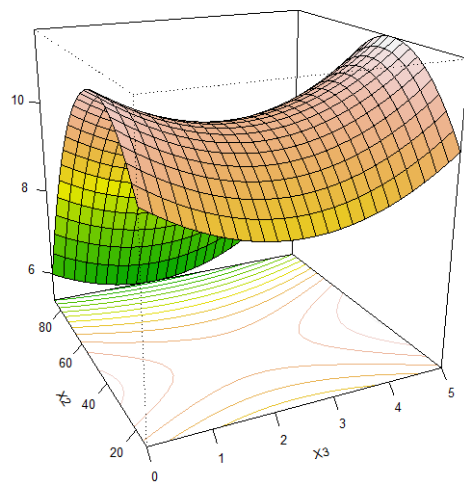
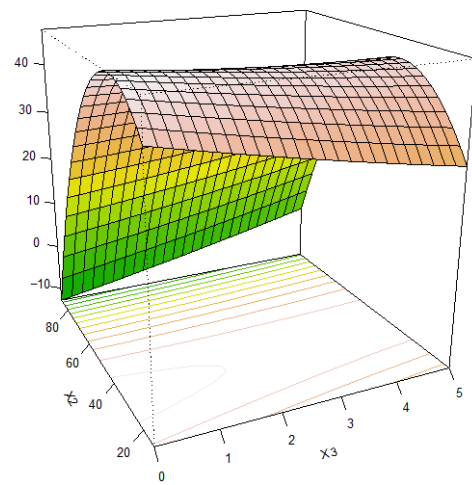
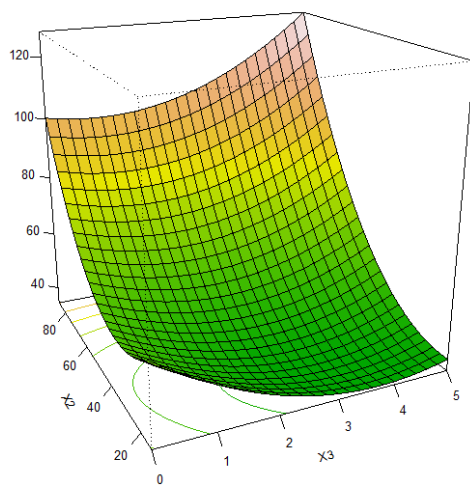
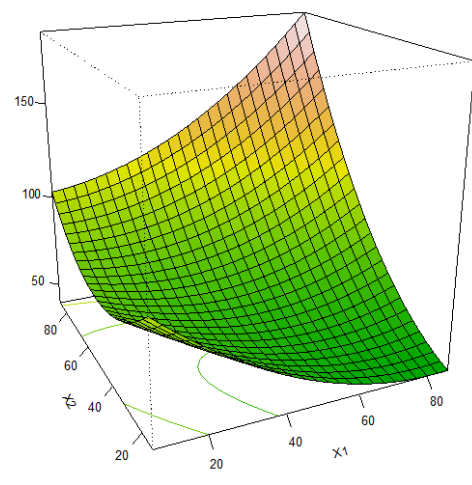
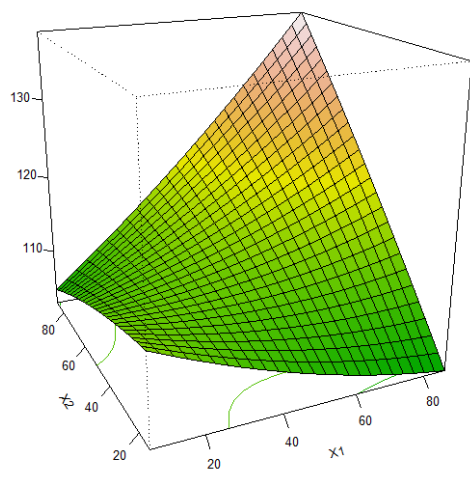


A**Anthocyanins****B****Flavonols****C**

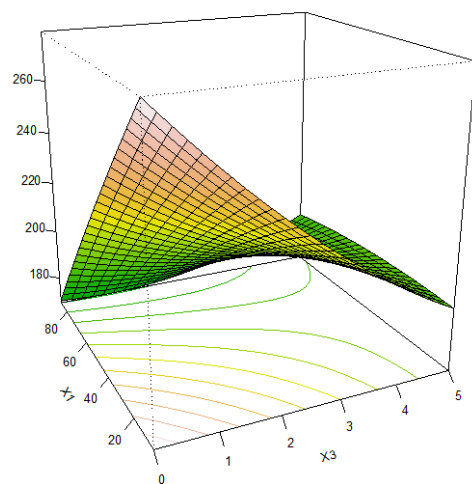
Slice at $X_1 = 51.27$
Other flavonoids

**D****Flavonols****E**

Slice at $X_1 = 51.27$
LMV phenolics

**F**

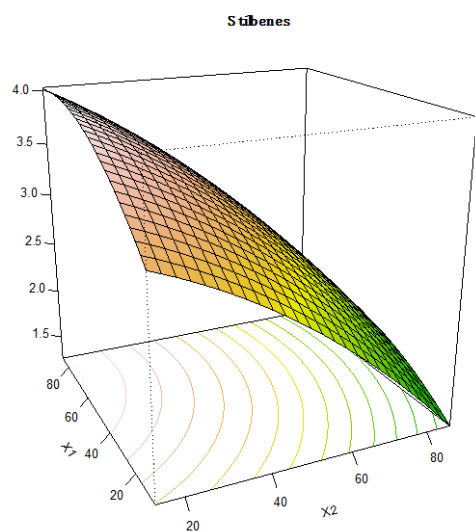
Slice at $X_3 = 2.88$
Phenolic acids



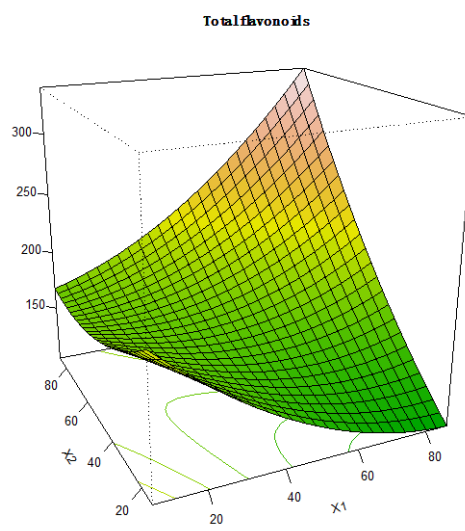
Slice at $X_3 = 2.88$

Slice at $X_2 = 50$

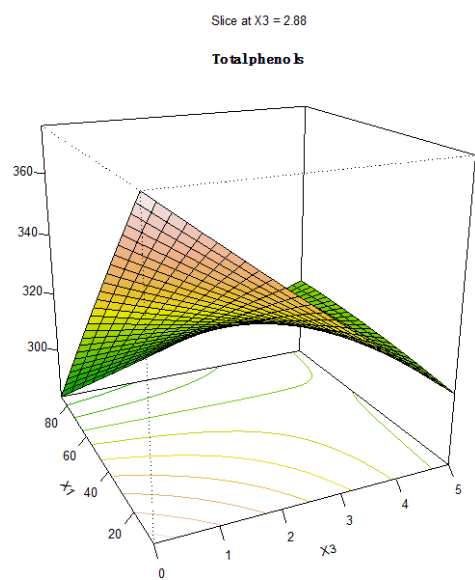
G



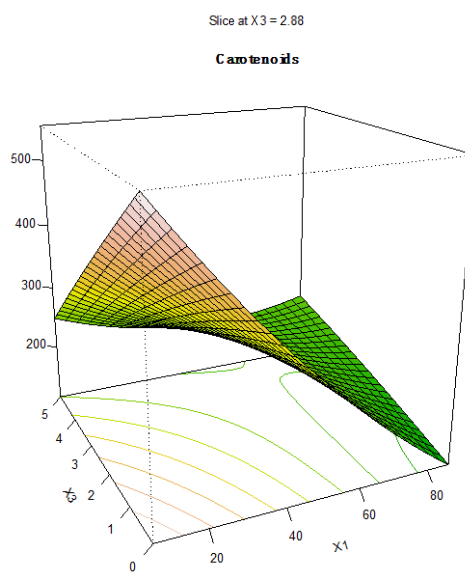
H



I



J



K

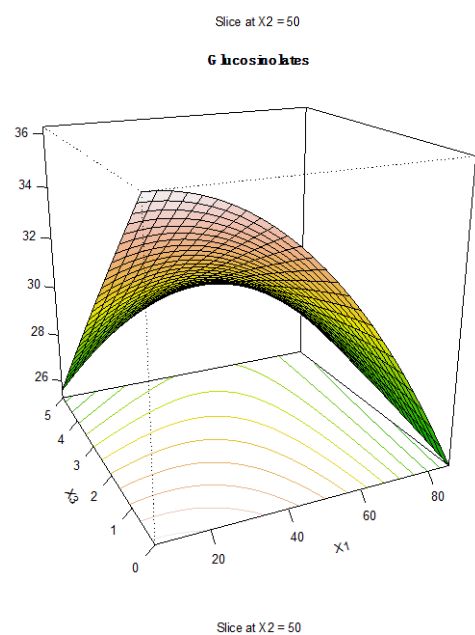
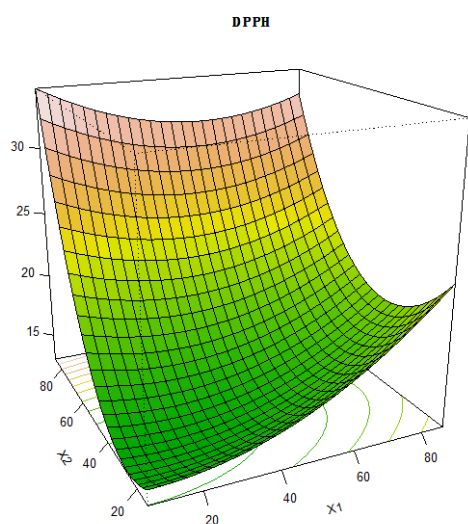
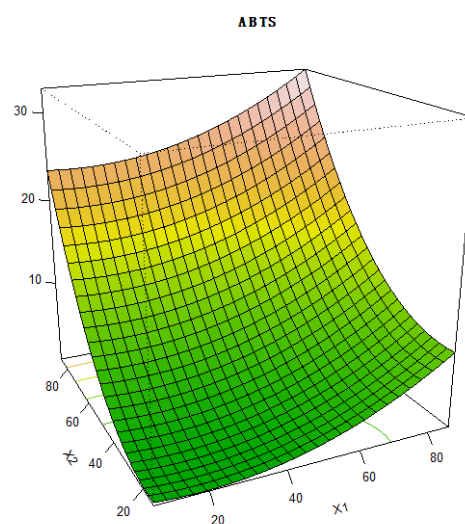


Figure S1. Three-dimensional response surface plots carried out considering the (A) Anthocyanins, (B) flavanols, (C) other flavonoids, (D) flavonols, (E) Low-molecular-weight (LMW) phenolics, (F) phenolic acids, (G) stilbenes, (H) total flavonoids, (I) total phenolics, (J) total carotenoids, (K) total glucosinolates phytochemical profile of the 21 duckweed extracts, as a function of extraction temperature, ultrasound power, and % Ethanol.

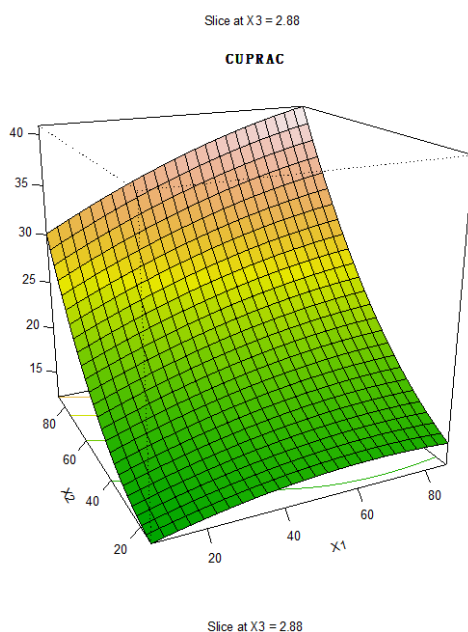
A



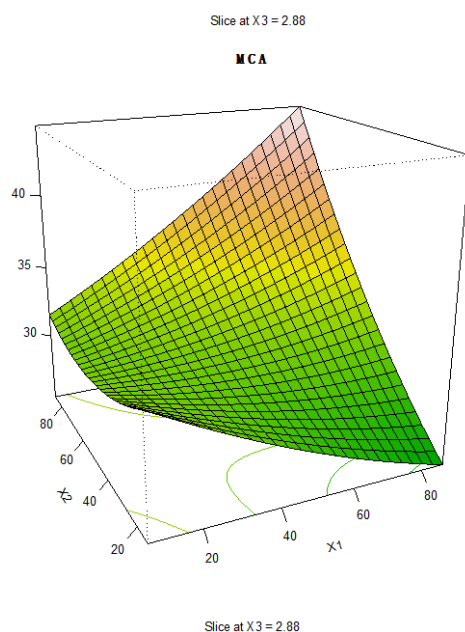
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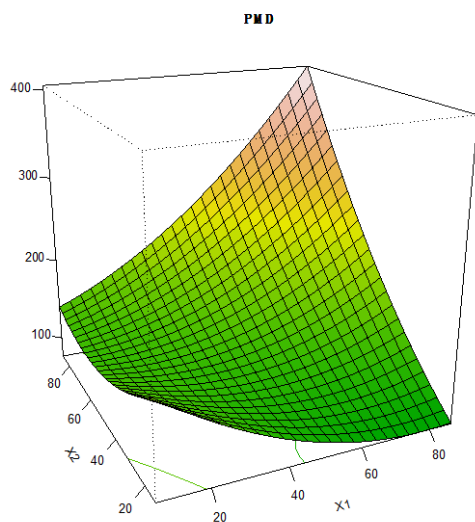
C



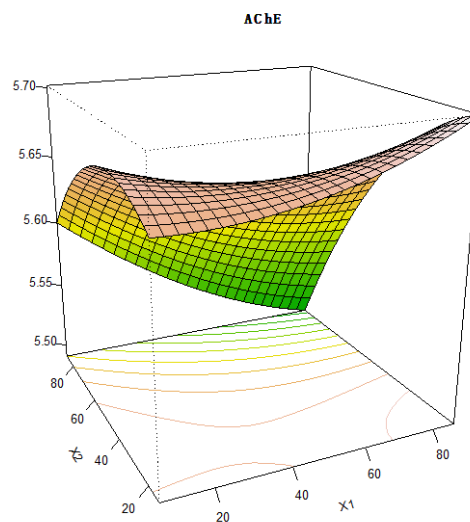
D



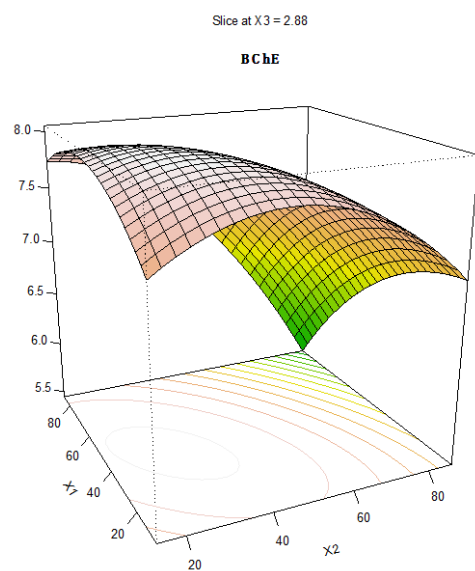
E



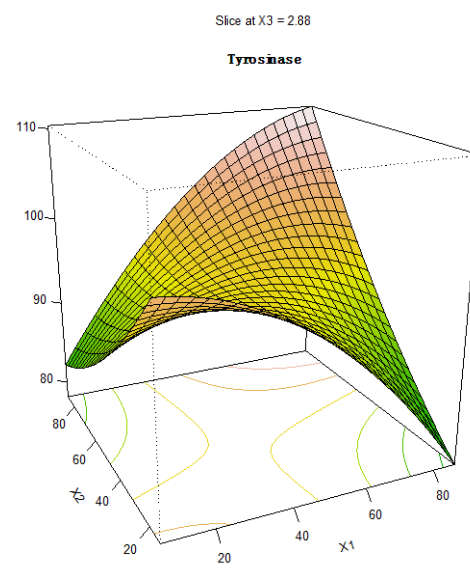
F



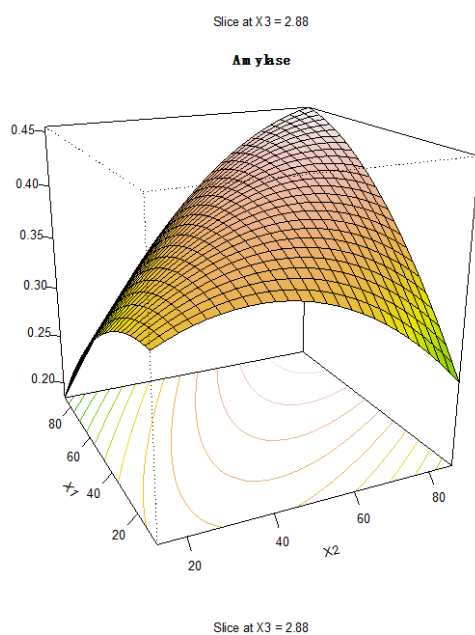
G



H



I



J

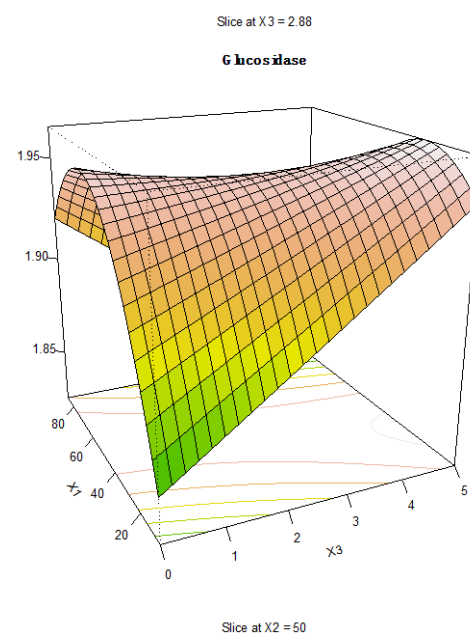
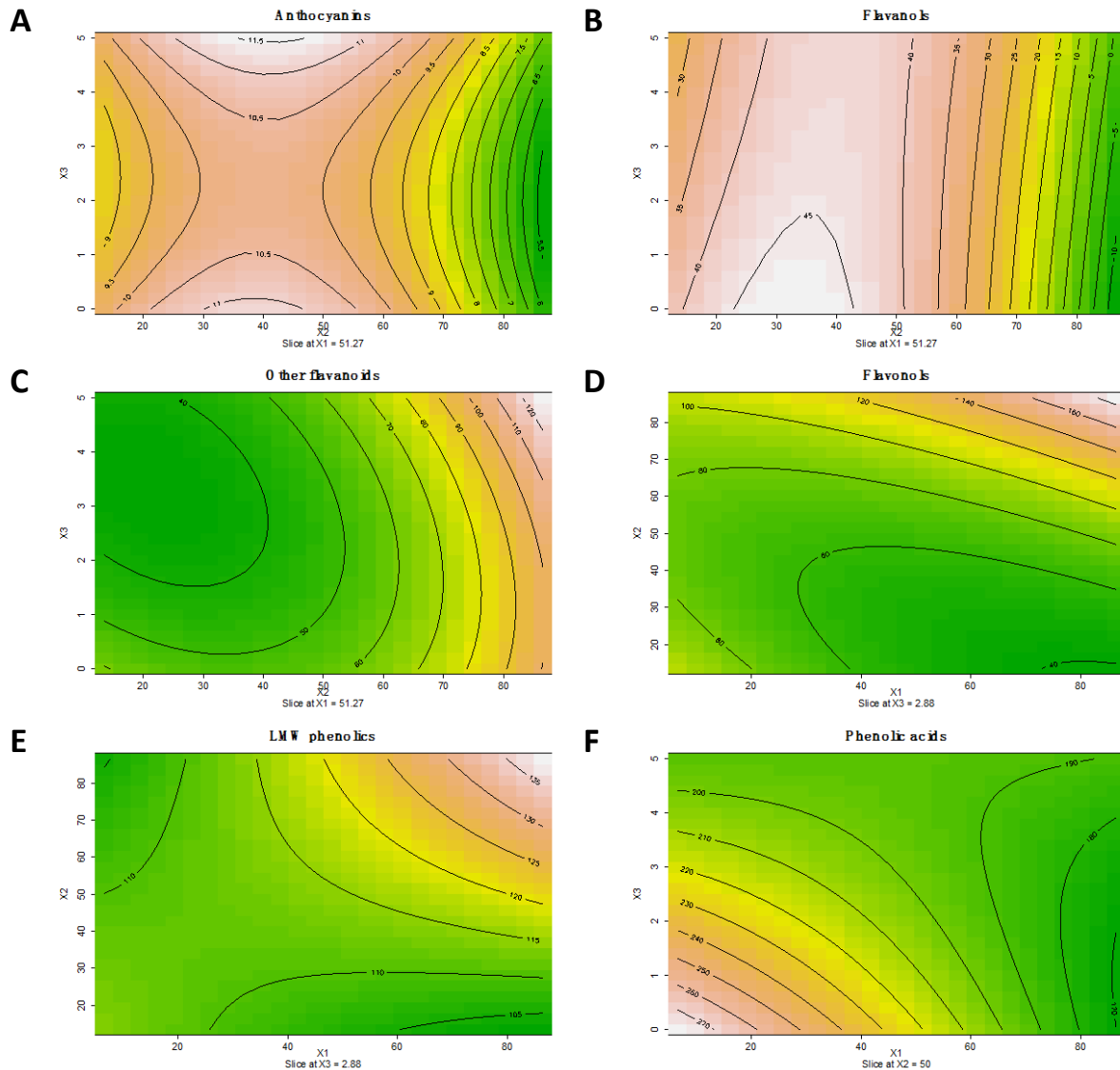


Figure S2. Three-dimensional response surface plots carried out considering the (A) DPPH, (B) ABTS, (C) CUPRAC, (D) MCA, (E) PMD, (F) AChE, (G) BChE, (H) Tyrosinase, (I) , alpha-Amylase, and (J) alpha-Glucosidase, antioxidant activities and enzyme inhibition capacities of the 21 duckweed extracts, as a function of extraction temperature, ultrasound power, and % Ethanol.



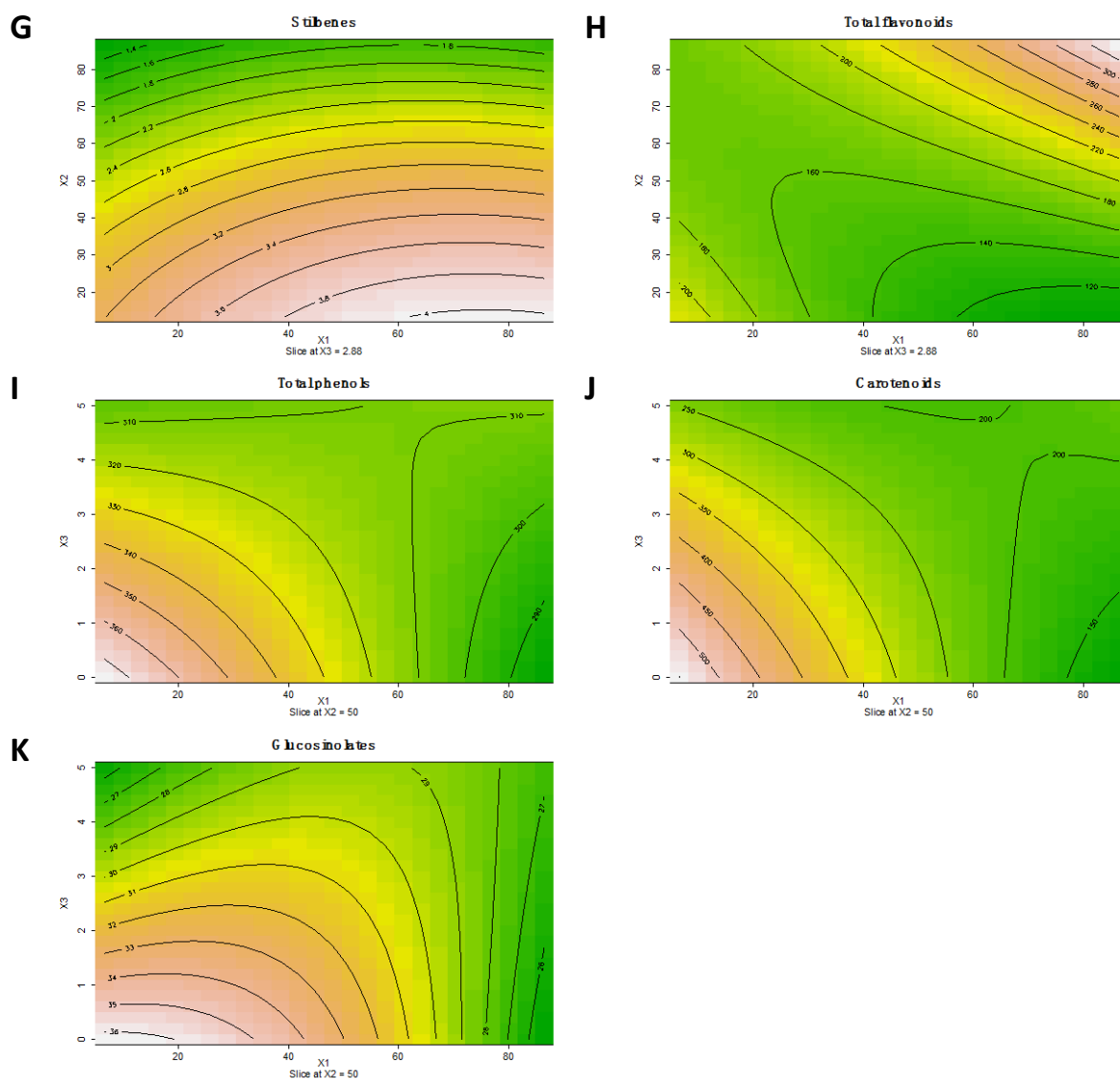
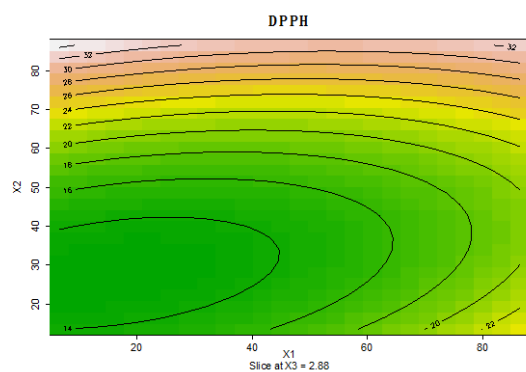
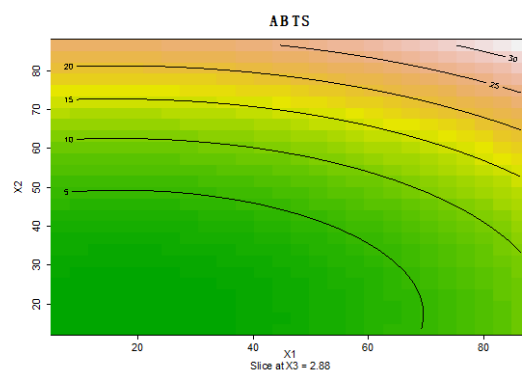
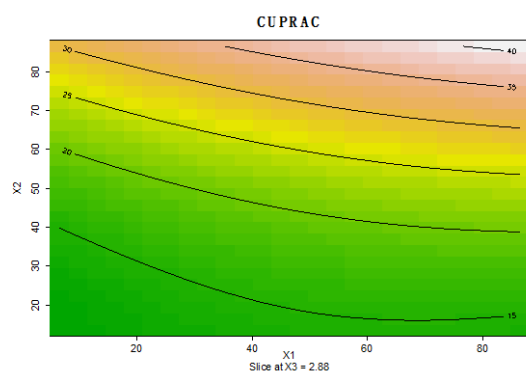
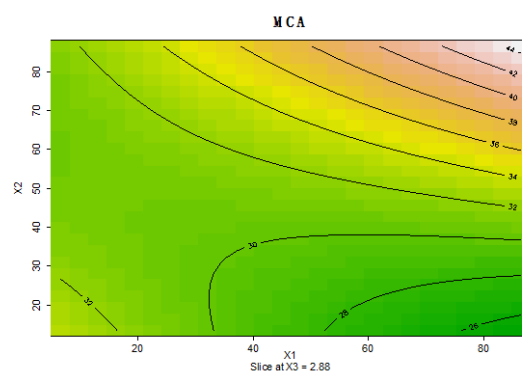
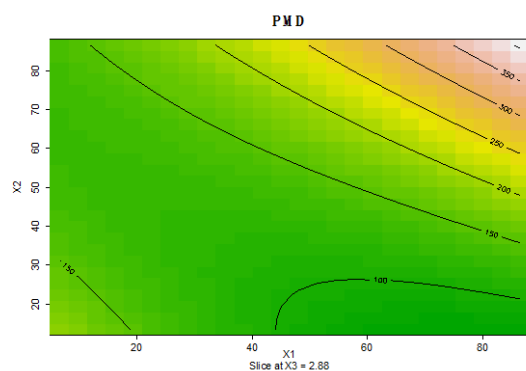
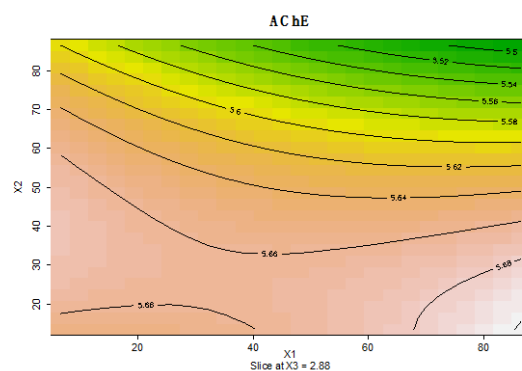
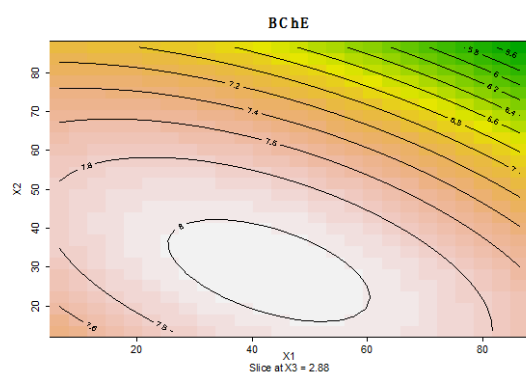
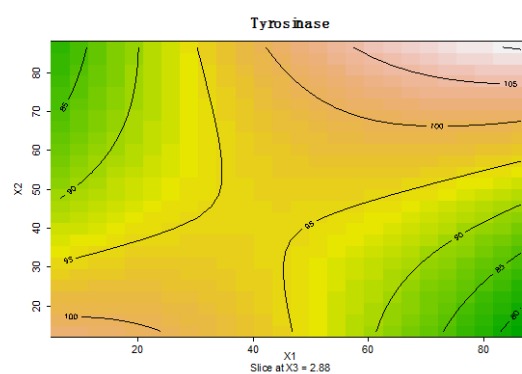


Figure S3. Two-dimensional contour plots carried out considering the (A) Anthocyanins, (B) flavanols, (C) other flavonoids, (D) flavonols, (E) Low-molecular-weight (LMW) phenolics, (F) phenolic acids, (G) stilbenes, (H) total flavonoids, (I) total phenolics, (J) total carotenoids, (K) total glucosinolates phytochemical profile of the 21 duckweed extracts, as a function of extraction temperature, ultrasound power, and % Ethanol.

A**B****C****D****E****F****G****H**

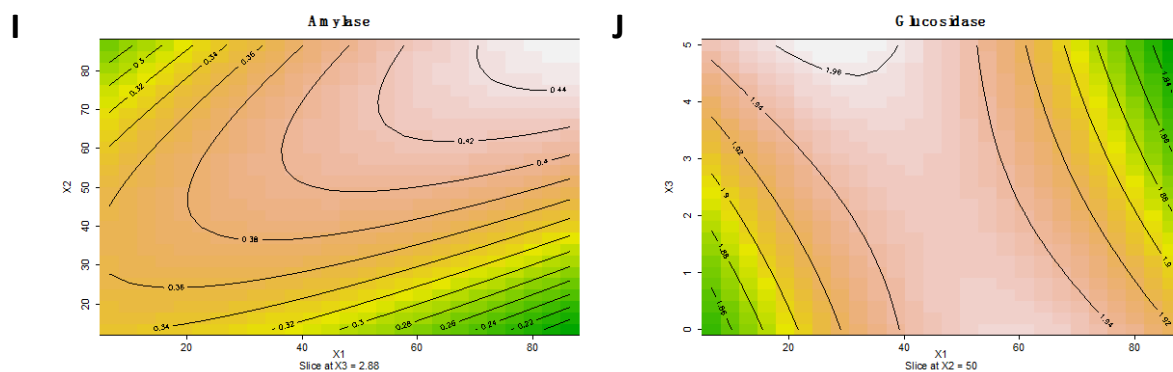


Figure S4. Two-dimensional contour plots carried out considering the (A) DPPH, (B) ABTS, (C) CUPRAC, (D) MCA, (E) PMD, (F) AChE, (G) BChE, (H) Tyrosinase, (I) α -Amylase, and (J) α -Glucosidase, antioxidant activities and enzyme inhibition capacities of the 21 duckweed extracts, as a function of extraction temperature, ultrasound power, and % Ethanol.