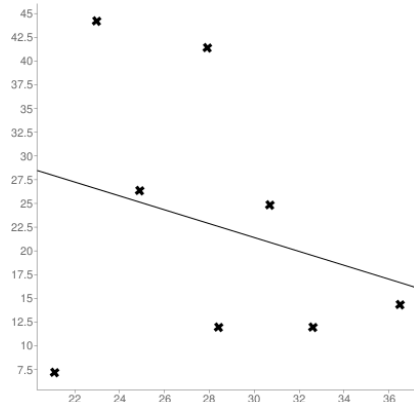


Supplementary File 3: Scatter-plots showing the dependence of the Chr-Chr contacts (Y-axis) against the Chr-NE contacts (X-axis) in species of malaria mosquitoes.

***An. coluzzii* – all chromosomes**

X: 21.1, 32.6, 36.5, 28.4, 30.7, 24.9, 27.9, 23.0

Y: 7.2, 11.9, 14.3, 11.9, 24.8, 26.4, 41.4, 44.2



Sample size: 8

Mean \bar{x} : 28.1375

Mean \bar{y} : 22.7625

Intercept (a): 43.324940724696

Slope (b): -0.73078421056228

Regression line equation: $y = 43.324940724696 - 0.73078421056228x$

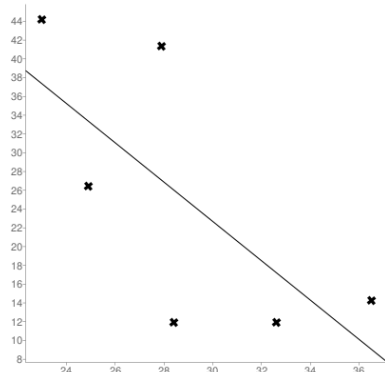
Correlation coefficient (r): -0.26664474968408

$r^2 = 0.071099422534086$. The P-Value is 0.523306. The result is not significant at $p < 0.05$

***An. coluzzii* – autosomes only**

X: 32.6, 36.5, 28.4, 24.9, 27.9, 23.0

Y: 11.9, 14.3, 11.9, 26.4, 41.4, 44.2



Sample size: 6

Mean \bar{x} : 28.883333333333

Mean \bar{y} : 25.016666666667

Intercept (a): 85.473082787937

Slope (b): -2.093124620471

Regression line equation: $y = 85.473082787937 - 2.093124620471x$

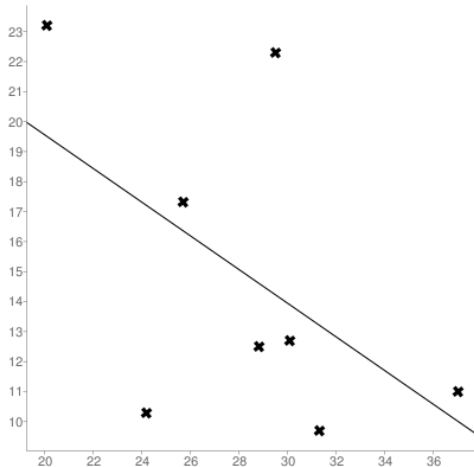
Correlation coefficient (r): -0.70224198940729

$r^2 = 0.493143811686708$. The P-Value is 0.119822. The result is not significant at $p < 0.05$

An. gambiae – all chromosomes

X: 24.2, 31.3, 37.0, 30.1, 28.8, 25.7, 20.1, 29.5

Y: 10.3, 9.7, 11.0, 12.7, 12.5, 17.3, 23.2, 22.3



Sample size: 8

Mean \bar{x} : 28.3375

Mean \bar{y} : 14.875

Intercept (a): 30.776669553469

Slope (b): -0.56115287352339

Regression line equation: $y = 30.776669553469 - 0.56115287352339x$

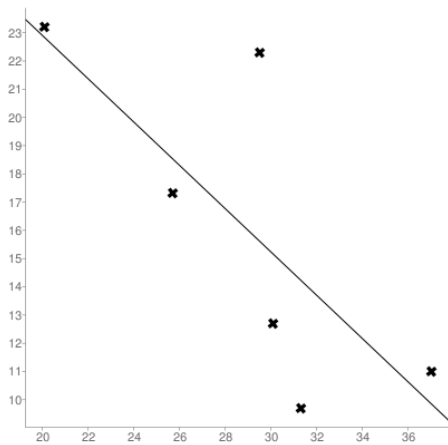
Correlation coefficient (r): -0.52848241195735

$r^2 = 0.279293659748258$. The P-Value is 0.178219. The result is not significant at $p < 0.05$

An. gambiae – autosomes only

X: 31.3, 37.0, 30.1, 25.7, 20.1, 29.5

Y: 9.7, 11.0, 12.7, 17.3, 23.2, 22.3



Sample size: 6

Mean \bar{x} : 28.95

Mean \bar{y} : 16.0333333333333

Intercept (a): 38.232503290122

Slope (b): -0.76681070662481

Regression line equation: $y = 38.232503290122 - 0.76681070662481x$

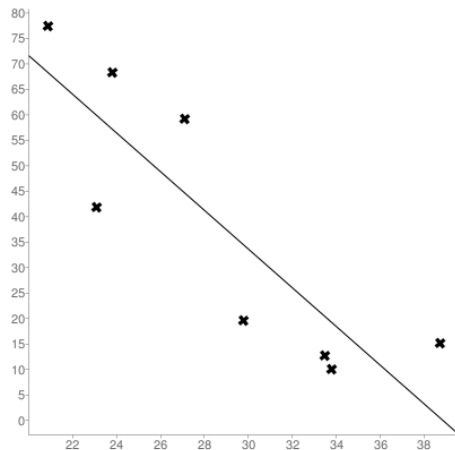
Correlation coefficient (r): -0.74851551197669

$r^2 = 0.560275471669726$. The P-Value is 0.086924. The result is not significant at $p < 0.05$

***An. merus* – all chromosomes**

X: 33.8, 33.5, 29.8, 38.7, 23.1, 23.8, 27.1, 20.9

Y: 10.1, 12.8, 19.6, 15.2, 41.8, 68.3, 59.2, 77.4



Sample size: 8

Mean \bar{x} : 28.8375

Mean \bar{y} : 38.05

Intercept (a): 147.7178449394

Slope (b): -3.8029595124197

Regression line equation: $y = 147.7178449394 - 3.8029595124197x$

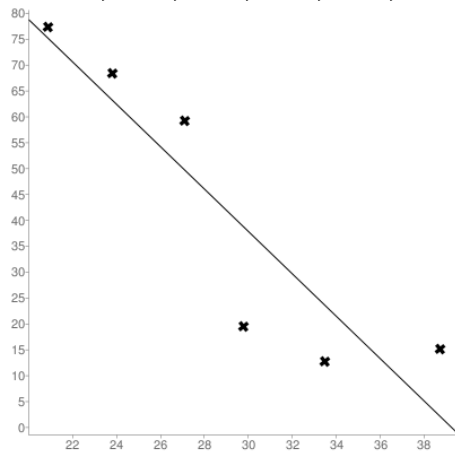
Correlation coefficient (r): -0.8642535785805

$r^2 = 0.7469342480892$. The P-Value is 0.005641. The result is significant at $p < 0.05$

***An. merus* – autosomes only**

X: 33.5, 29.8, 38.7, 23.8, 27.1, 20.9

Y: 12.8, 19.6, 15.2, 68.3, 59.2, 77.4



Sample size: 6

Mean \bar{x} : 28.966666666667

Mean \bar{y} : 42.083333333333

Intercept (a): 160.76255957077

Slope (b): -4.0970964178633

Regression line equation: $y = 160.76255957077 - 4.0970964178633x$

Correlation coefficient (r): -0.90667818228384

$r^2 = 0.822065326229528$. The P-Value is 0.012678. The result is significant at $p < 0.05$