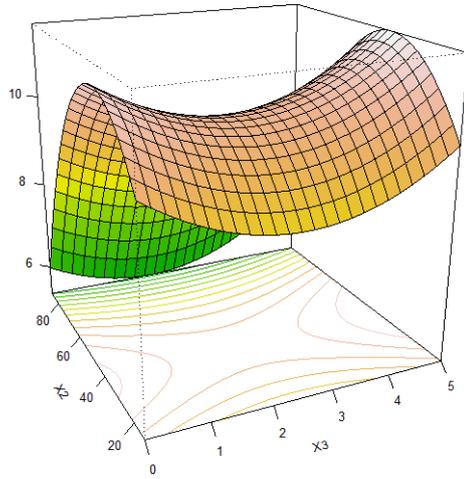
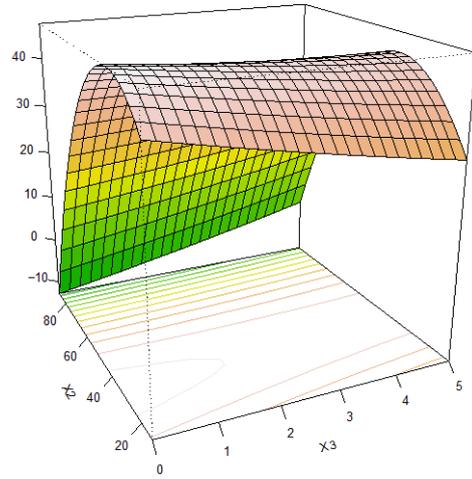
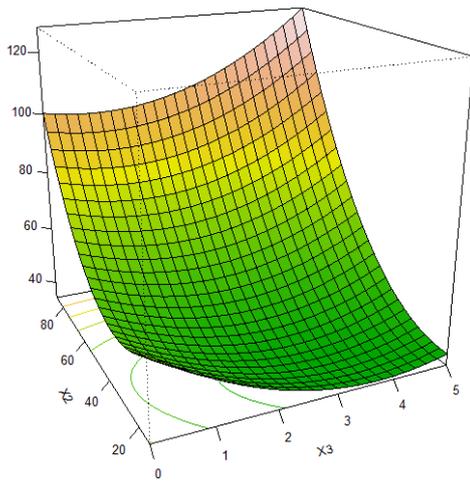
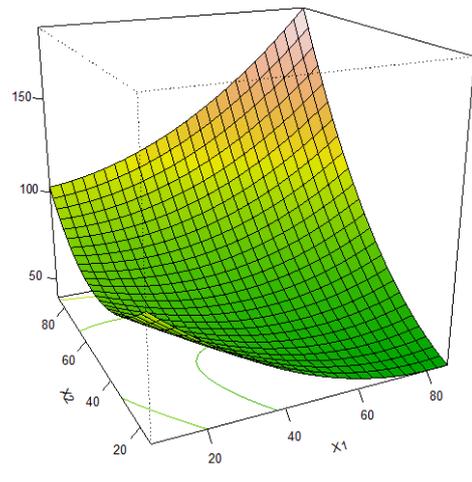
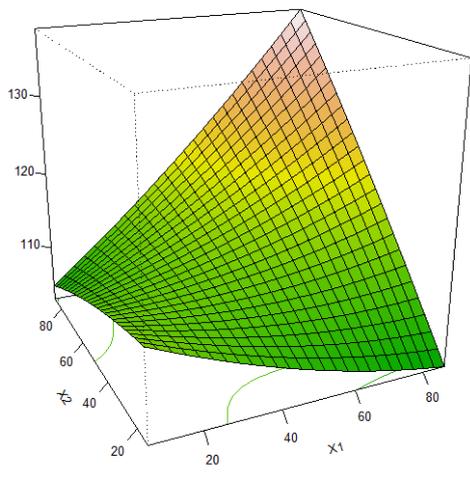


A**Anthocyanins****B****Flavonols****C**

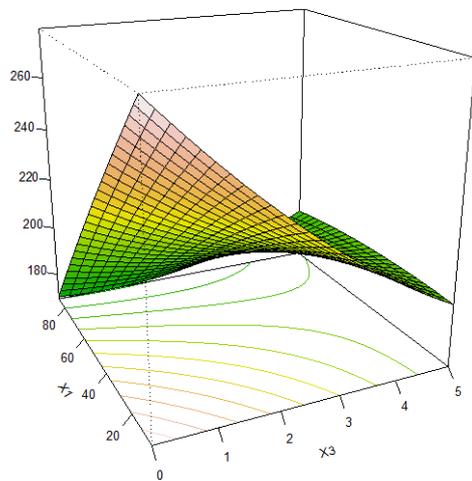
Slice at X1 = 51.27
Other flavonoids

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

Slice at X1 = 51.27
LMV phenolics

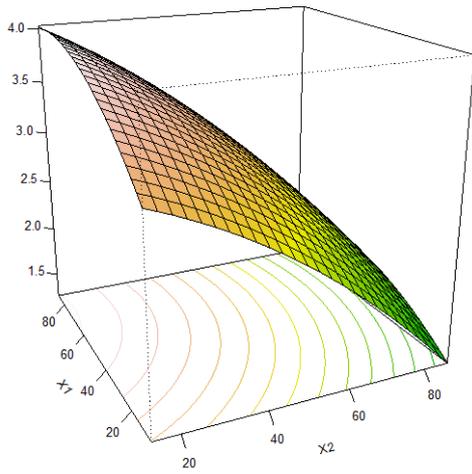
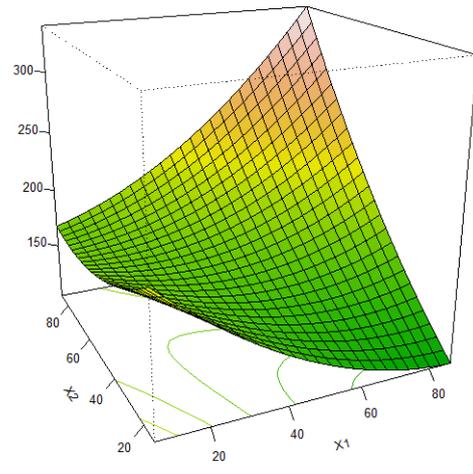
**F**

Slice at X3 = 2.88
Phenolic acids

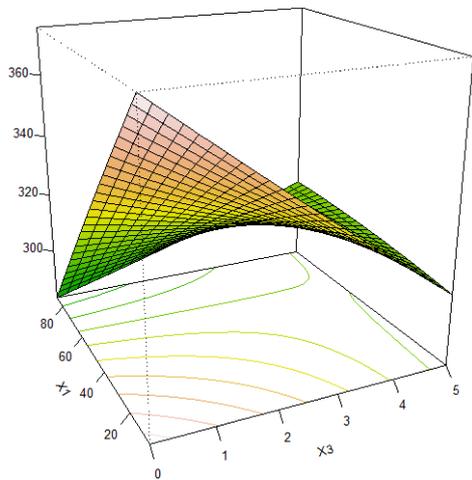


Slice at X3 = 2.88

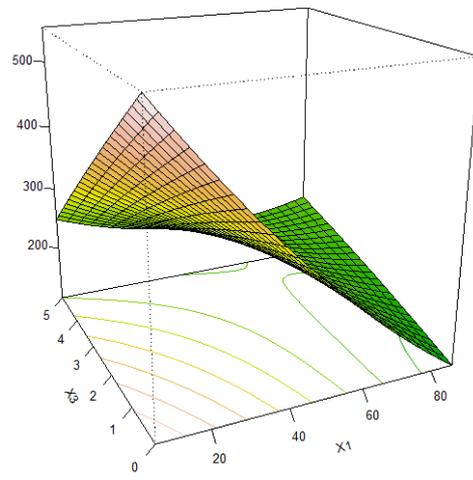
Slice at X2 = 50

G**Stübenes****H****Totalflavonois****I**

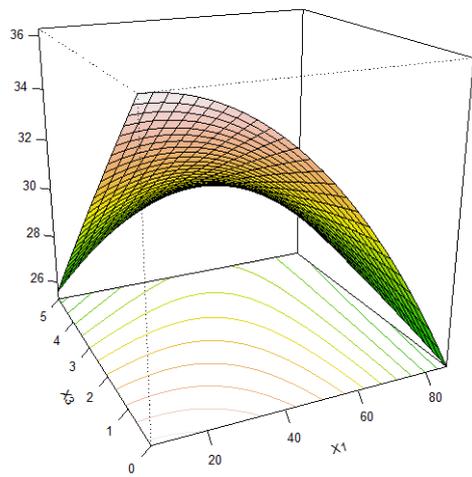
Slice at X3 = 2.88

Totalphenols**J**

Slice at X3 = 2.88

Carotenois**K**

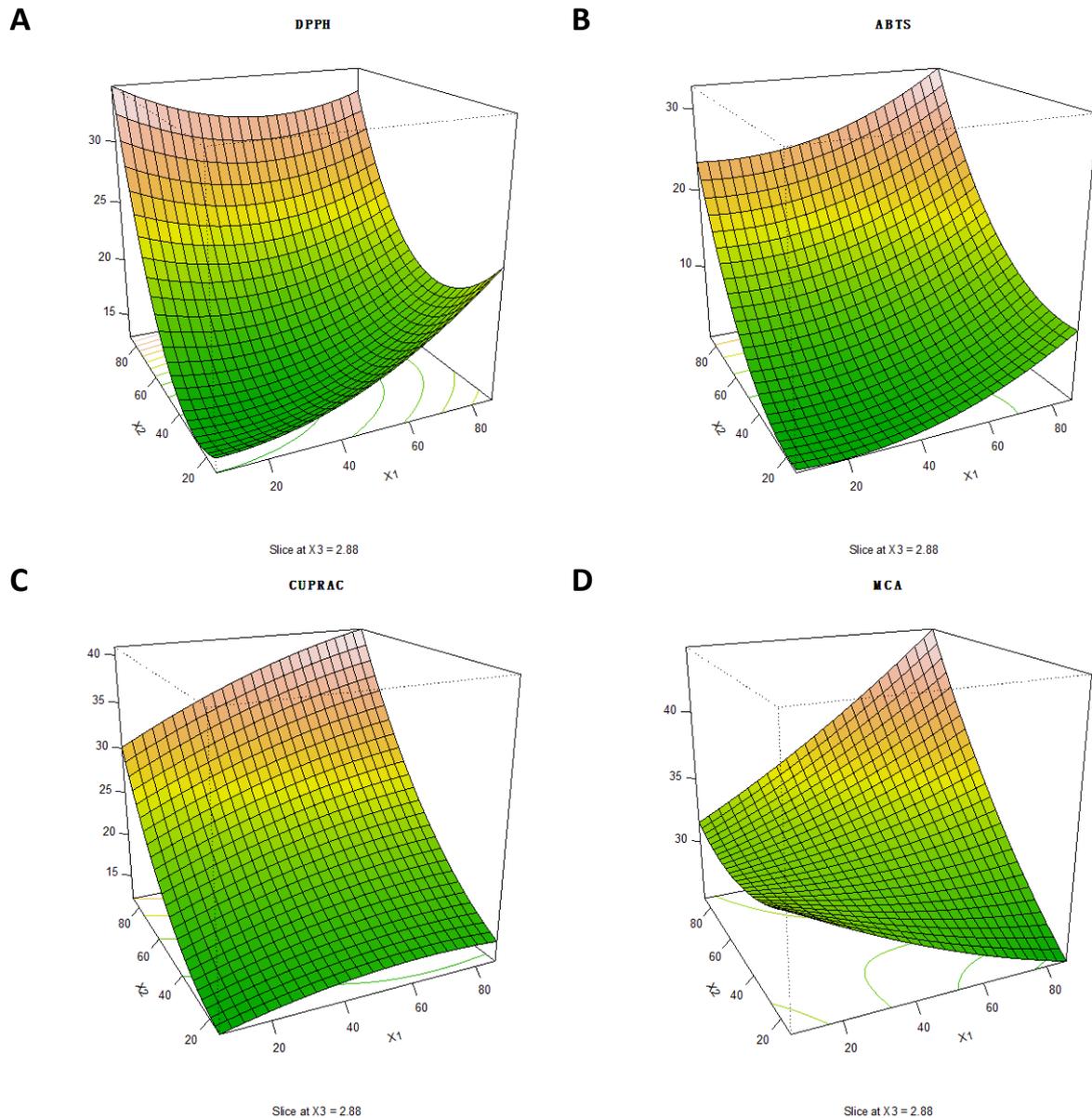
Slice at X2 = 50

Glicosolates

Slice at X2 = 50

Slice at X2 = 50

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.



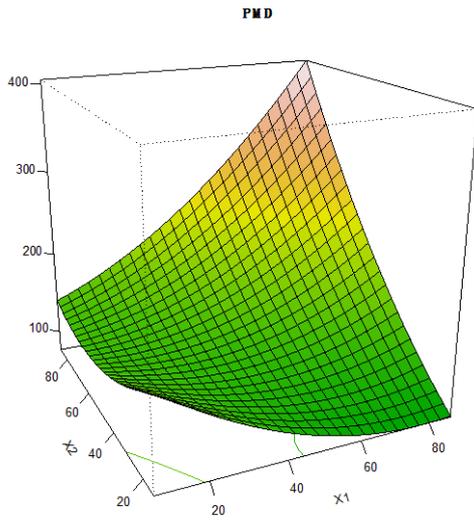
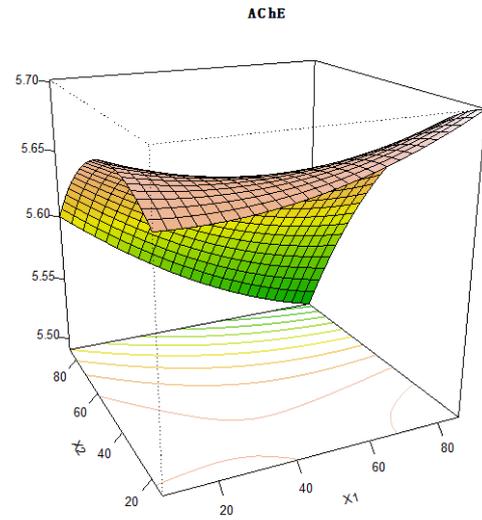
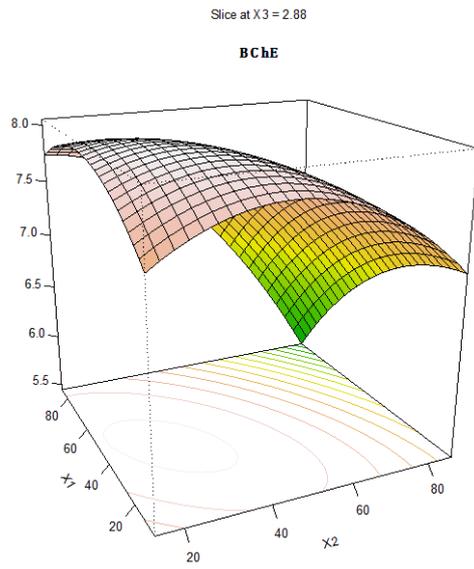
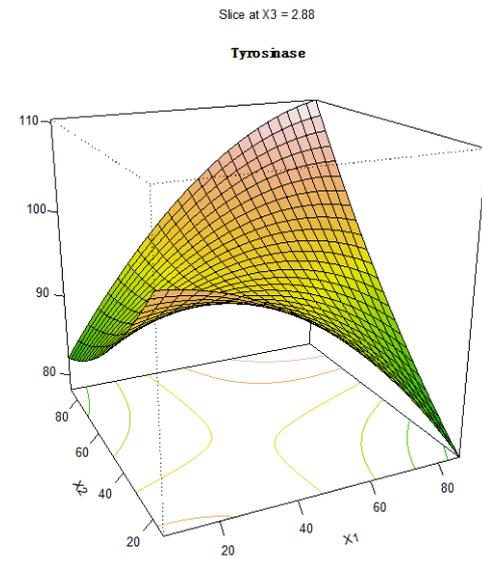
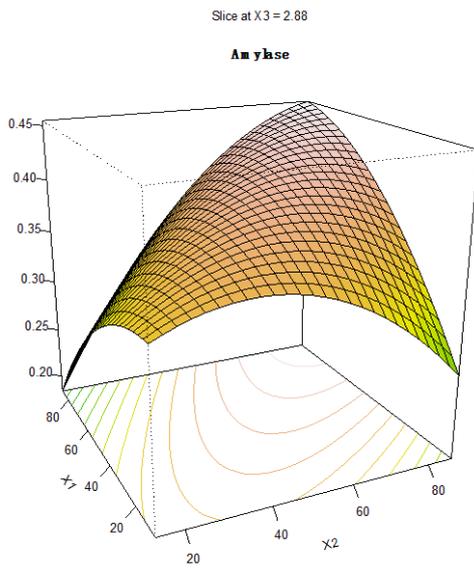
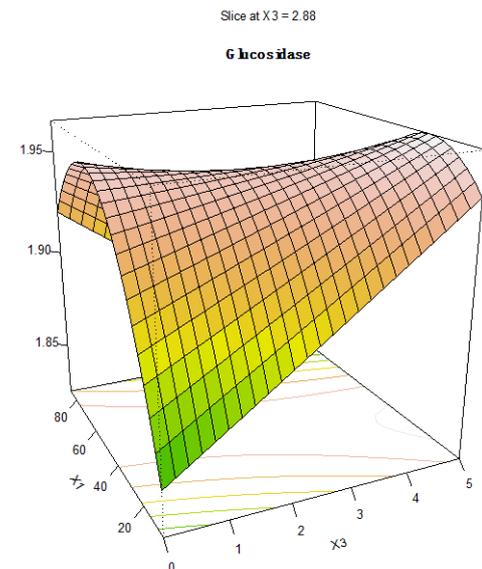
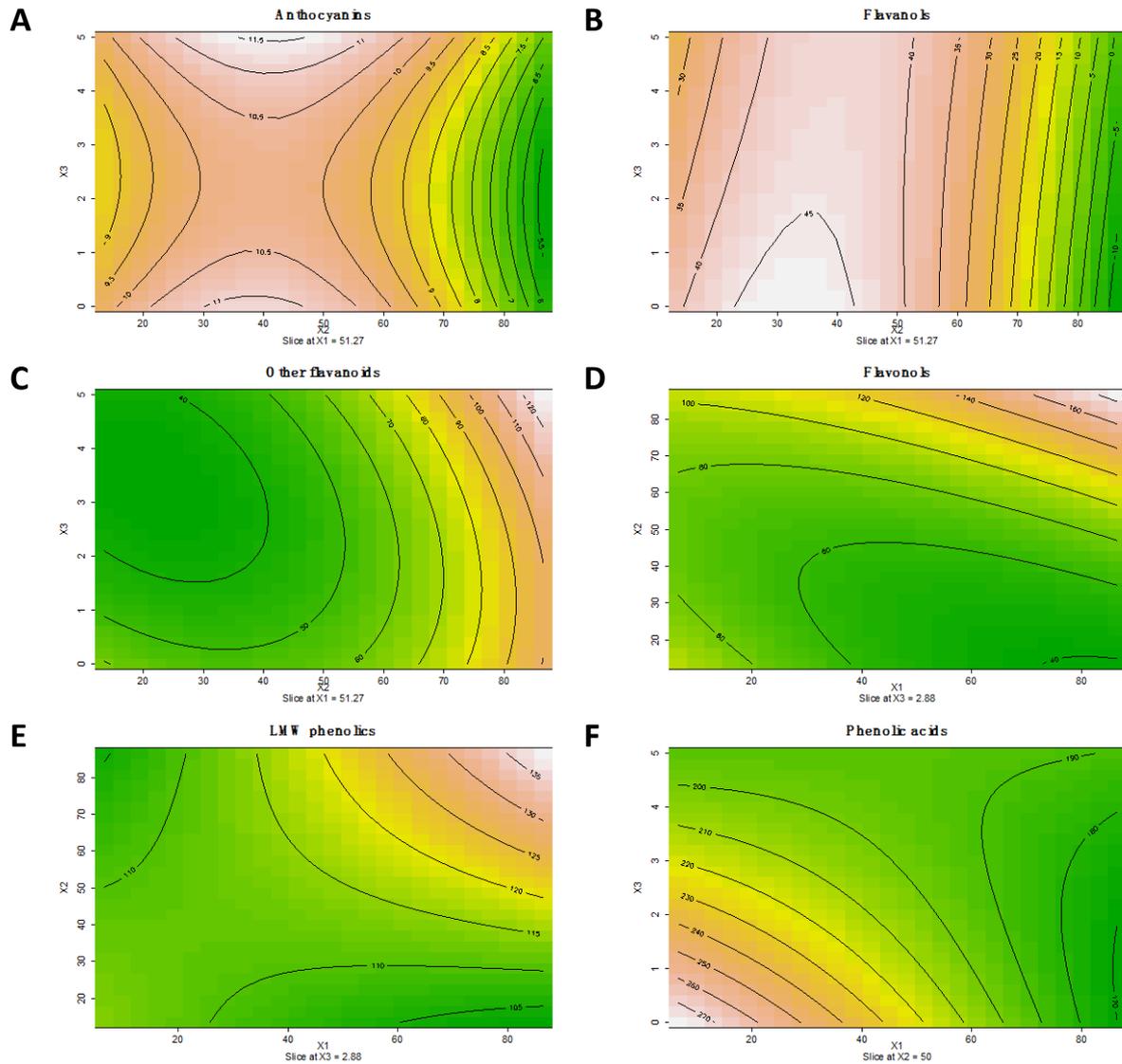
E**F****G****H****I****J**

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.



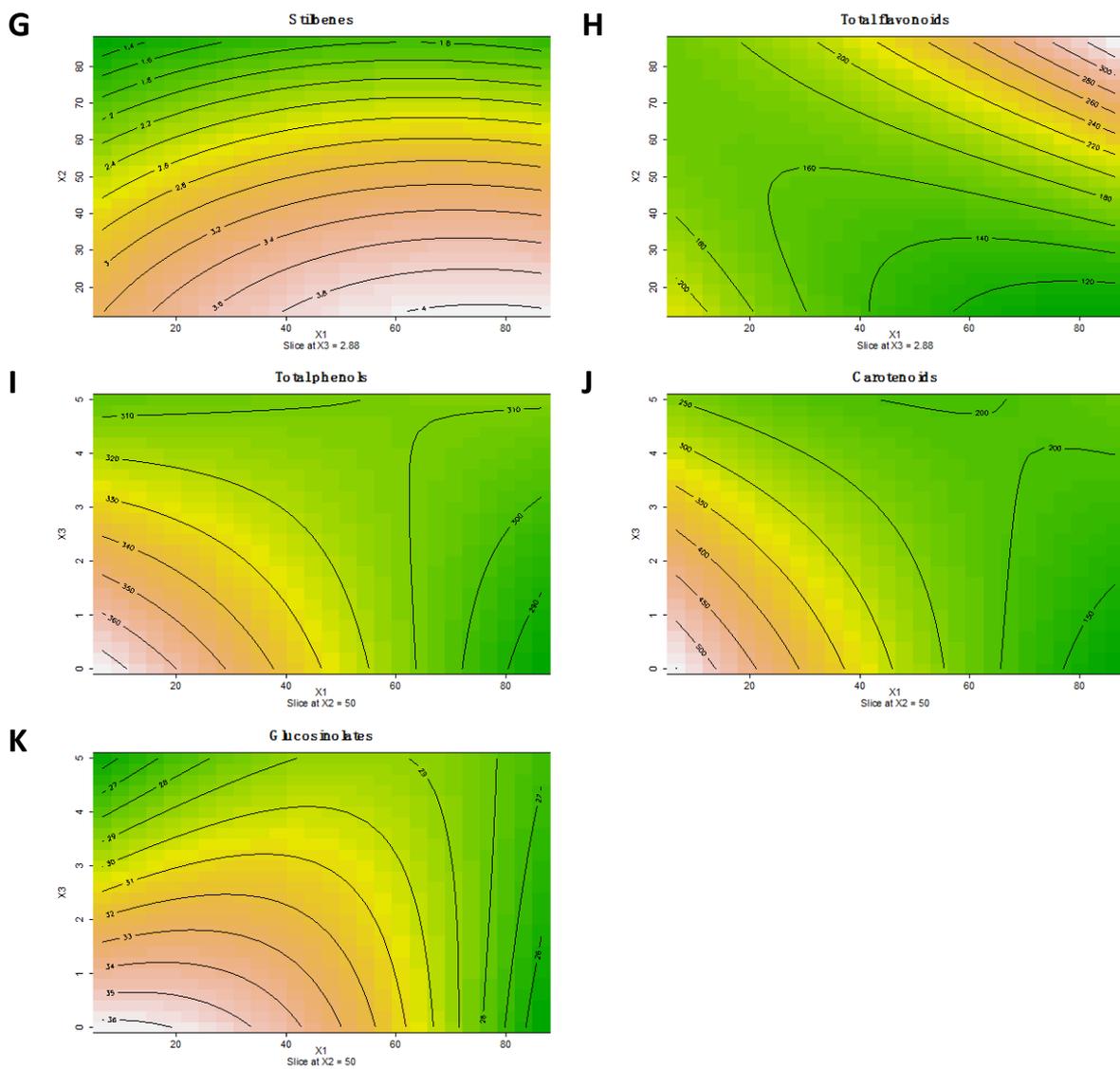
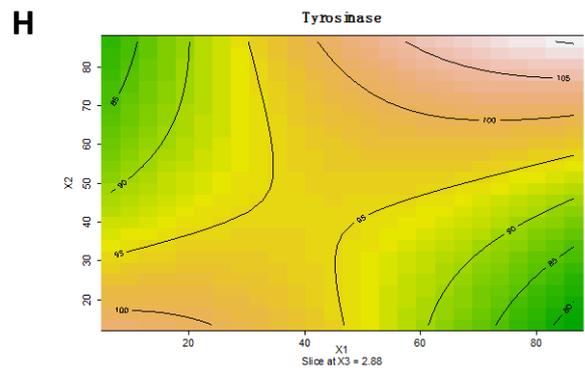
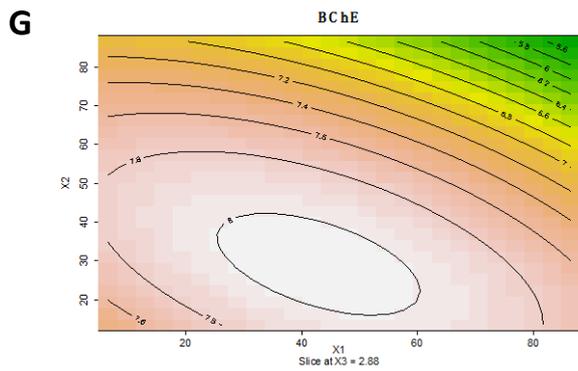
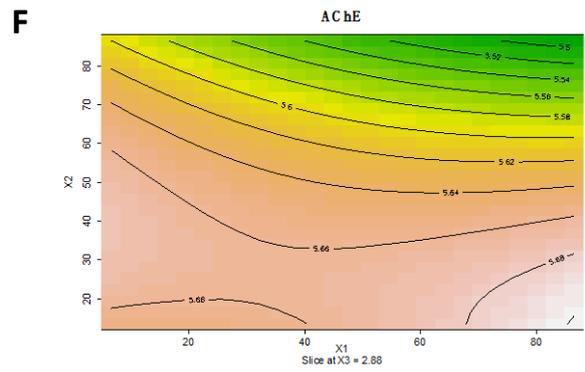
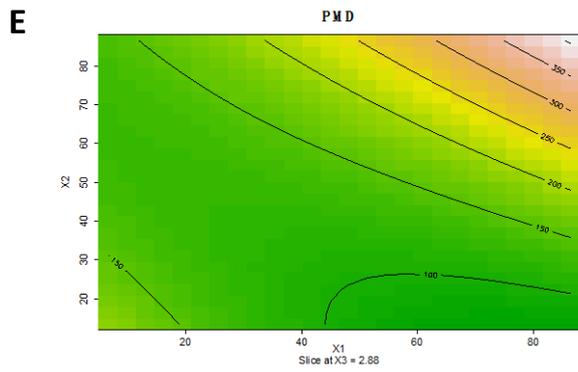
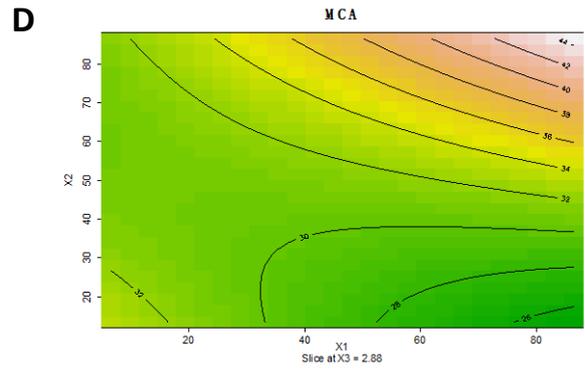
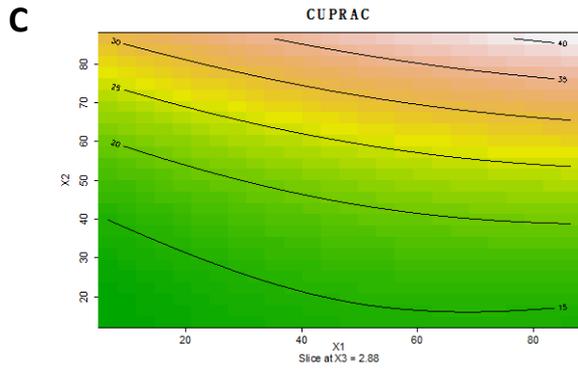
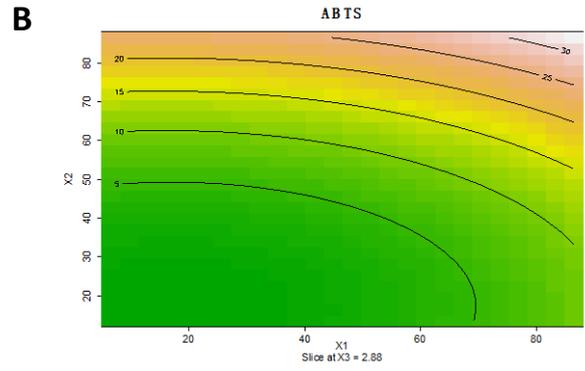
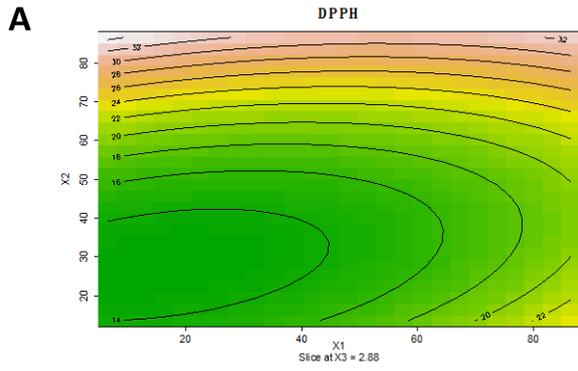


Figure S3. Two-dimensional contour plots carried out considering the (A) Anthocyanins, (B) flavanols, (C) other flavonoids, (D) flavanols, (E) Low-molecular-weight (LMW) phenolics, (F) phenolic acids, (G) stilbenes, (H) total flavonoids, (I) total phenolics, (J) total carotenoids, (K) total glucosinolates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



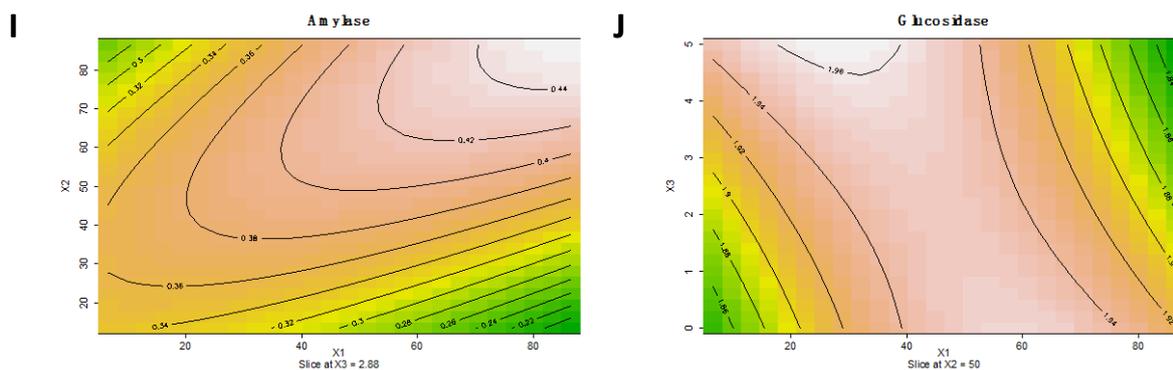


Figure S4. Two-dimensional contour plots carried out considering the (A) DPPH, (B) ABTS, (C) CUPRAC, (D) MCA, (E) PMD, (F) AChE, (G) BChE, (H) Tyrosinase, (I) α -Amylase, and (J) α -Glucosidase, antioxidant activities and enzyme inhibition capacities of the 21 duckweed extracts, as a function of extraction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