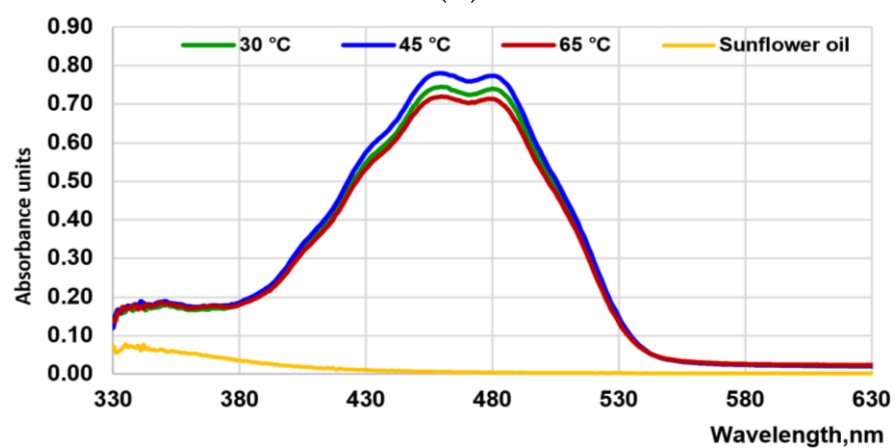
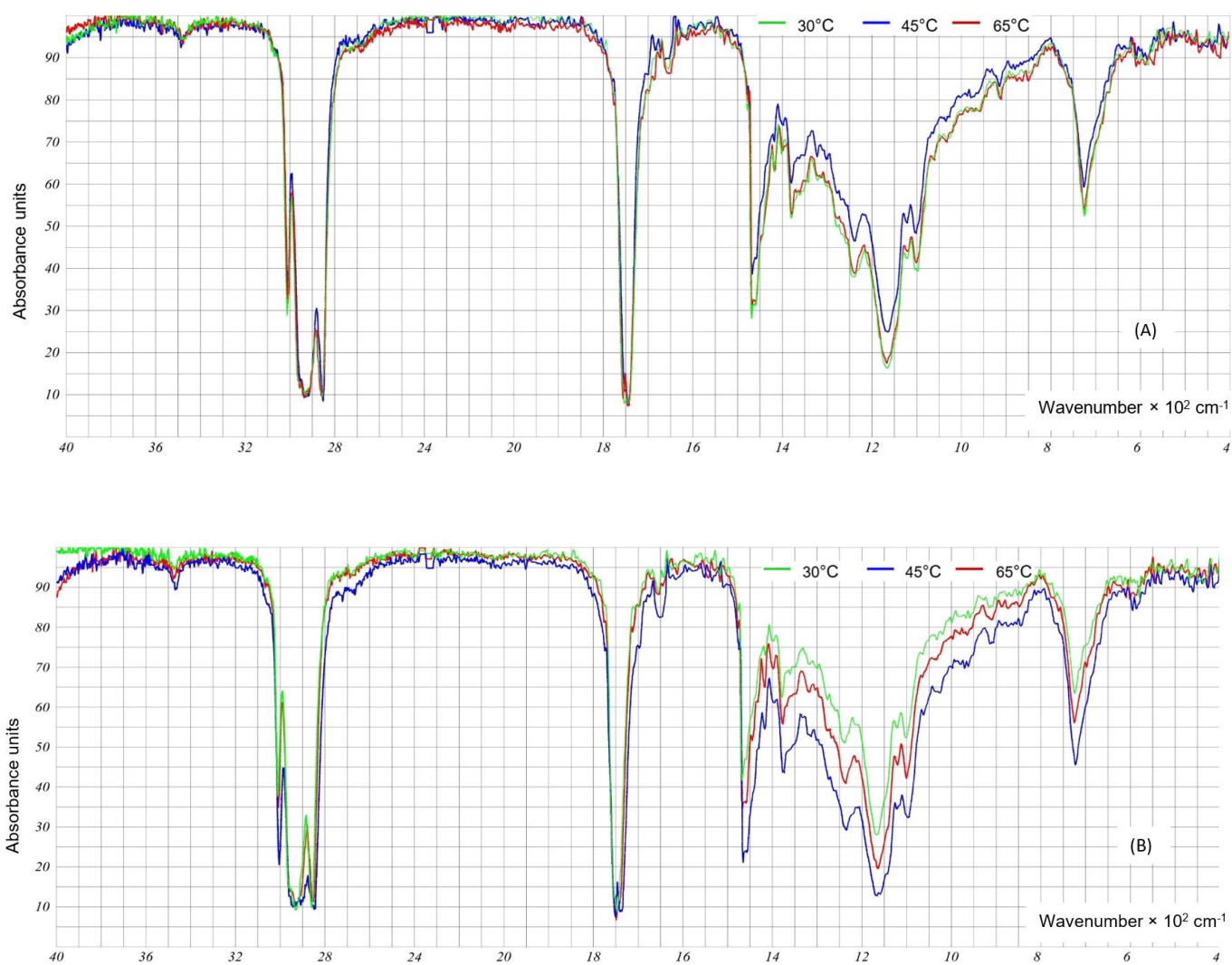


(A)

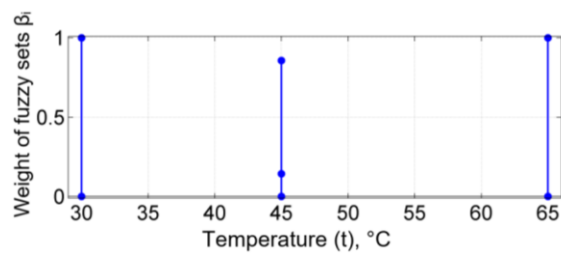


(B)

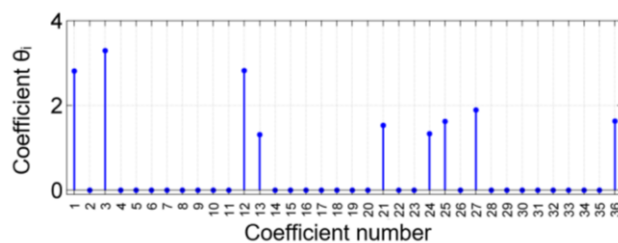
**Figure S1.** UV-Vis spectra of liposoluble extracts from berries and sunflower oil depending on the extraction temperature: (A) sea buckthorn; (B) rose hip.



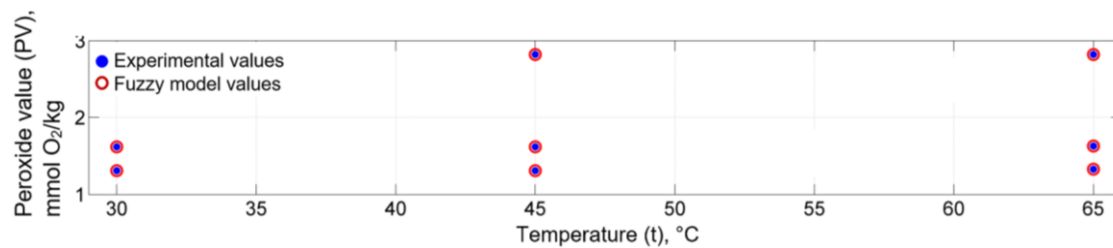
**Figure S2.** FTIR spectra of liposoluble extracts from sea buckthorn (A) and rose hip (B) depending on the extraction temperature.



(A)



(B)



(C)

**Figure S3.** Generalized fuzzy mathematical model  $PV=f(t, AV)$  for sunflower oil, sea buckthorn and rose hip extracts: (A) weights of fuzzy sets; (B) coefficients of the model; (C) the PV parameter, experimental values and from the fuzzy model.