

7. LAMPIRAN

7.1. Perhitungan Konsentrasi Maksimum Logam Berat Ikan Bandeng.

7.1.1. Konsentrasi maksimum Pb

MTWI (*Maximum Tolerable Weekly Intake*) = $25/\mu\text{g}/\text{kg}/\text{mgg} \times 65 \text{ kg bb} = 1,625 \text{ mg}/\text{kg bb}$

Konsumsi ikan perminggu = $(49,84/838,54) \times 100\% = 6\%/\text{mgg}$

Intake Pb maksimum pada ikan = $6\% \times 1,625 = 0,0975 \text{ mg}/\text{mgg}$

Maksimum konsumsi ikan perminggu = $49,84 \times 7 = 0,35 \text{ kg}/\text{mgg}$

MRL (*Maximum Residu Limit*) = $0,0975 \text{ mg}/0,35 \text{ kg} = 0,28 \text{ mg}/\text{kg bb}$

7.1.2. Konsentrasi maksimum Cu

MTWI (*Maximum Tolerable Weekly Intake*) = $12/\text{mg}/\text{kg}/\text{hari} \times 7 = 84 \text{ mg}/\text{kg}/\text{mgg}$

Konsumsi ikan perminggu = $(49,84/838,54) \times 100\% = 6\%/\text{mgg}$

Intake Pb maksimum pada ikan = $6\% \times 84 = 5,22 \text{ mg}/\text{mgg}$

Maksimum konsumsi ikan perminggu = $49,84 \times 7 = 0,35 \text{ kg}/\text{mgg}$

MRL (*Maximum Residu Limit*) = $5,22 \text{ mg}/0,35 \text{ kg} = 14,5 \text{ mg}/\text{kg bb}$

7.2. Perhitungan Berat Maksimum Ikan yang Diperkenankan

7.2.1. Berat maksimum Pb

$$\log c = \log a + (b - 1) \log x$$

$$\log 0,28 = \log 0,63 + (1,09 - 1) \log x$$

$$-0,6 = -0,2 + 0,09 \log x$$

$$X = 0,00004 \text{ g}$$

7.2.2. Berat Maksimum Cu

$$\log c = \log a + (b - 1) \log x$$

$$\text{Log } 14,5 = \text{Log } 0,0003 + (1,75 - 1) \text{Log } x$$

$$1,2 = -3,5 + 0,75 \text{Log } x$$

$$X = 1812684,6 \text{ g}$$



Curve Fit (berat kecil)

tpb

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .795 | .632 | .619 | .033 |

The independent variable is berat.

ANOVA

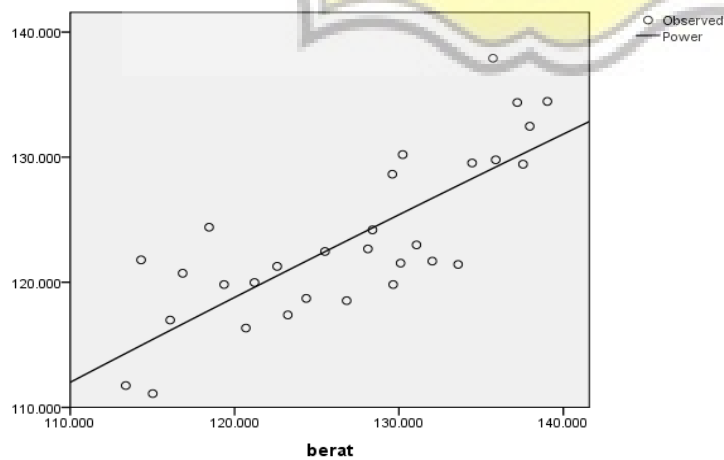
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|--------|------|
| Regression | .051 | 1 | .051 | 48.035 | .000 |
| Residual | .030 | 28 | .001 | | |
| Total | .081 | 29 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | .676 | .098 | .795 | 6.931 | .000 |
| (Constant) | 4.660 | 2.202 | | 2.116 | .043 |

The dependent variable is ln(tpb).



tcu

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .283 | .080 | .047 | .230 |

The independent variable is berat.

ANOVA

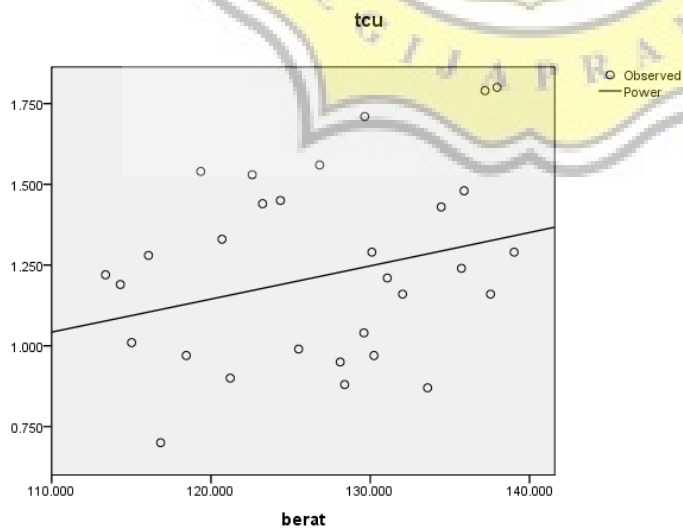
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|------|
| Regression | .129 | 1 | .129 | 2.433 | .130 |
| Residual | 1.485 | 28 | .053 | | |
| Total | 1.614 | 29 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | 1.074 | .689 | .283 | 1.560 | .130 |
| (Constant) | .007 | .022 | | .300 | .767 |

The dependent variable is ln(tcu).



Curve Fit (berat sedang)

Tpb

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .949 | .900 | .896 | .014 |

The independent variable is berat.

ANOVA

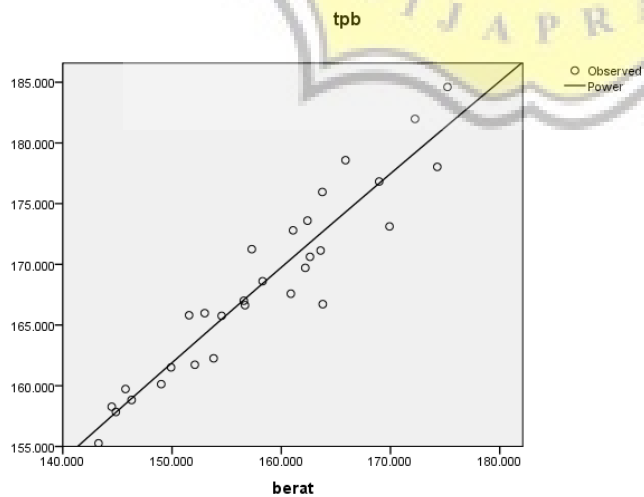
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|---------|------|
| Regression | .052 | 1 | .052 | 251.066 | .000 |
| Residual | .006 | 28 | .000 | | |
| Total | .058 | 29 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | .734 | .046 | .949 | 15.845 | .000 |
| (Constant) | 4.094 | .960 | | 4.265 | .000 |

The dependent variable is ln(tpb).



Tcu

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .503 | .253 | .226 | .053 |

The independent variable is berat.

ANOVA

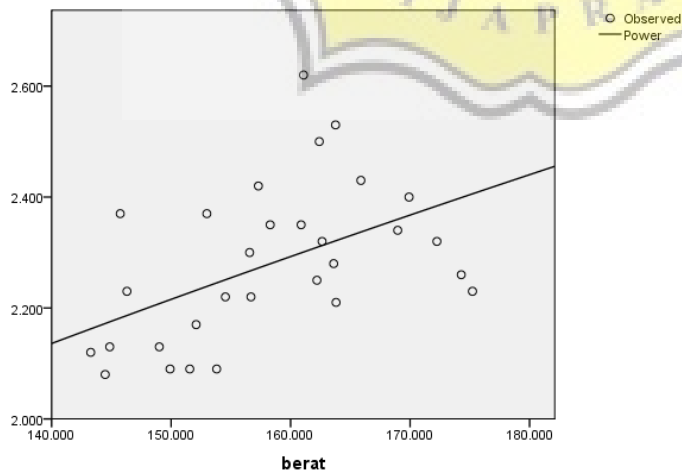
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|------|
| Regression | .027 | 1 | .027 | 9.468 | .005 |
| Residual | .080 | 28 | .003 | | |
| Total | .107 | 29 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | .530 | .172 | .503 | 3.077 | .005 |
| (Constant) | .156 | .136 | | 1.147 | .261 |

The dependent variable is ln(tcu).



Curve Fit (berat besar)

Tpb

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .963 | .927 | .924 | .033 |

The independent variable is berat.

ANOVA

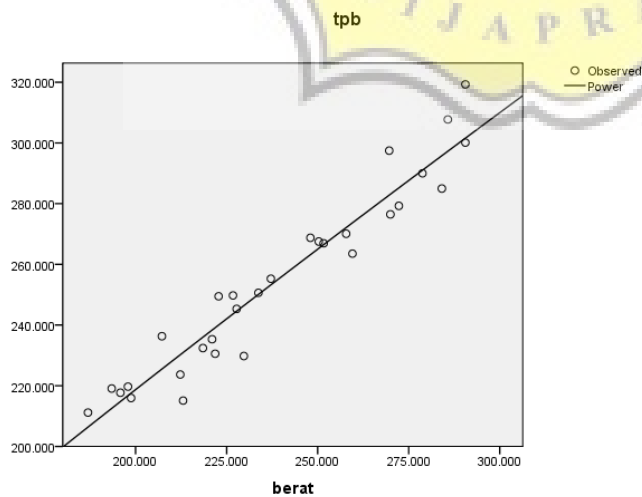
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|---------|------|
| Regression | .383 | 1 | .383 | 354.955 | .000 |
| Residual | .030 | 28 | .001 | | |
| Total | .413 | 29 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | .860 | .046 | .963 | 18.840 | .000 |
| (Constant) | 2.297 | .573 | | 4.007 | .000 |

The dependent variable is ln(tpb).



Tcu

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .593 | .351 | .328 | .152 |

The independent variable is berat.

ANOVA

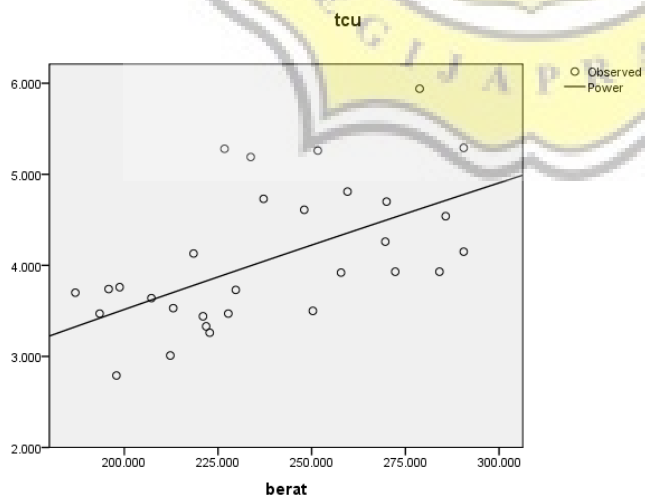
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|--------|------|
| Regression | .349 | 1 | .349 | 15.157 | .001 |
| Residual | .645 | 28 | .023 | | |
| Total | .995 | 29 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | .822 | .211 | .593 | 3.893 | .001 |
| (Constant) | .045 | .052 | | .866 | .394 |

The dependent variable is ln(tcu).



Curve Fit (panjang kecil)

Phys

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .061 | .004 | -.032 | .018 |

The independent variable is panjang.

ANOVA

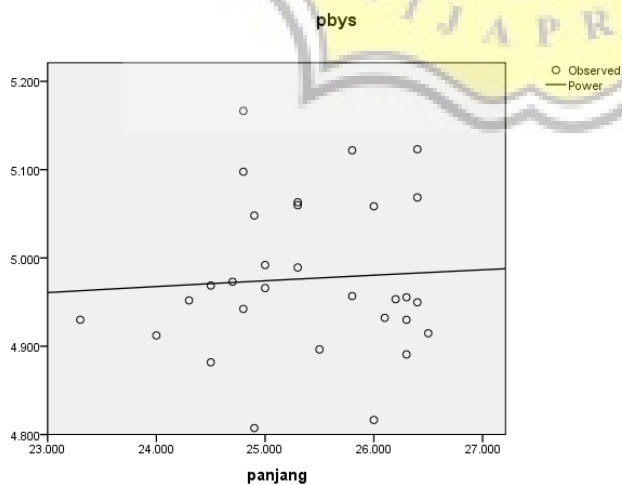
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|------|------|
| Regression | .000 | 1 | .000 | .105 | .748 |
| Residual | .009 | 28 | .000 | | |
| Total | .009 | 29 | | | |

The independent variable is panjang.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(panjang) | .032 | .100 | .061 | .324 | .748 |
| (Constant) | 4.483 | 1.445 | | 3.102 | .004 |

The dependent variable is ln(pbys).



Cuys

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .049 | .002 | -.033 | .080 |

The independent variable is panjang.

ANOVA

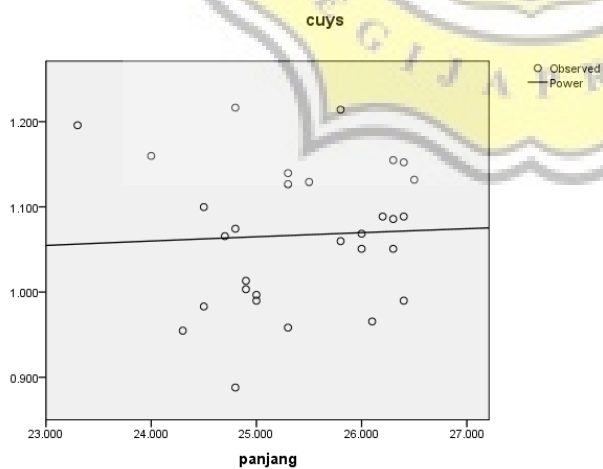
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|------|------|
| Regression | .000 | 1 | .000 | .067 | .798 |
| Residual | .179 | 28 | .006 | | |
| Total | .179 | 29 | | | |

The independent variable is panjang.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------------|-----------------------------|------------|---------------------------|------|------|
| | B | Std. Error | Beta | | |
| ln(panjang) | .115 | .445 | .049 | .259 | .798 |
| (Constant) | .735 | 1.058 | | .694 | .493 |

The dependent variable is ln(cuys).



Curve Fit (panjang sedang)

Phys

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .253 | .064 | .031 | .015 |

The independent variable is panjang.

ANOVA

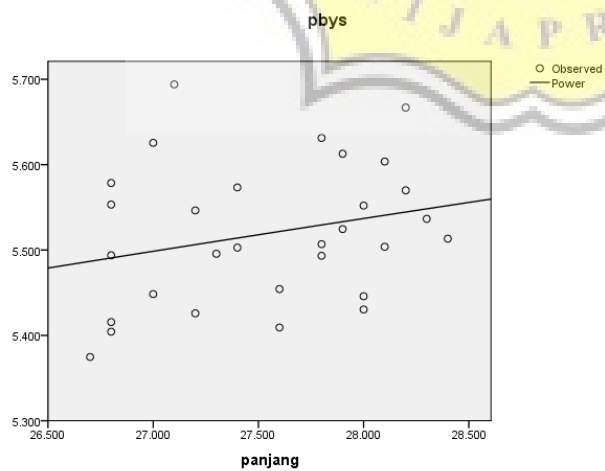
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|------|
| Regression | .000 | 1 | .000 | 1.922 | .177 |
| Residual | .006 | 28 | .000 | | |
| Total | .006 | 29 | | | |

The independent variable is panjang.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(panjang) | .191 | .138 | .253 | 1.386 | .177 |
| (Constant) | 2.926 | 1.339 | | 2.184 | .037 |

The dependent variable is ln(pbys).



Cuys

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .209 | .044 | .009 | .020 |

The independent variable is panjang.

ANOVA

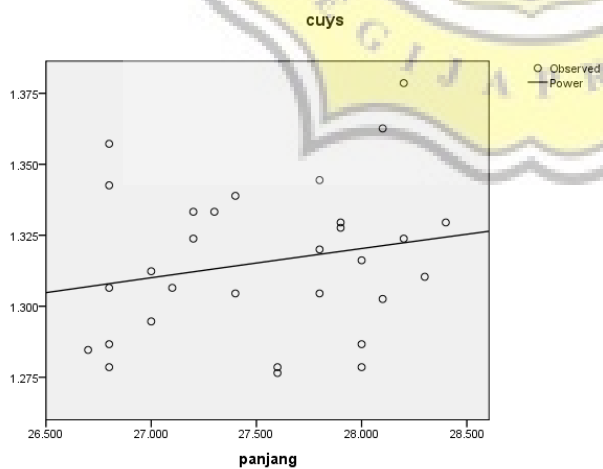
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|------|
| Regression | .001 | 1 | .001 | 1.277 | .268 |
| Residual | .011 | 28 | .000 | | |
| Total | .012 | 29 | | | |

The independent variable is panjang.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(panjang) | .215 | .190 | .209 | 1.130 | .268 |
| (Constant) | .645 | .407 | | 1.586 | .124 |

The dependent variable is ln(cuys).



Curve Fit (panjang sedang)

Phys

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .296 | .087 | .055 | .039 |

The independent variable is panjang.

ANOVA

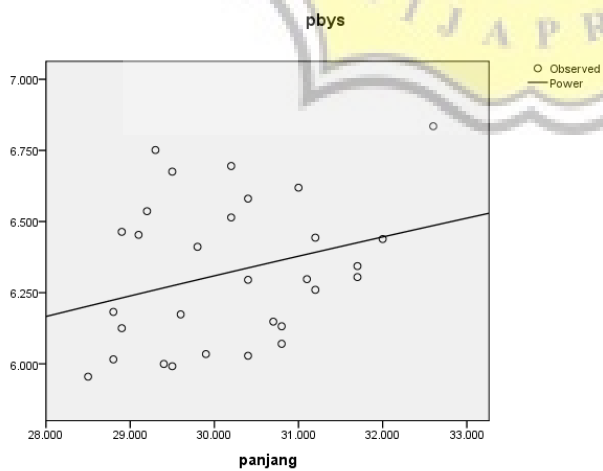
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|------|
| Regression | .004 | 1 | .004 | 2.681 | .113 |
| Residual | .042 | 28 | .001 | | |
| Total | .046 | 29 | | | |

The independent variable is panjang.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(panjang) | .332 | .203 | .296 | 1.637 | .113 |
| (Constant) | 2.040 | 1.409 | | 1.448 | .159 |

The dependent variable is ln(pbys).



Cuys

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .376 | .142 | .111 | .058 |

The independent variable is panjang.

ANOVA

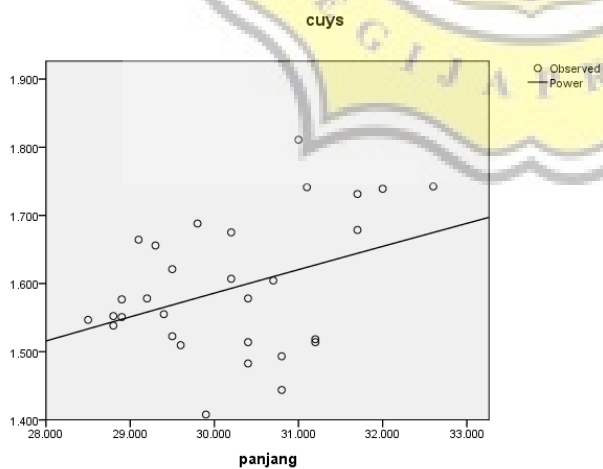
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|-------|------|
| Regression | .016 | 1 | .016 | 4.621 | .040 |
| Residual | .095 | 28 | .003 | | |
| Total | .111 | 29 | | | |

The independent variable is panjang.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| ln(panjang) | .656 | .305 | .376 | 2.150 | .040 |
| (Constant) | .170 | .177 | | .962 | .344 |

The dependent variable is ln(cuys).



Curve Fit (berat keseluruhan)

Tpb

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .988 | .976 | .976 | .048 |

The independent variable is berat.

ANOVA

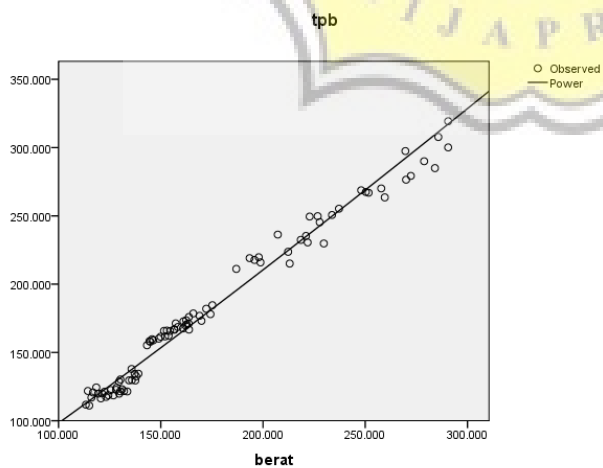
| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|----------|------|
| Regression | 8.120 | 1 | 8.120 | 3593.365 | .000 |
| Residual | .199 | 88 | .002 | | |
| Total | 8.319 | 89 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | 1.099 | .018 | .988 | 59.945 | .000 |
| (Constant) | .624 | .059 | | 10.635 | .000 |

The dependent variable is ln(tpb).



Tcu

Power

Model Summary

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
|------|----------|-------------------|----------------------------|
| .920 | .846 | .844 | .206 |

The independent variable is berat.

ANOVA

| | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----|-------------|---------|------|
| Regression | 20.619 | 1 | 20.619 | 484.264 | .000 |
| Residual | 3.747 | 88 | .043 | | |
| Total | 24.365 | 89 | | | |

The independent variable is berat.

Coefficients

| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| ln(berat) | 1.751 | .080 | .920 | 22.006 | .000 |
| (Constant) | 0.0003 | 0.0001 | | 2.450 | .016 |

The dependent variable is ln(tcu).

