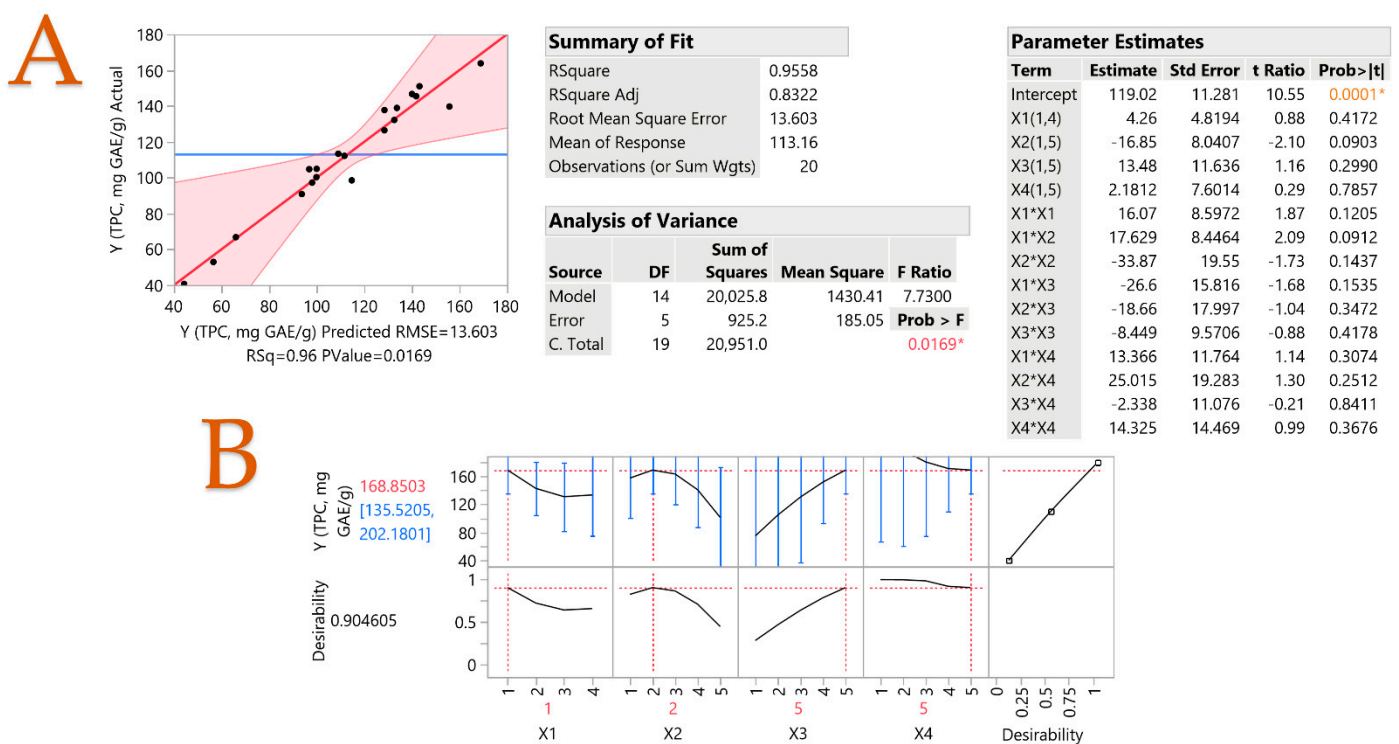


# Antioxidant-rich Extracts from Lemon Verbena (*Aloysia Citrodora* L.) Leaves Through Response Surface Methodology

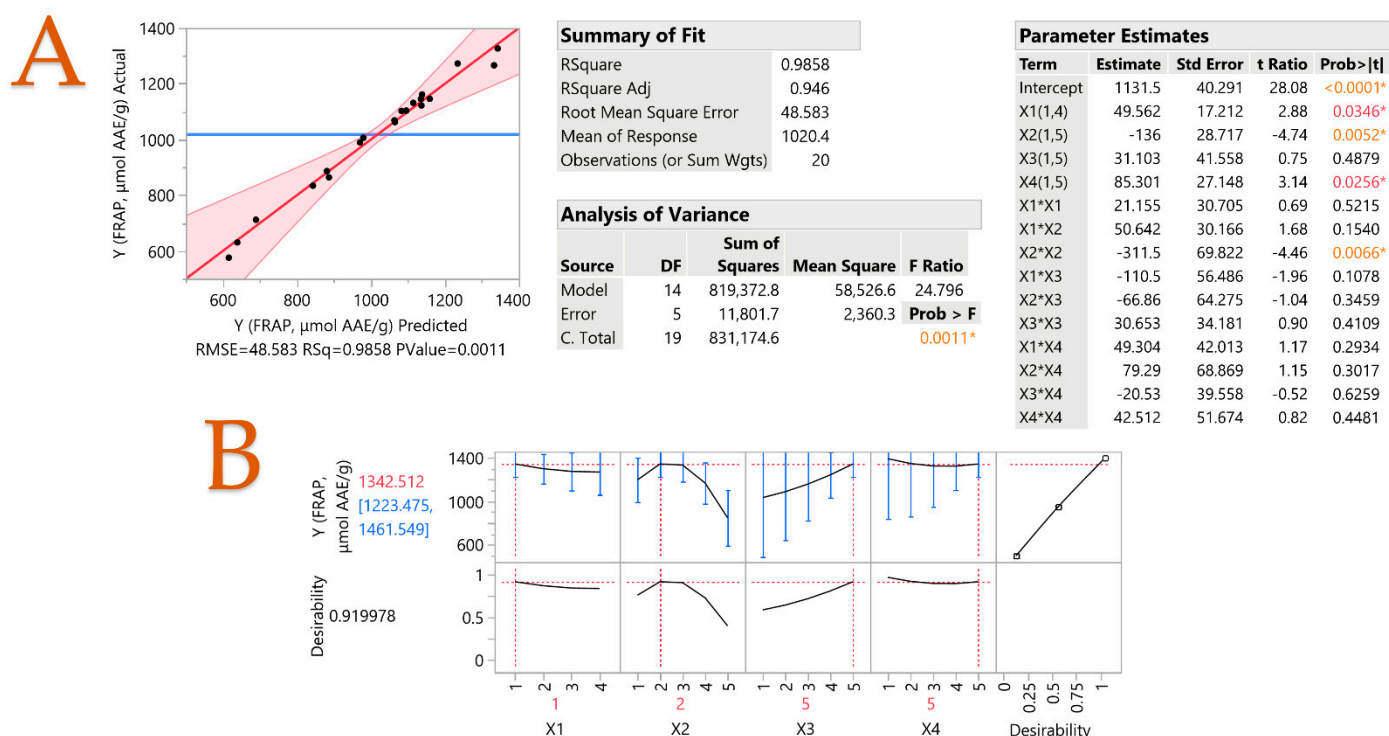
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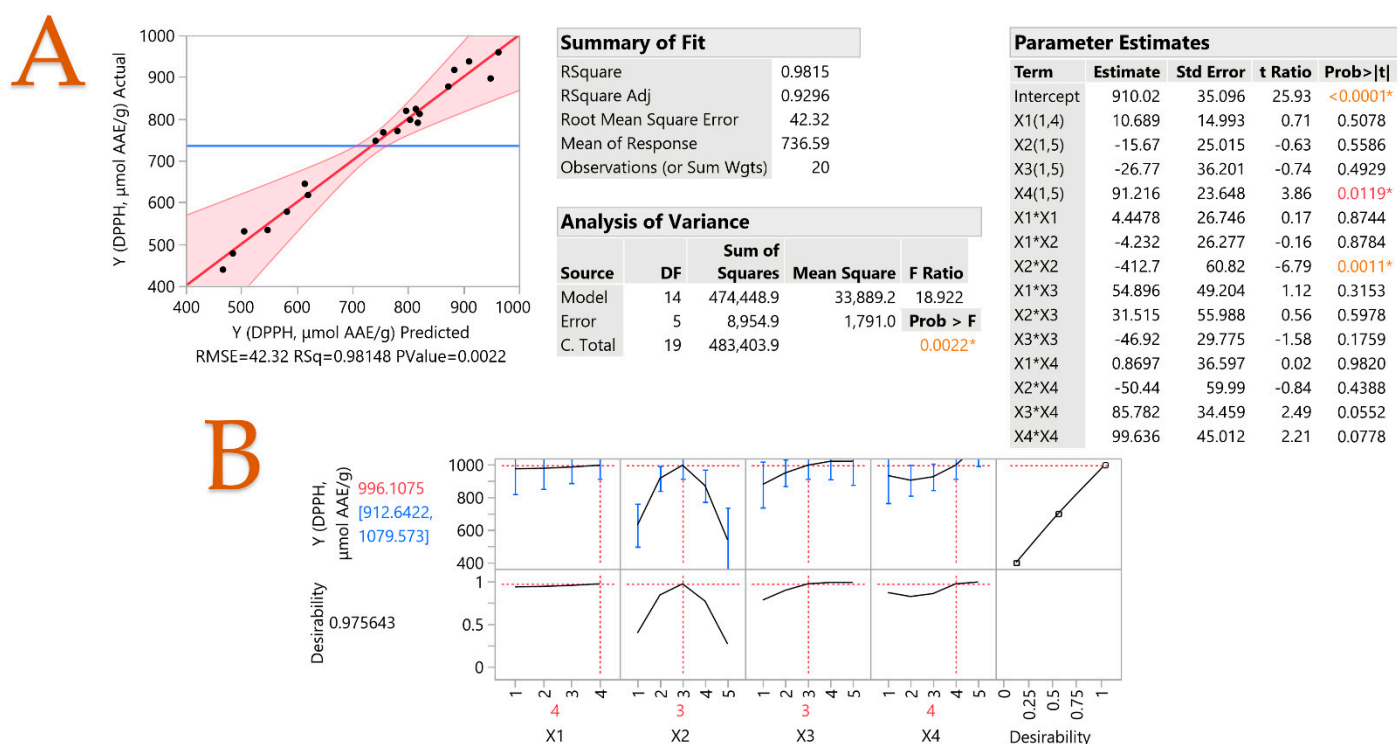
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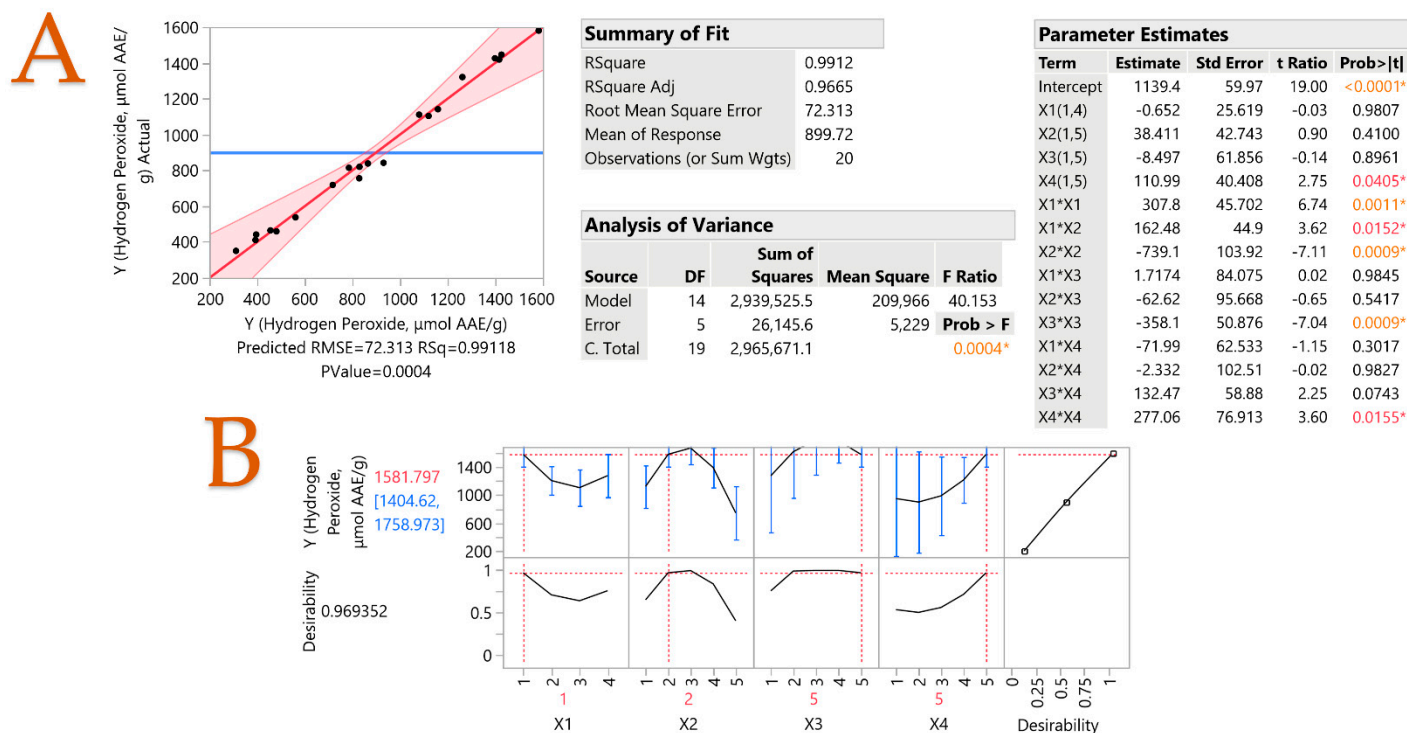
**Figure S1.** Plots **A** and **B** display the actual response versus the predicted response (Total polyphenol content – TPC, mg GAE/g) for the optimization of *A. citrodora* extracts carried out with water solutions, different extraction parameters, and the desirability function. Asterisks and colored values denote statistically significant values, while inset tables include statistics relevant to the evaluation of the resulting model.



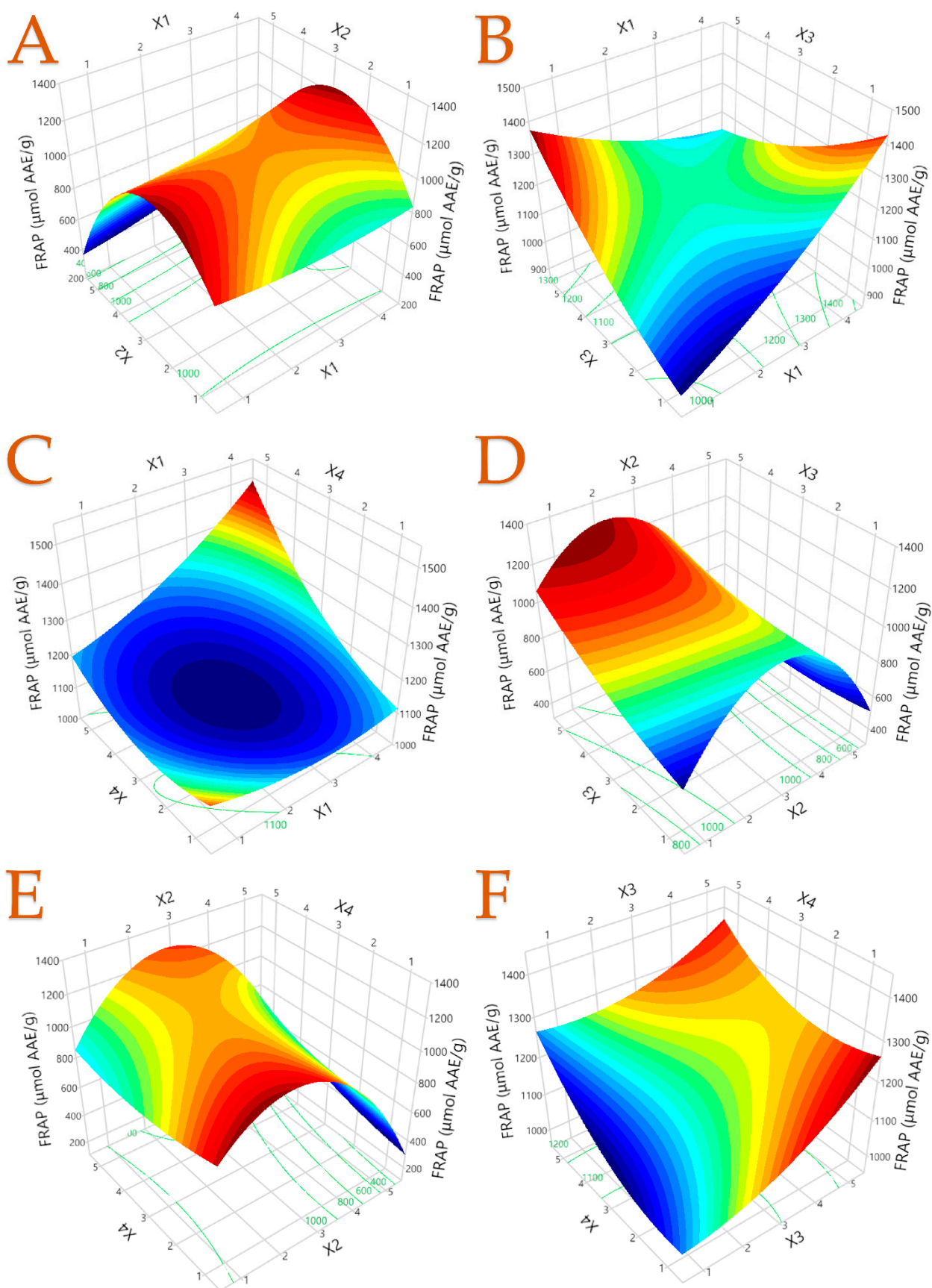
**Figure S2.** Plots A and B display the actual response versus the predicted response (FRAP,  $\mu\text{mol AAE/g}$ ) for the optimization of *A. citrodora* extracts carried out with water solutions, different extraction parameters, and the desirability function. Asterisks and colored values denote statistically significant values, while inset tables include statistics relevant to the evaluation of the resulting model.



**Figure S3.** Plots A and B display the actual response versus the predicted response (DPPH,  $\mu\text{mol AAE/g}$ ) for the optimization of *A. citrodora* extracts carried out with water solutions, different extraction parameters, and the desirability function. Asterisks and colored values denote statistically significant values, while inset tables include statistics relevant to the evaluation of the resulting model.

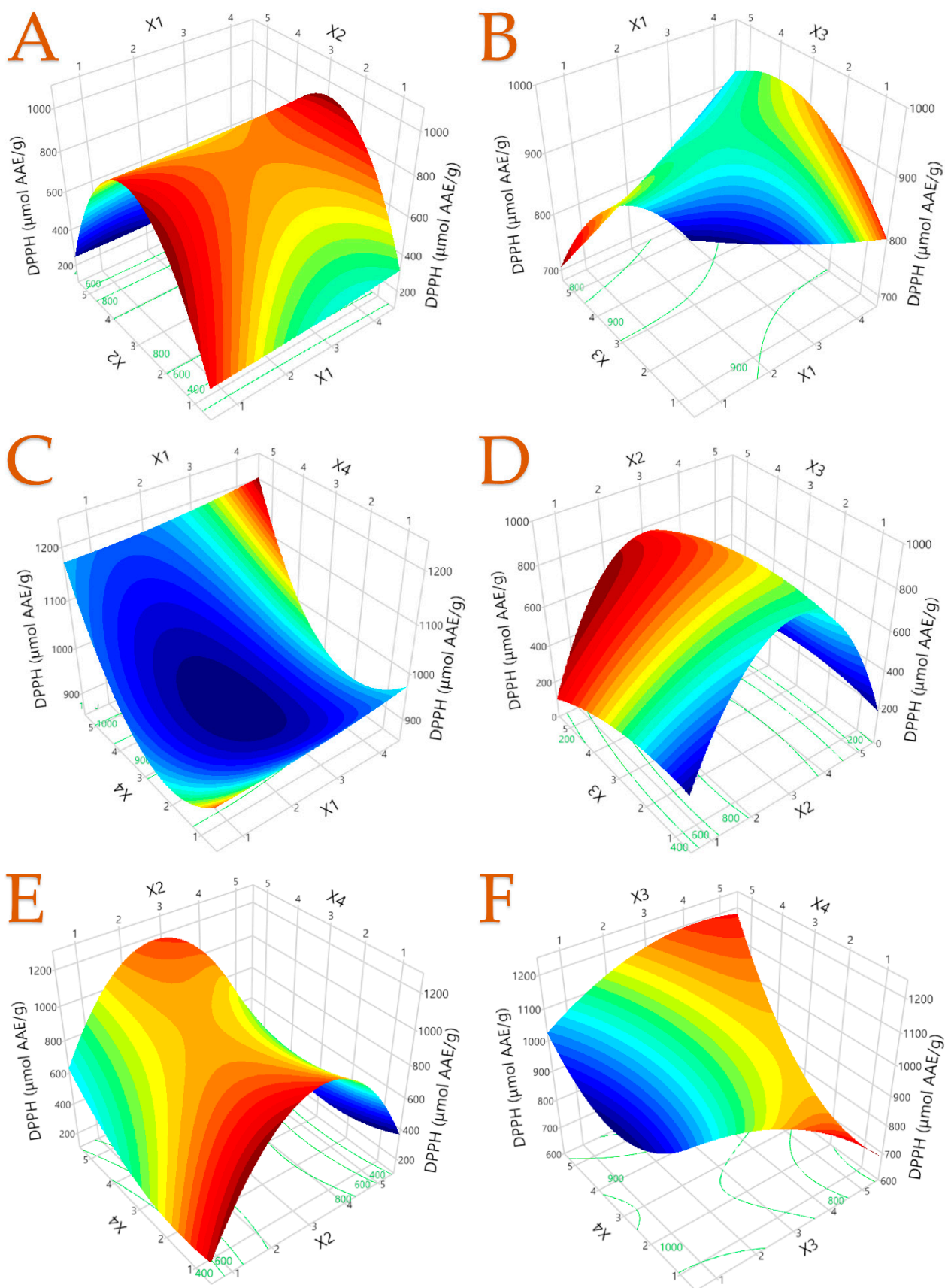


**Figure S4.** Plots **A** and **B** display the actual response versus the predicted response (Hydrogen Peroxide,  $\mu\text{mol AAE/g}$ ) for the optimization of *A. citrodora* extracts carried out with water solutions, different extraction parameters, and the desirability function. Asterisks and colored values denote statistically significant values, while inset tables include statistics relevant to the evaluation of the resulting model.

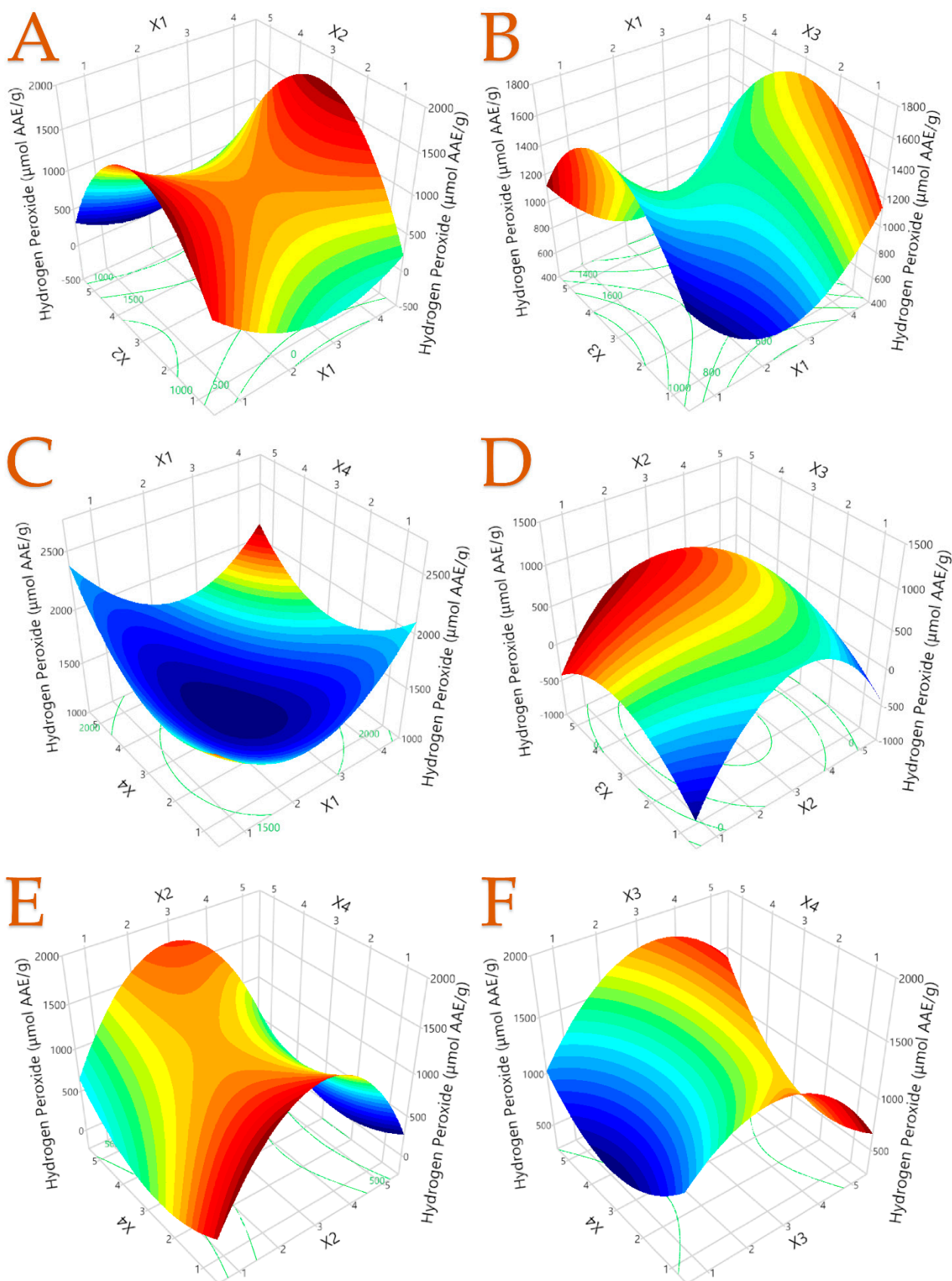


**Figure S5.** The optimal extraction of *A. citrodora* extracts is shown in 3D graphs that show the impact of the process variables considered in the response (FRAP,  $\mu\text{mol AAE/g}$ ). Plot (A), covariation of X1 and X2; plot (B), covariation of X1 and X3; plot (C), covariation of X1 and X4; plot (D), covariation of X2 and X3; plot (E), covariation of X2 and X4; plot (F), covariation of X3 and X4.





**Figure S6.** The optimal extraction of *A. citrodora* extracts is shown in 3D graphs that show the impact of the process variables considered in the response (DPPH,  $\mu\text{mol AAE/g}$ ). Plot (A), covariation of X1 and X2; plot (B), covariation of X1 and X3; plot (C), covariation of X1 and X4; plot (D), covariation of X2 and X3; plot (E), covariation of X2 and X4; plot (F), covariation of X3 and X4.



**Figure S7.** The optimal extraction of *A. citrodora* extracts is shown in 3D graphs that show the impact of the process variables considered in the response (Hydrogen Peroxide,  $\mu\text{mol AAE/g}$ ). Plot (A), covariation of X1 and X2; plot (B), covariation of X1 and X3; plot (C), covariation of X1 and X4; plot (D), covariation of X2 and X3; plot (E), covariation of X2 and X4; plot (F), covariation of X3 and X4.