

Article

Error Distribution Model to Standardize LPUE, CPUE and Survey-Derived Catch Rates of Target and Non-Target Species

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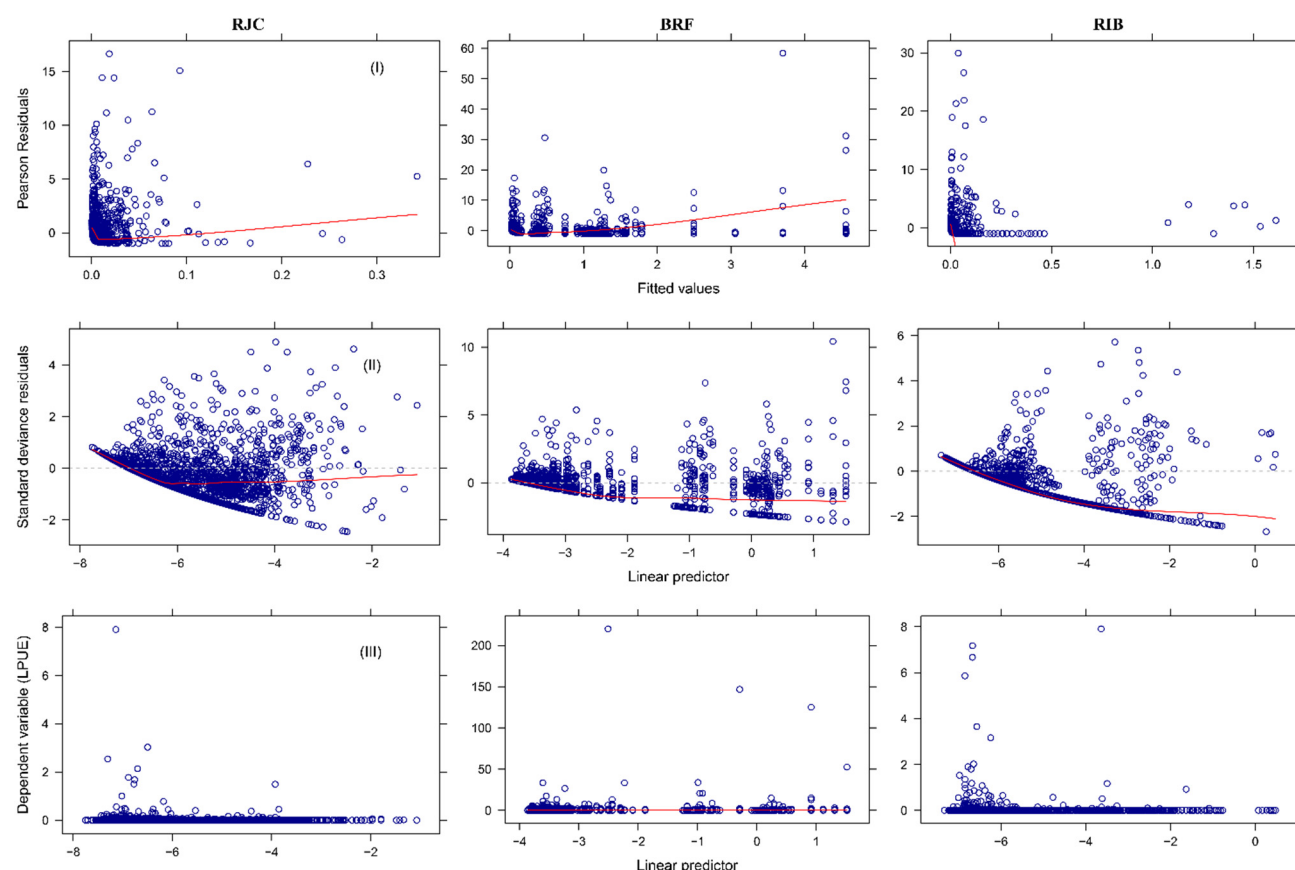
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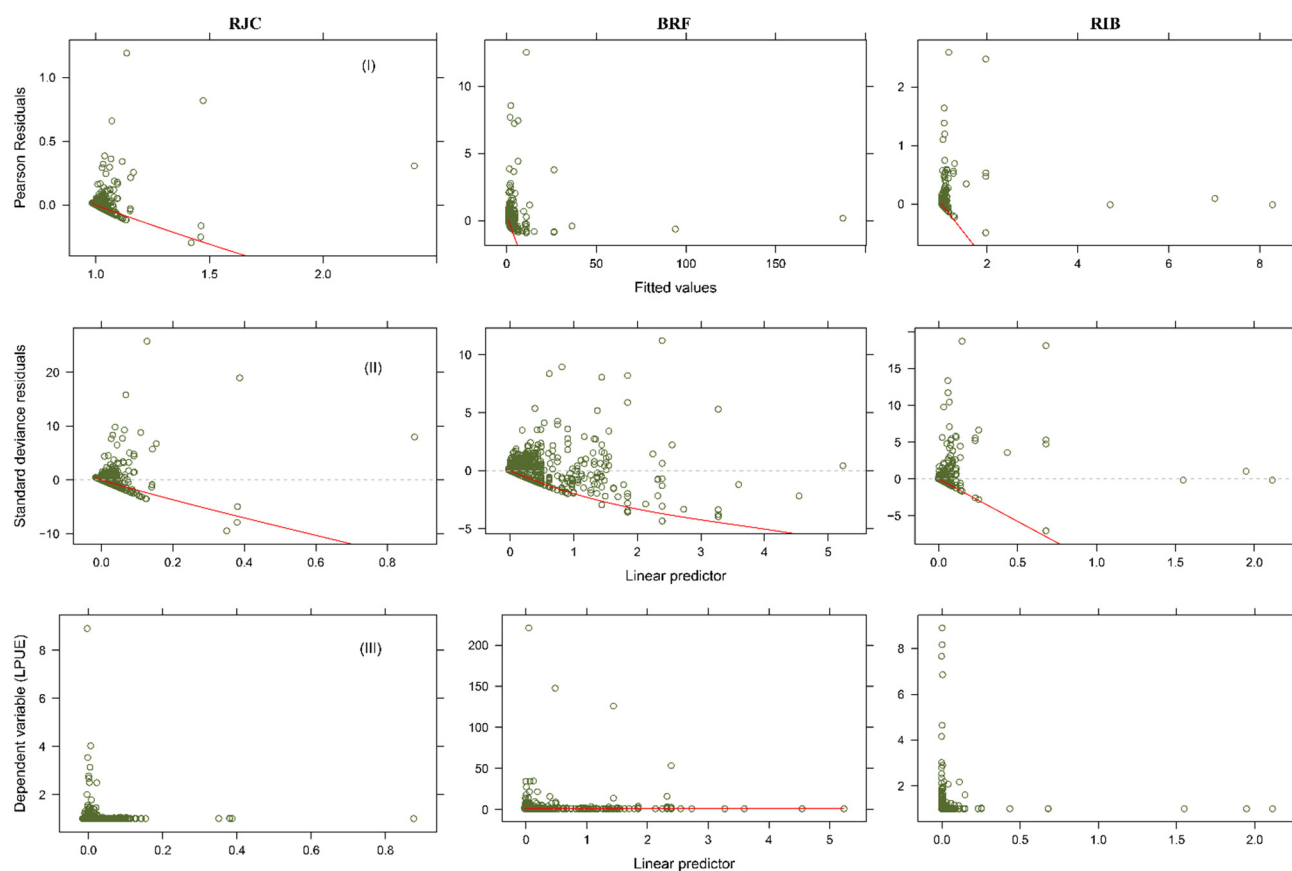
Figure S5. Diagnostic plots for positive catch rates of thornback ray *Raja clavata* (RJC), blackbelly rosefish *Helicolenus dactylopterus* (BRF), and common mora *Mora moro* (RIB) to check (I) the adequacy of the assumed variance function, (II) the assumed error distribution, and (III) the link function selection in the best selected models. Results are shown for the other error distributions evaluated. The null pattern is a no trend in the residuals (I), a distribution of residuals with mean zero and constant variance (II), and a straight line (III). The red line is the loess smoother through the plotted values. A: LPUE (kg landing⁻¹ vessel⁻¹); B: CPUE (kg days at sea⁻¹ vessel⁻¹); and C: RPN (ind. 10⁻³ hooks).

A.

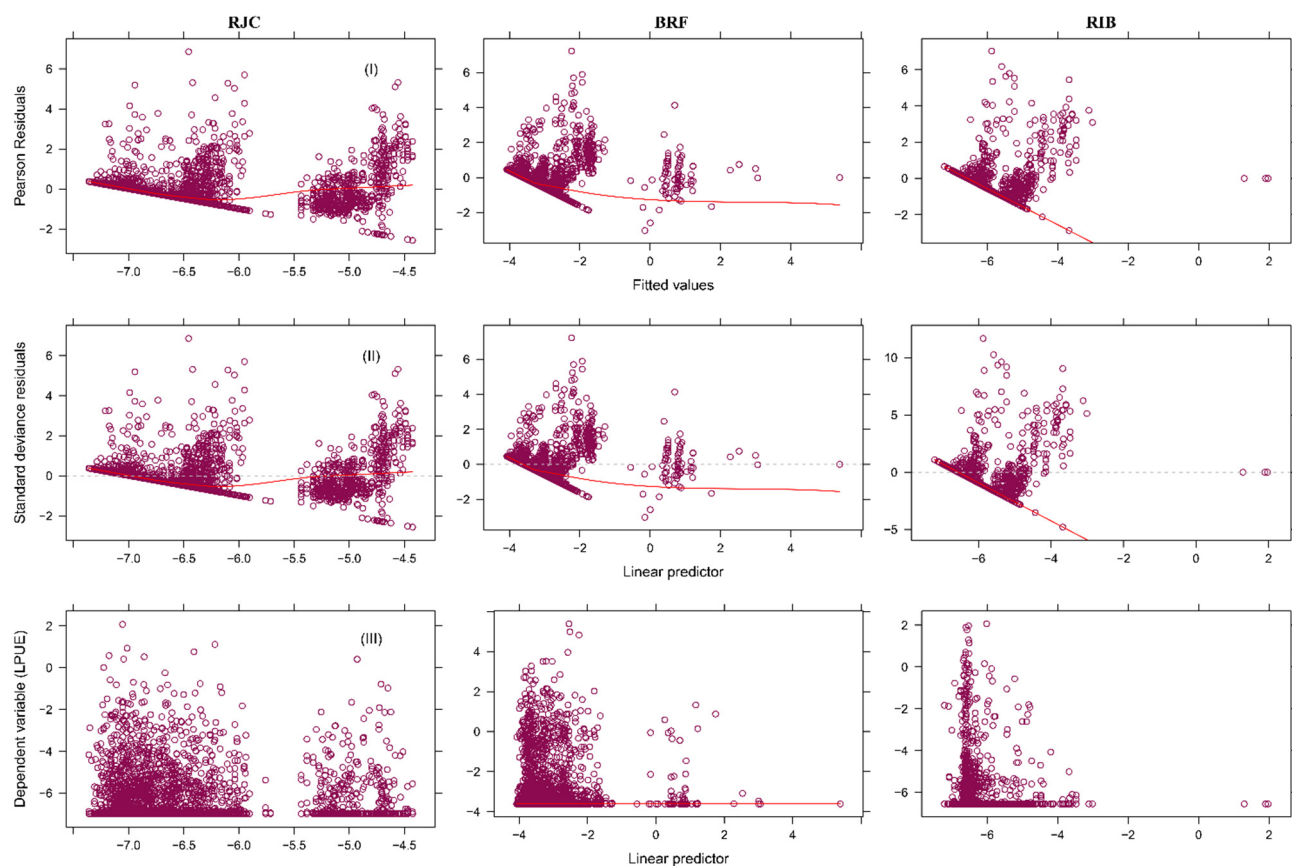
Gamma (LPUE + c)



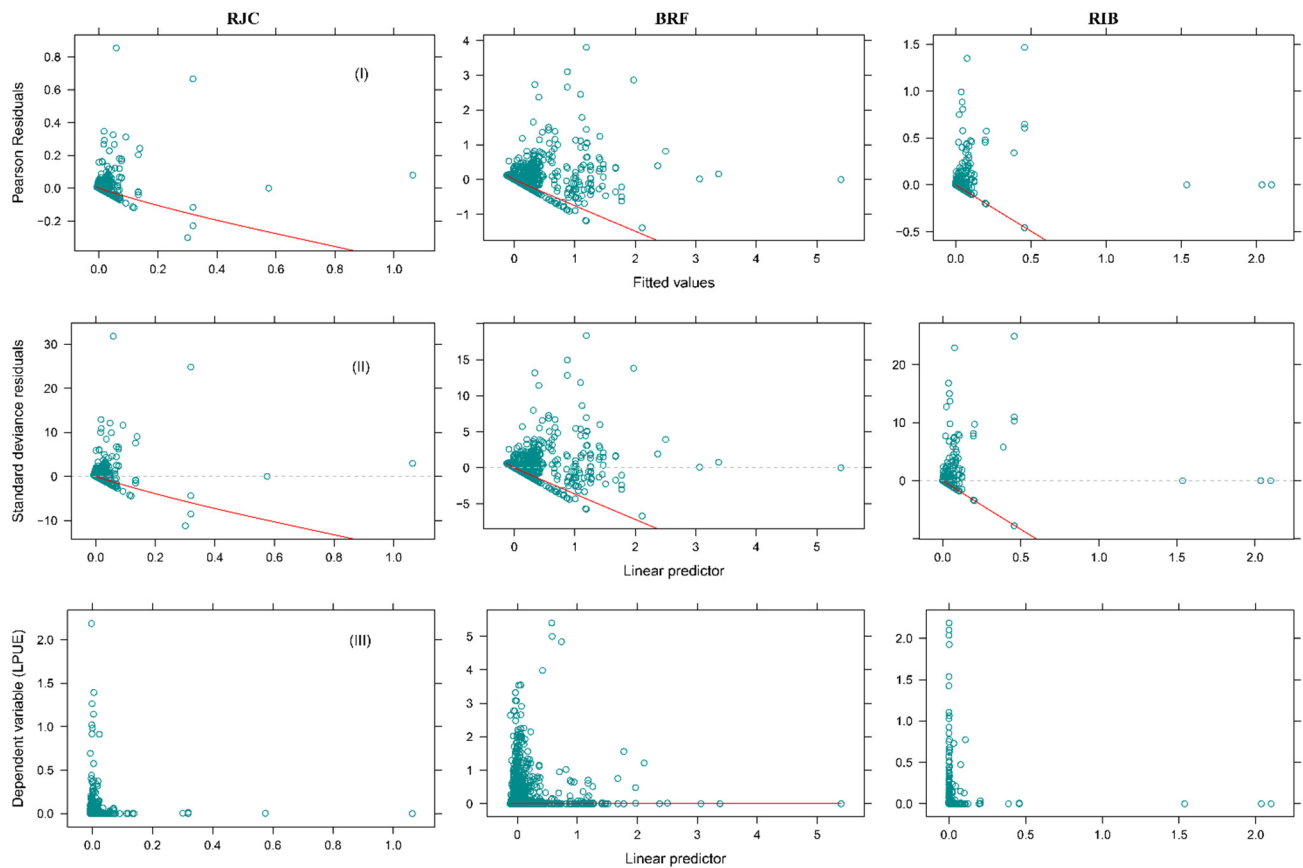
Gamma (LPUE + 1)



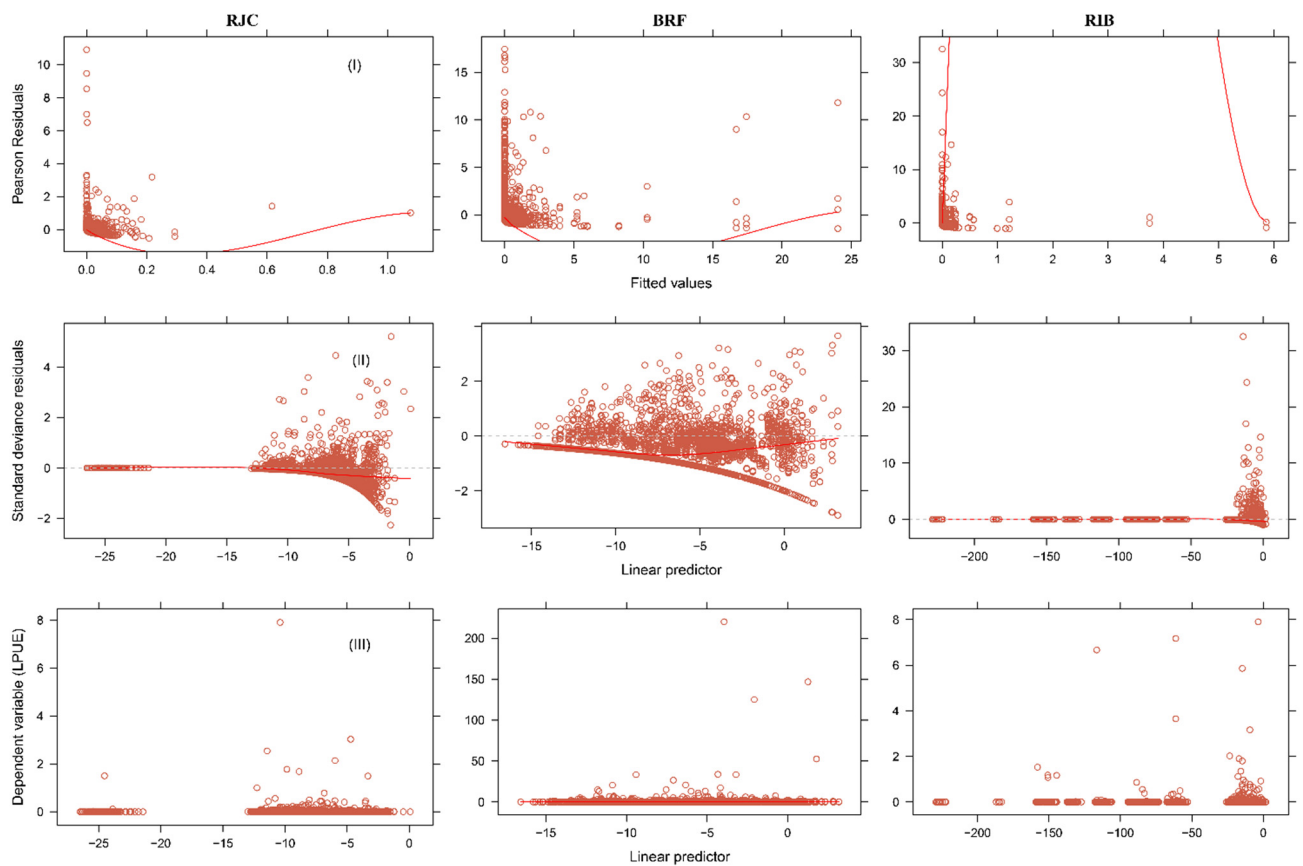
Lognormal (LPUE + c)



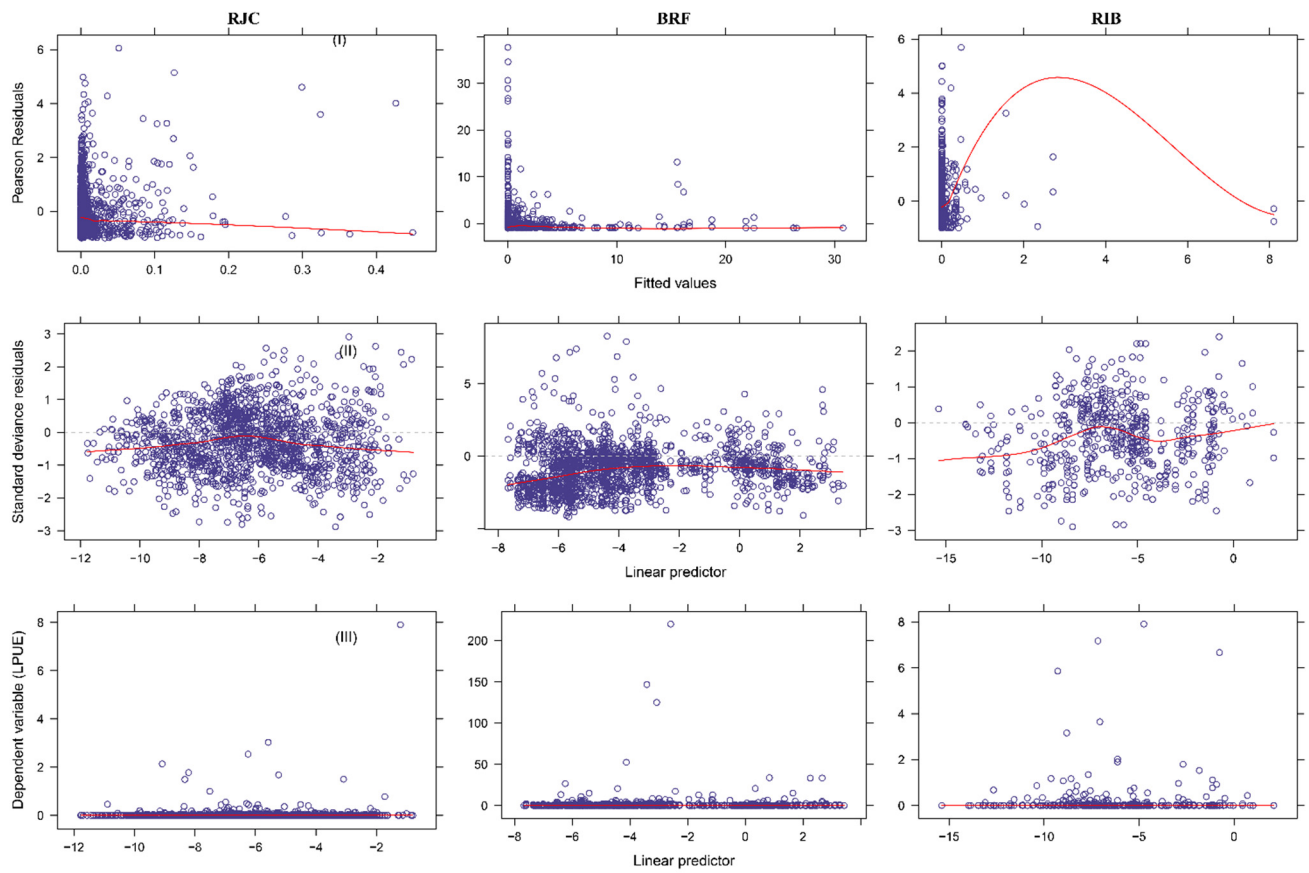
Lognormal (LPUE + 1)



Tweedie

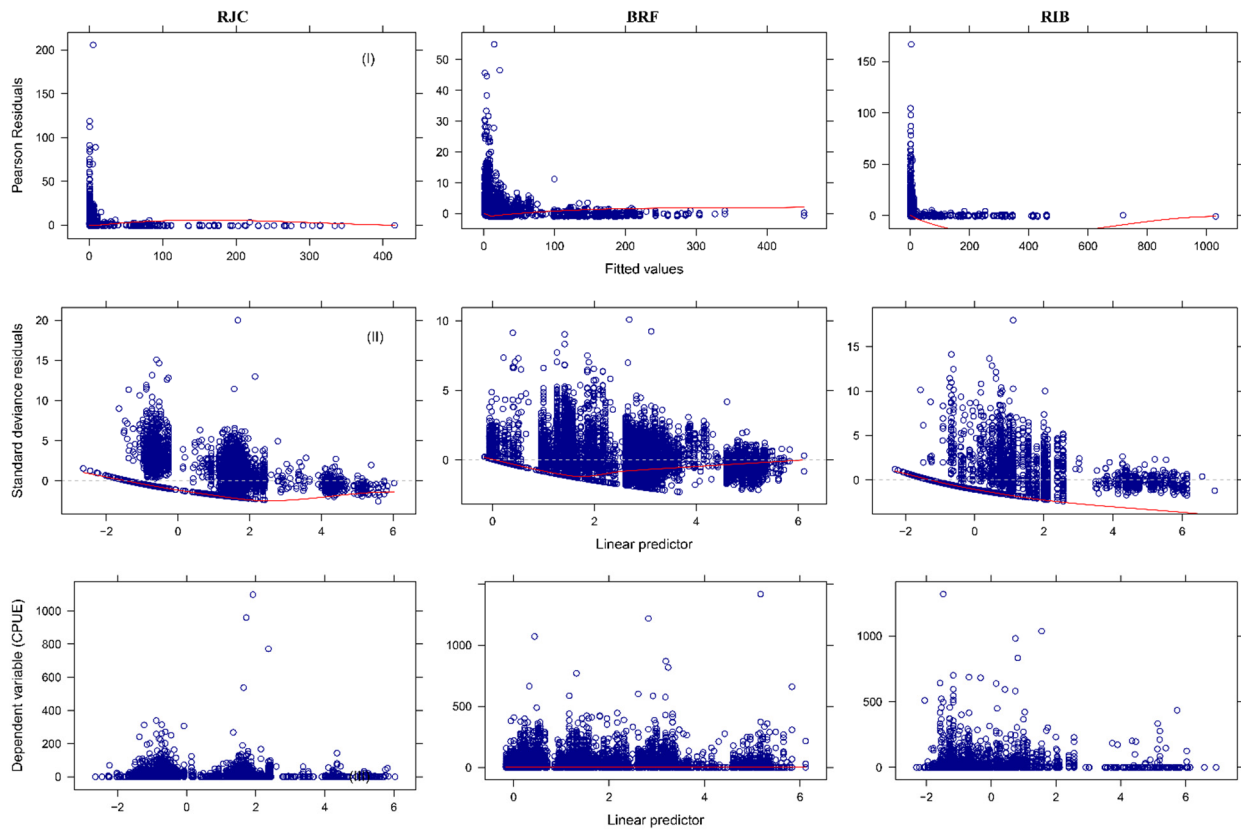


Gamma (LPUE > 0)

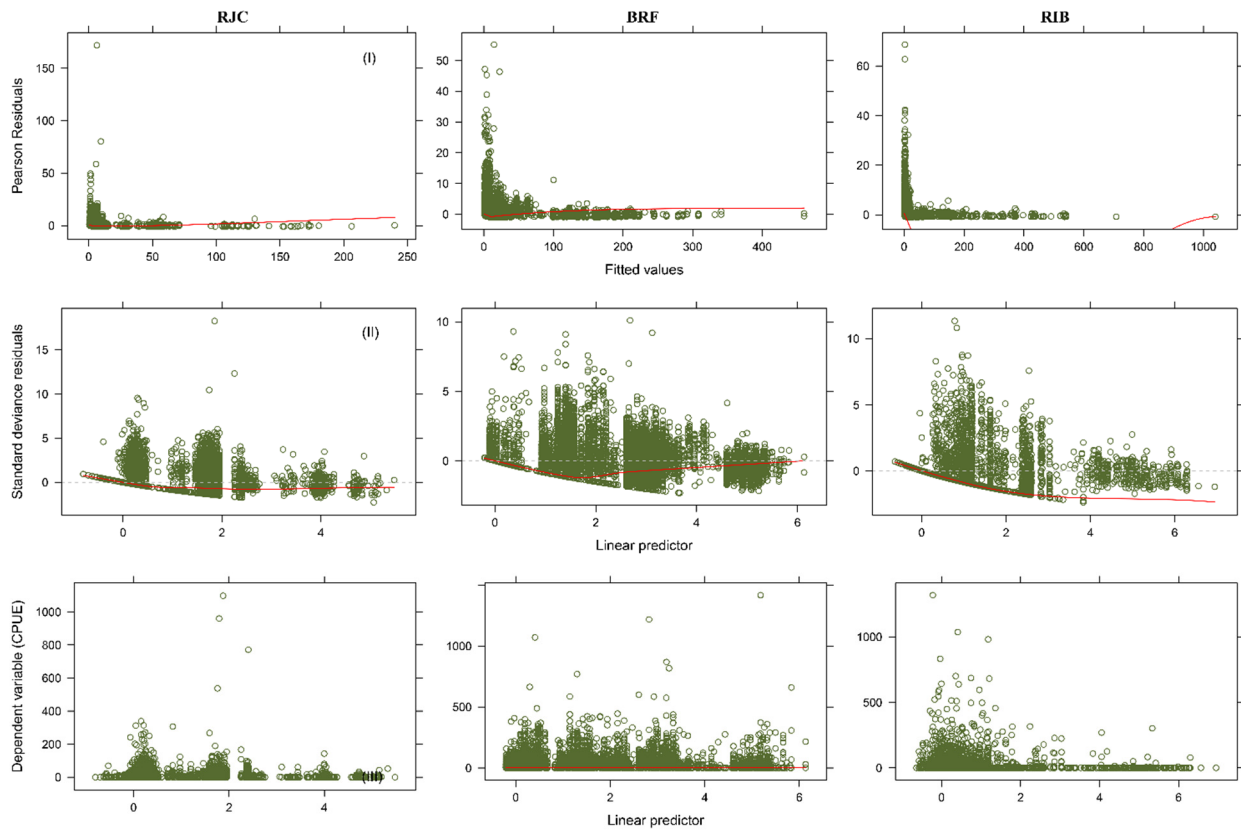


B.

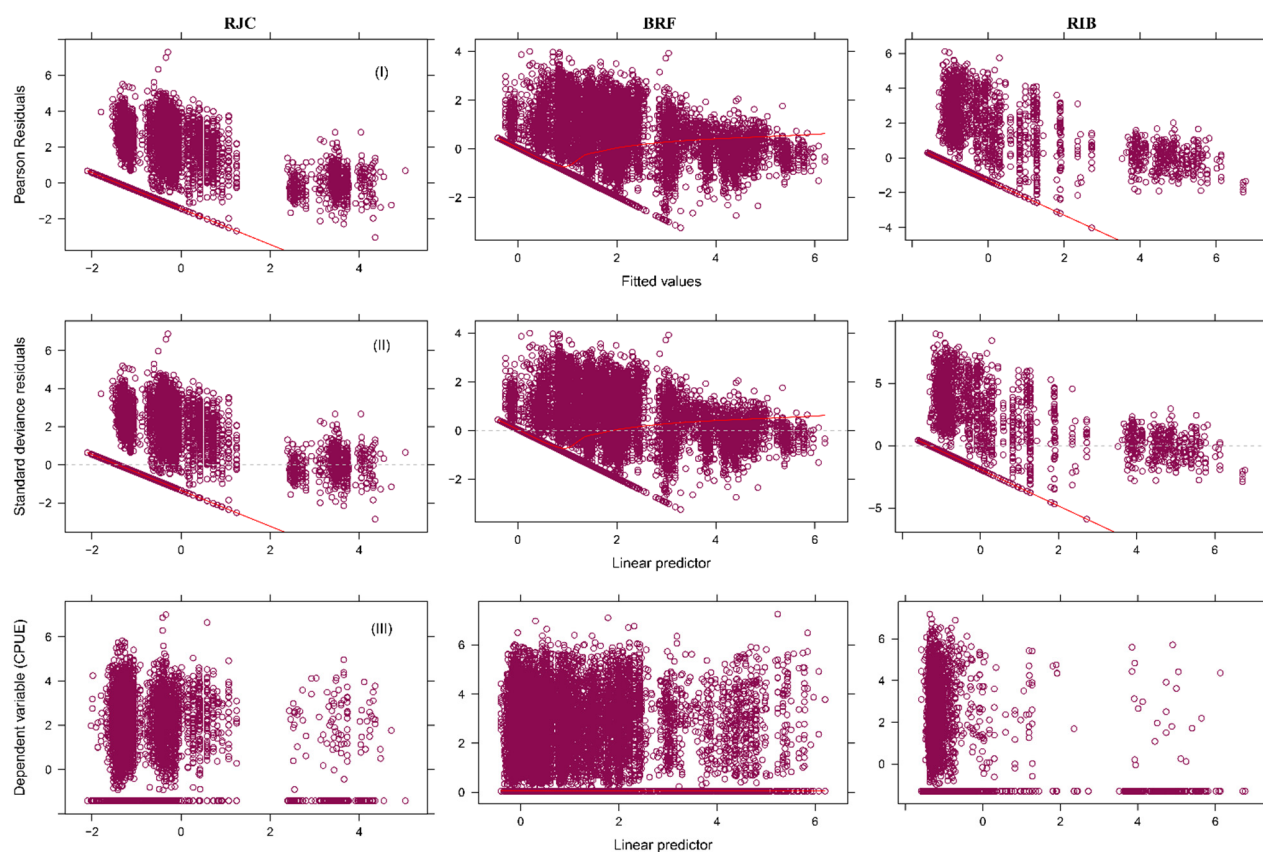
Gamma (CPUE + c)



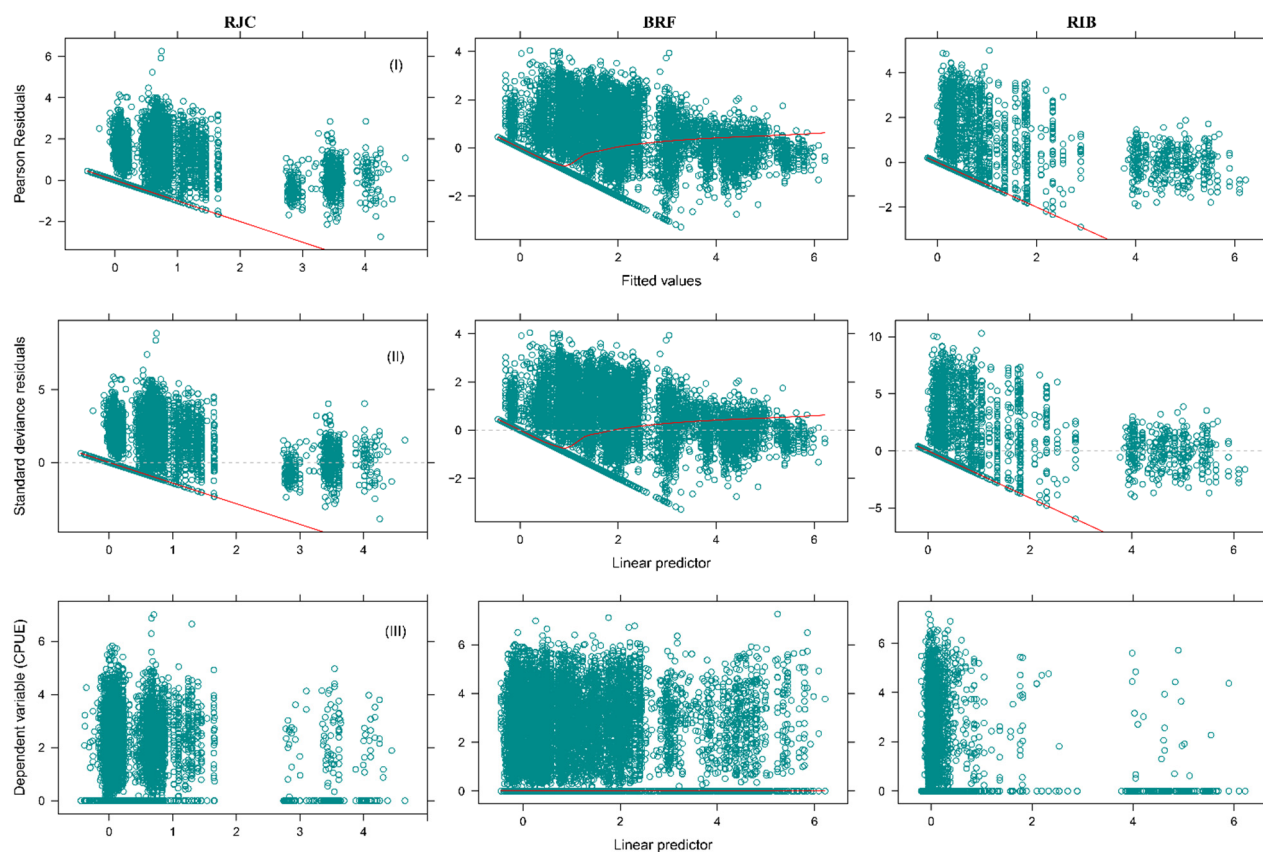
Gamma (CPUE + 1)



Lognormal (CPUE + c)

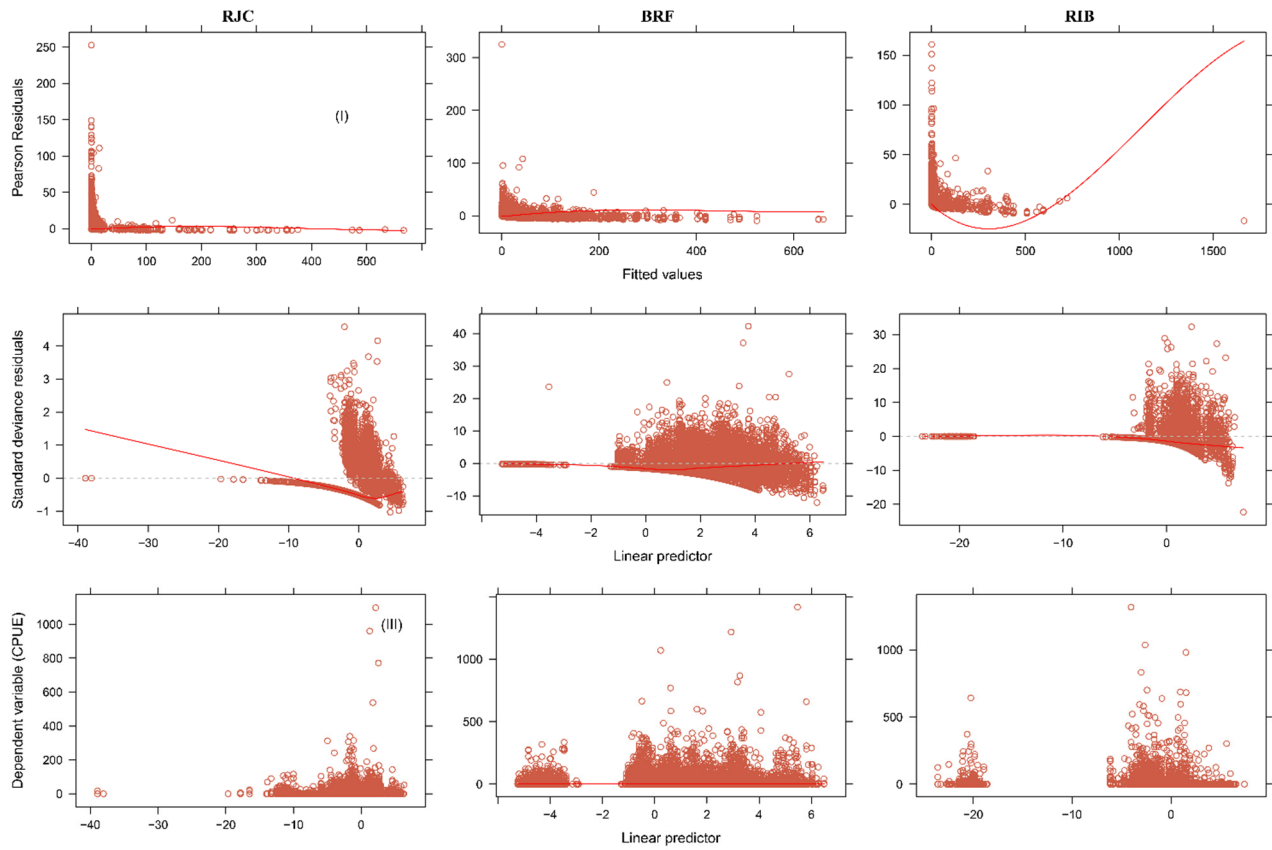


Lognormal (CPUE + 1)

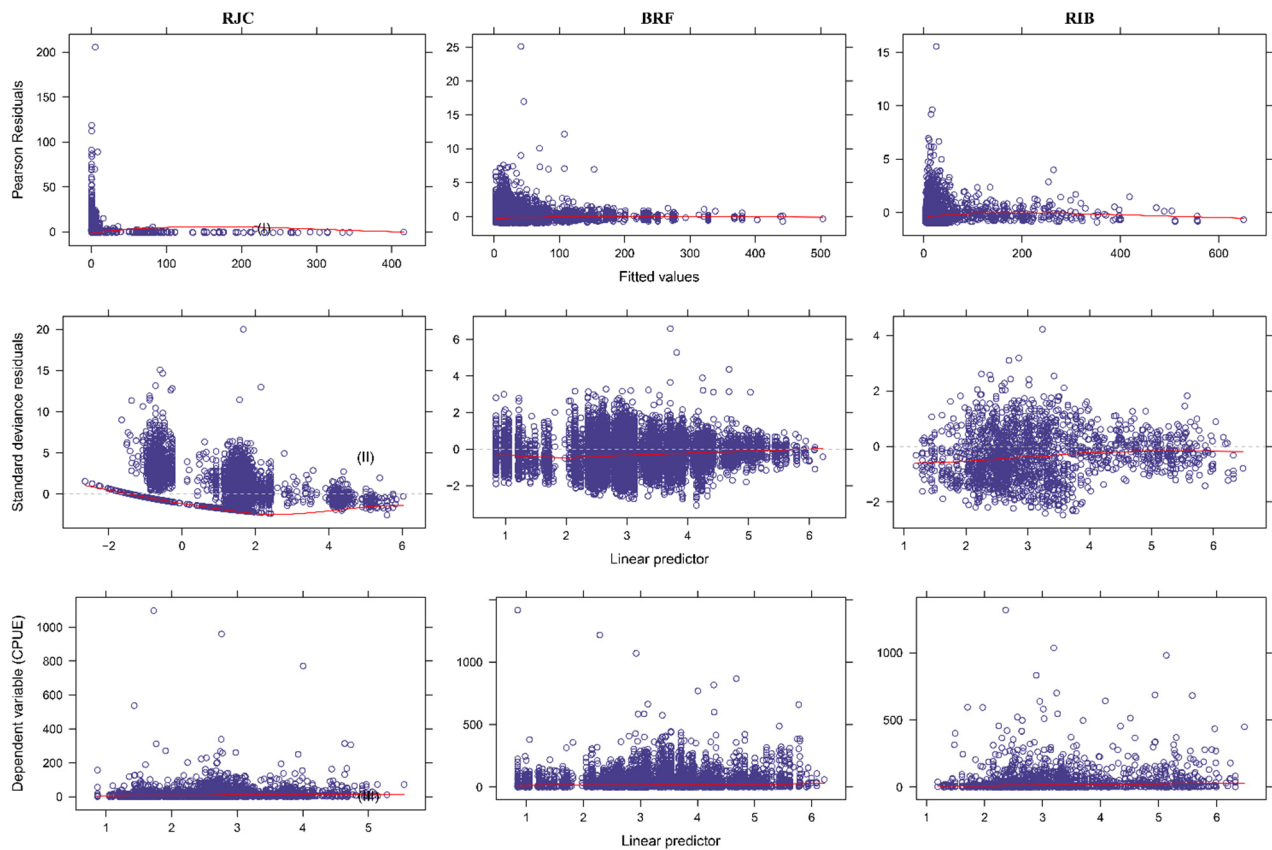




Tweedie

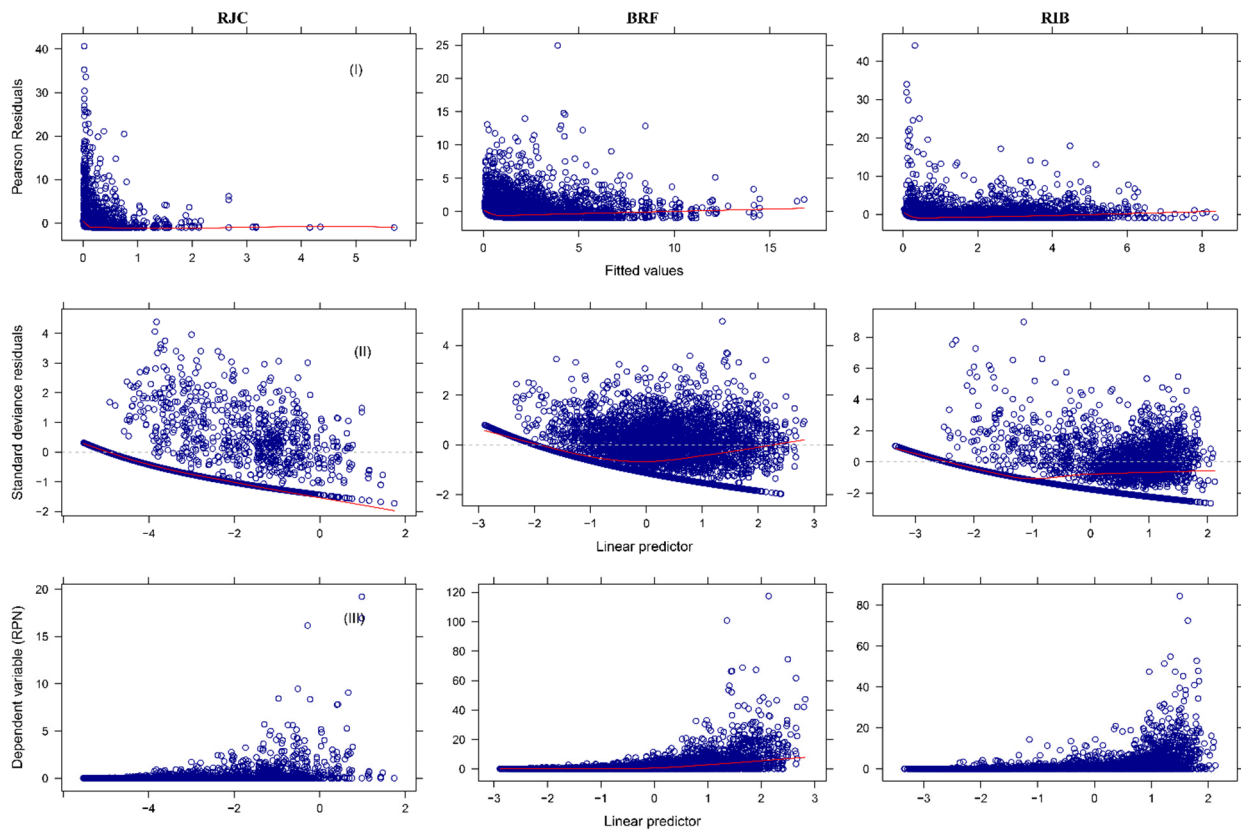


Gamma (CPUE > 0)

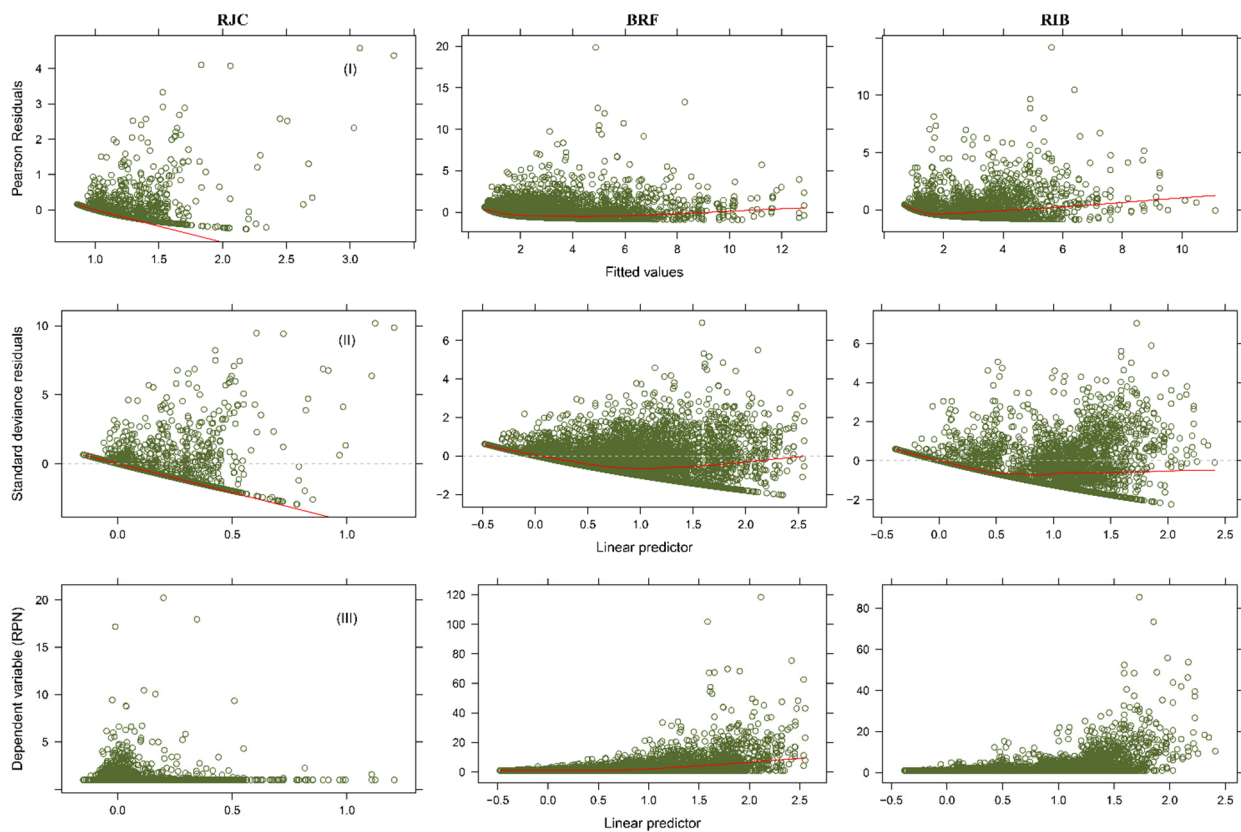


C.

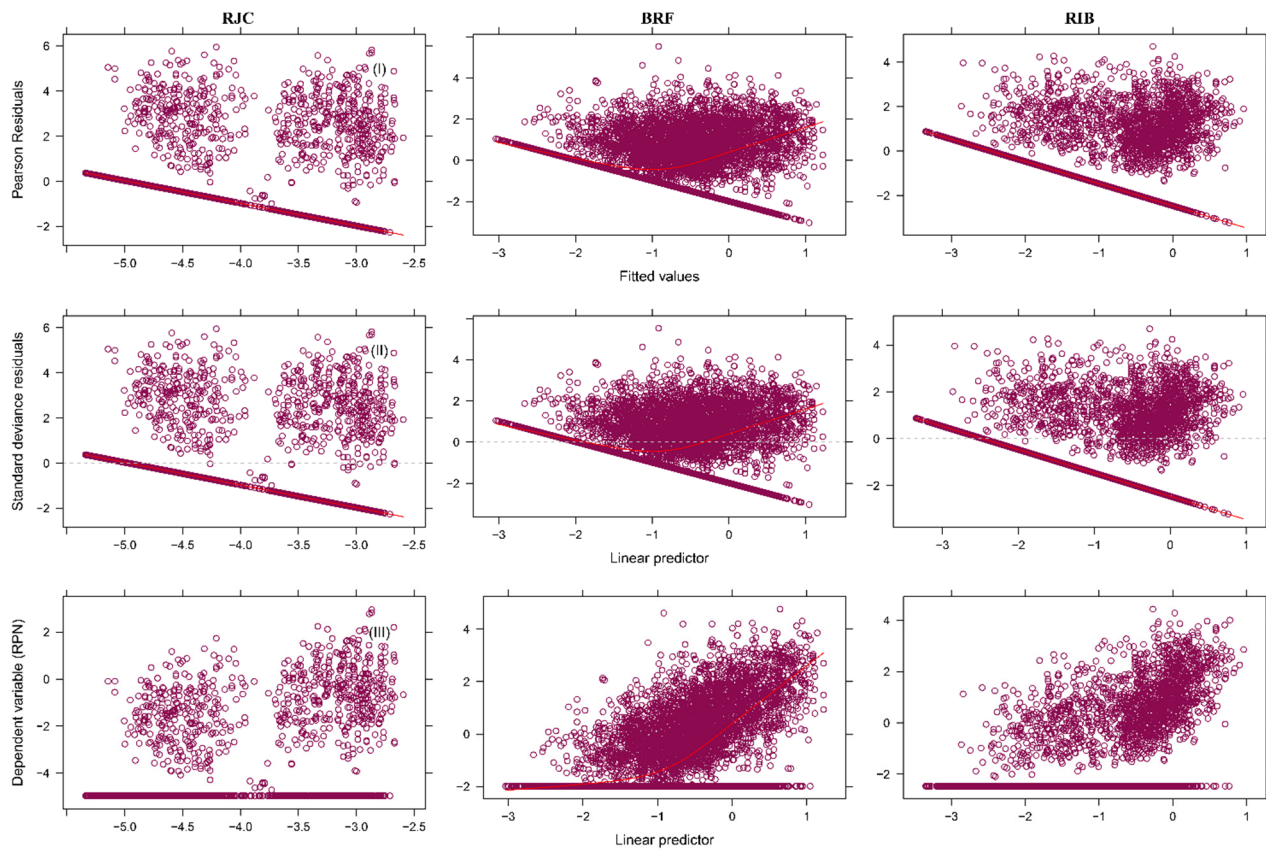
Gamma (RPN + c)



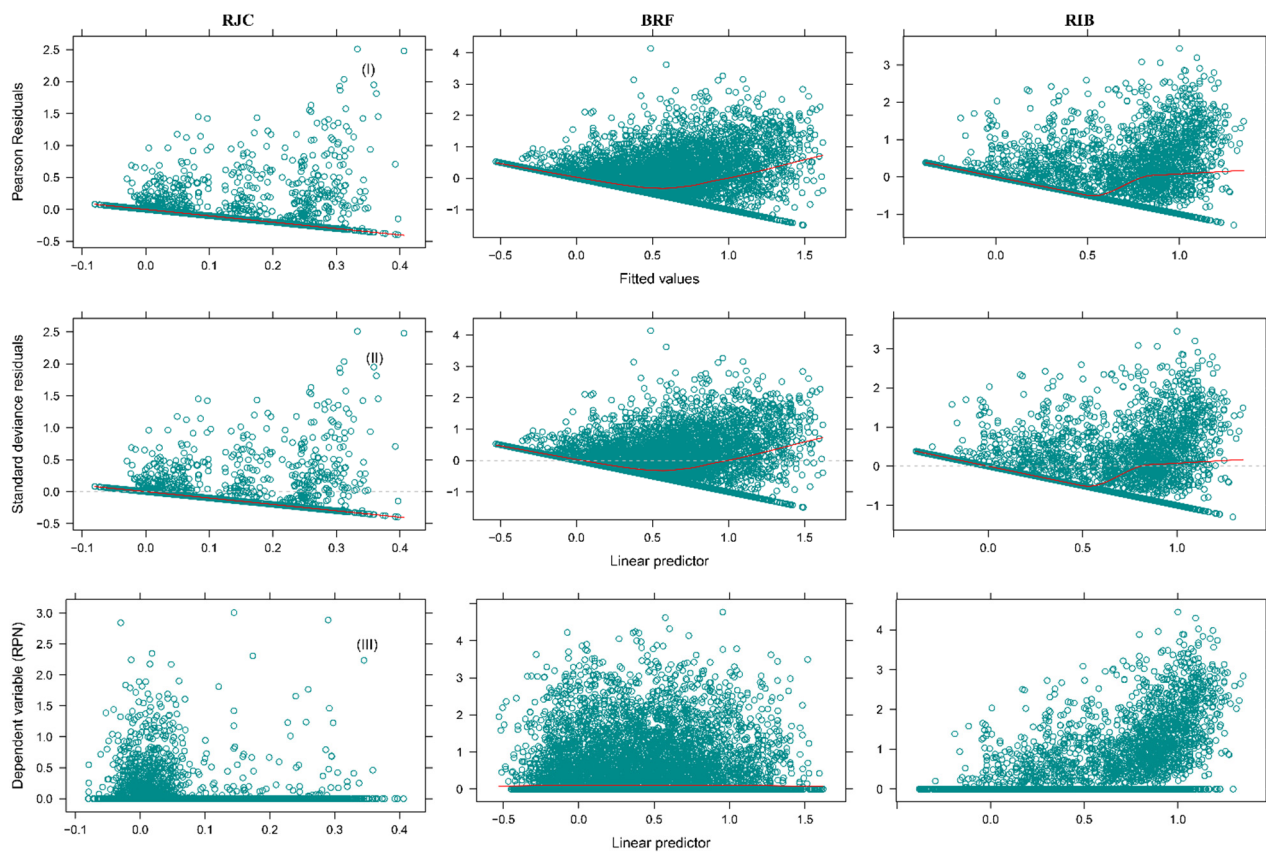
Gamma (RPN + 1)



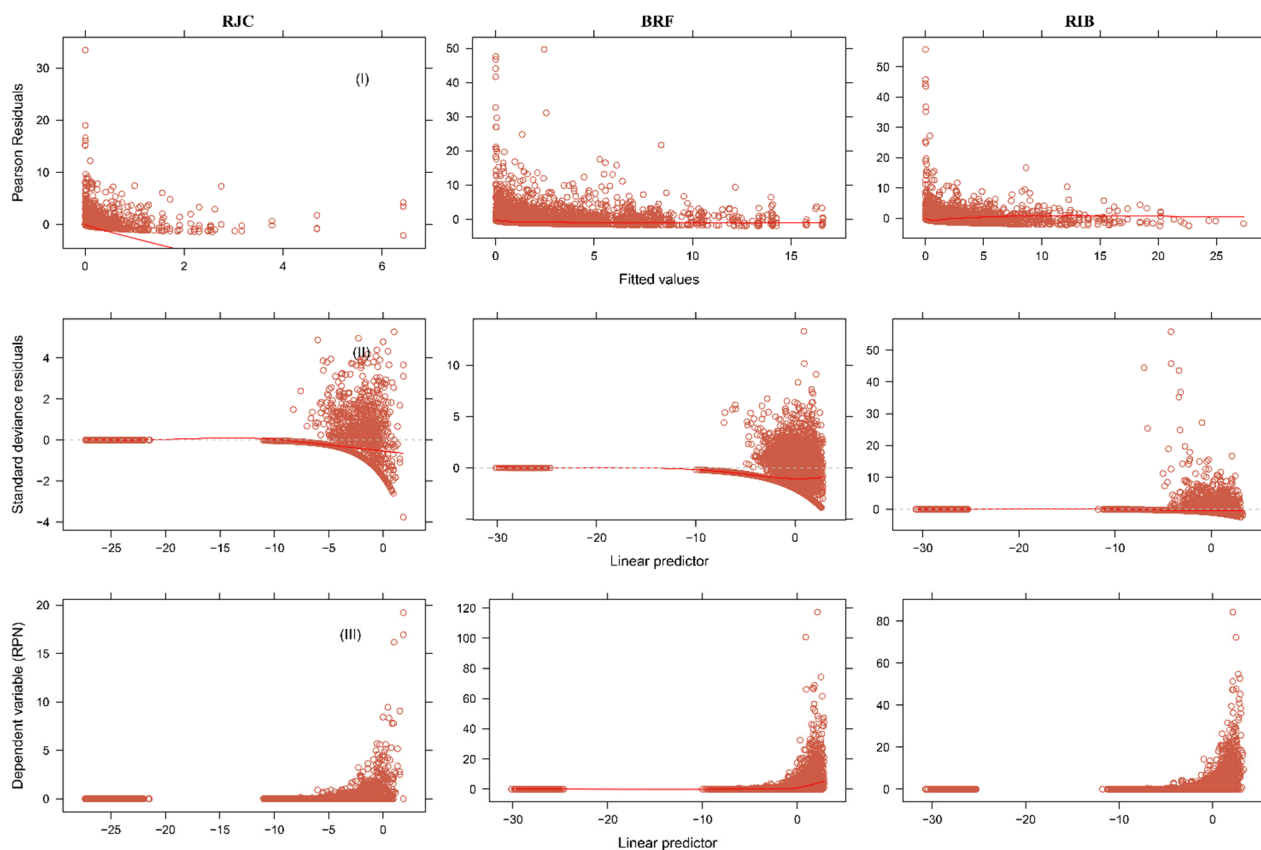
Lognormal (RPN + c)



Lognormal (RPN + 1)



Tweedie



Gamma (RPN > 0)

