is: logCtFm:I(InstarNumber^2)"

	Chisq	Df	p_value
logCtFm	6.81	1.00	0.009**
InstarNumber	1.99	1.00	0.159
I(InstarNumber^2)	3.04	1.00	0.081.
InstarNumber:InstarSex	28.11	1.00	0.000***
InstarSex:I(InstarNumber^2)	21.73	1.00	0.000***
logCtFm:InstarNumber:InstarSex	0.62	2.00	0.733 RMVD
logCtFm:InstarSex:I(InstarNumber^2)	0.90	2.00	0.637

[1] "term with highest p value is: logCtFm:InstarNumber:InstarSex"

	Chisq	Df	p_value
logCtFm	7.19	1.00	0.007**
InstarNumber	1.91	1.00	0.167
I(InstarNumber^2)	2.85	1.00	0.092.
InstarNumber:InstarSex	29.45	1.00	0.000***
InstarSex:I(InstarNumber^2)	20.79	1.00	0.000***
logCtFm:InstarSex:I(InstarNumber^2)	3.19	2.00	0.203 RMVD

[1] "term with highest p value is: logCtFm:InstarSex:I(InstarNumber^2)"

	Chisq	Df	p_value
logCtFm	7.24	1.00	0.007**
InstarNumber	1.34	1.00	0.246 RMVD
I(InstarNumber^2)	2.23	1.00	0.135
InstarNumber:InstarSex	29.18	1.00	0.000***
InstarSex:I(InstarNumber^2)	23.08	1.00	0.000***

[1] “term with highest p value is: InstarNumber”

	Chisq	Df	p_value
logCtFm	7.24	1.00	0.007**
I(InstarNumber^2)	2.23	1.00	0.135 RMVD
InstarNumber:InstarSex	30.52	2.00	0.000***
InstarSex:I(InstarNumber^2)	23.08	1.00	0.000***

[1] “term with highest p value is: I(InstarNumber^2)”

	Chisq	Df	p_value
logCtFm	7.24	1.00	0.007**
InstarNumber:InstarSex	30.52	2.00	0.000***
InstarSex:I(InstarNumber^2)	25.32	2.00	0.000***

[1] “term with highest p value is: logCtFm”

Final Model is: bootVarTrans ~ InstarNumber:InstarSex + InstarSex:I(InstarNumber^2)

## Checking final model fit

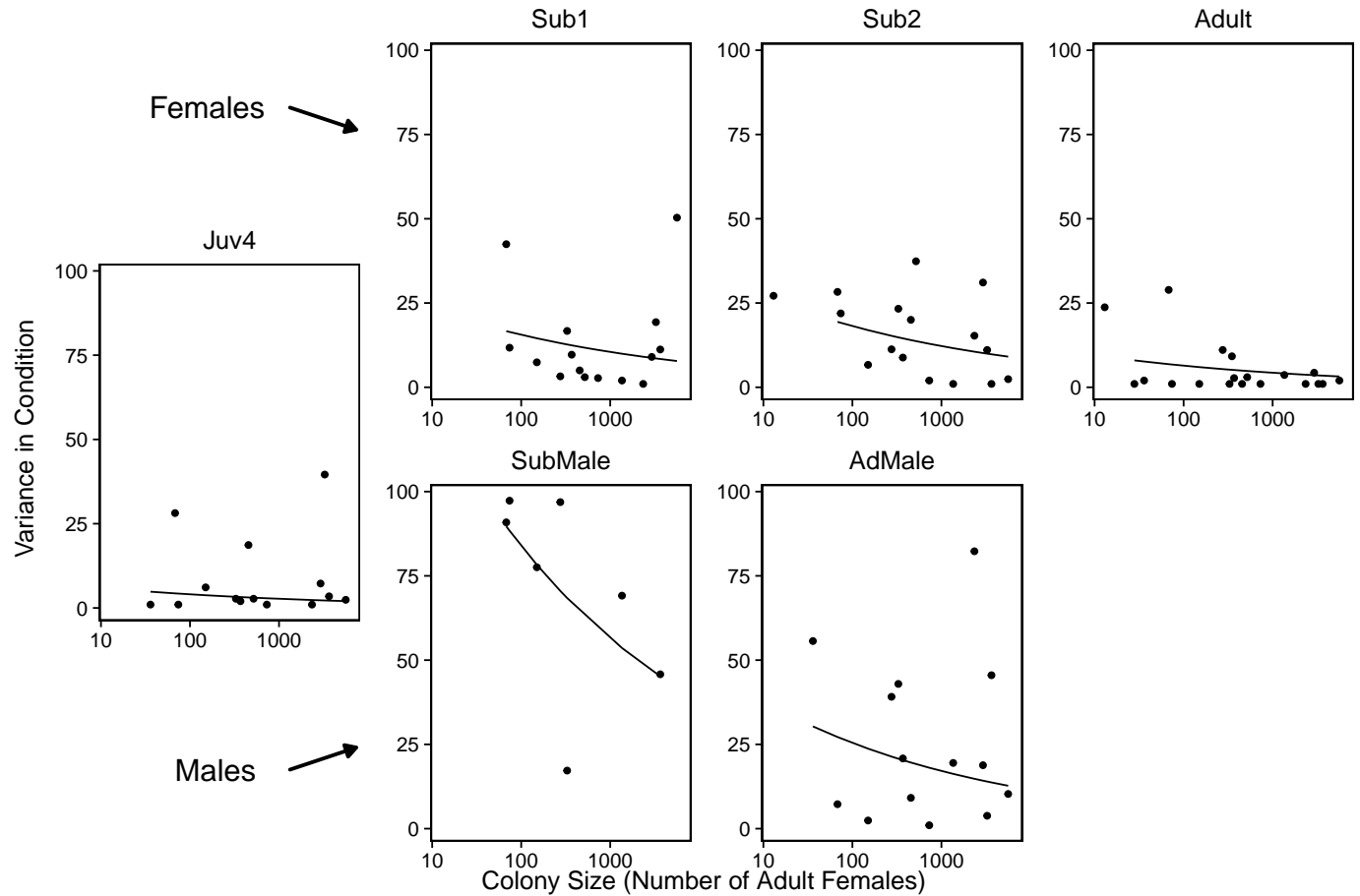
# Graph

note: blue line just lm model

Note: If line on graph is blue R could not plot the lmer, plotting a simple lm instead

Warning: Removed 1 rows containing missing values (geom\_path).

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Graph of condition variance against instar

