

Table S1. Experimental design used for the optimization study.

Experiment	Extractant	Temperature	Time	Extract
01	Water	60	10	E01
02	Water	60	20	E02
03	Water	60	30	E03
04	Water	80	10	E04
05	Water	80	20	E05
06	Water	80	30	E06
07	Water	100	10	E07
08	Water	100	20	E08
09	Water	100	30	E09
10	Water/Oil 2:1	60	10	E10 E11
11	Water/Oil 2:1	60	20	E12 E13
12	Water/Oil 2:1	60	30	E14 E15
13	Water/Oil 2:1	80	10	E16 E17
14	Water/Oil 2:1	80	20	E18 E19
15	Water/Oil 2:1	80	30	E20 E21
16	Water/Oil 2:1	100	10	E22 E23
17	Water/Oil 2:1	100	20	E24 E25
18	Water/Oil 2:1	100	30	E26 E27
19	Water/Oil 1:2	60	10	E28 E29
20	Water/Oil 1:2	60	20	E30 E31
21	Water/Oil 1:2	60	30	E32 E33
22	Water/Oil 1:2	80	10	E34 E35
23	Water/Oil 1:2	80	20	E36 E37
24	Water/Oil 1:2	80	30	E38 E39
25	Water/Oil 1:2	100	10	E40 E41
26	Water/Oil 1:2	100	20	E42 E43
27	Water/Oil 1:2	100	30	E44 E45
28	Oil	60	10	E46
29	Oil	60	20	E47
30	Oil	60	30	E48
31	Oil	80	10	E49
32	Oil	80	20	E50
33	Oil	80	30	E51
34	Oil	100	10	E52
35	Oil	100	20	E53
36	Oil	100	30	E54

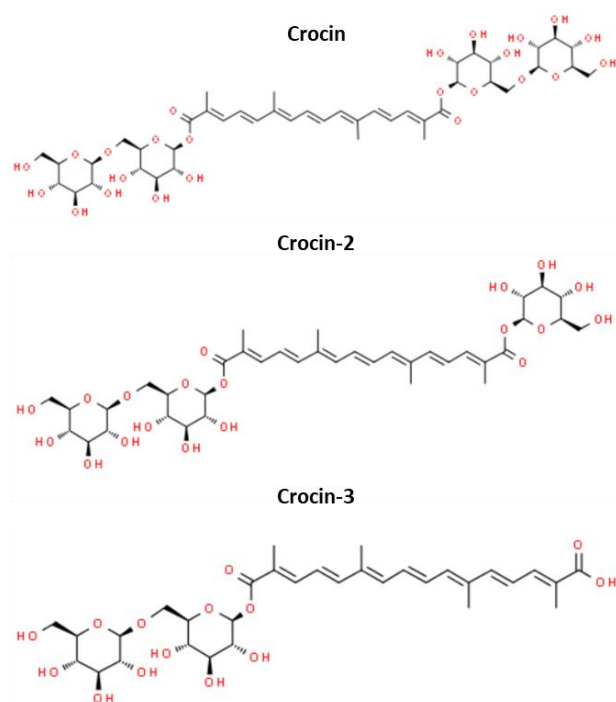


Figure S1. Chemical structures of crocin, crocin-2, and crocin-3. For each of them, cis and trans isomers can be distinguished.

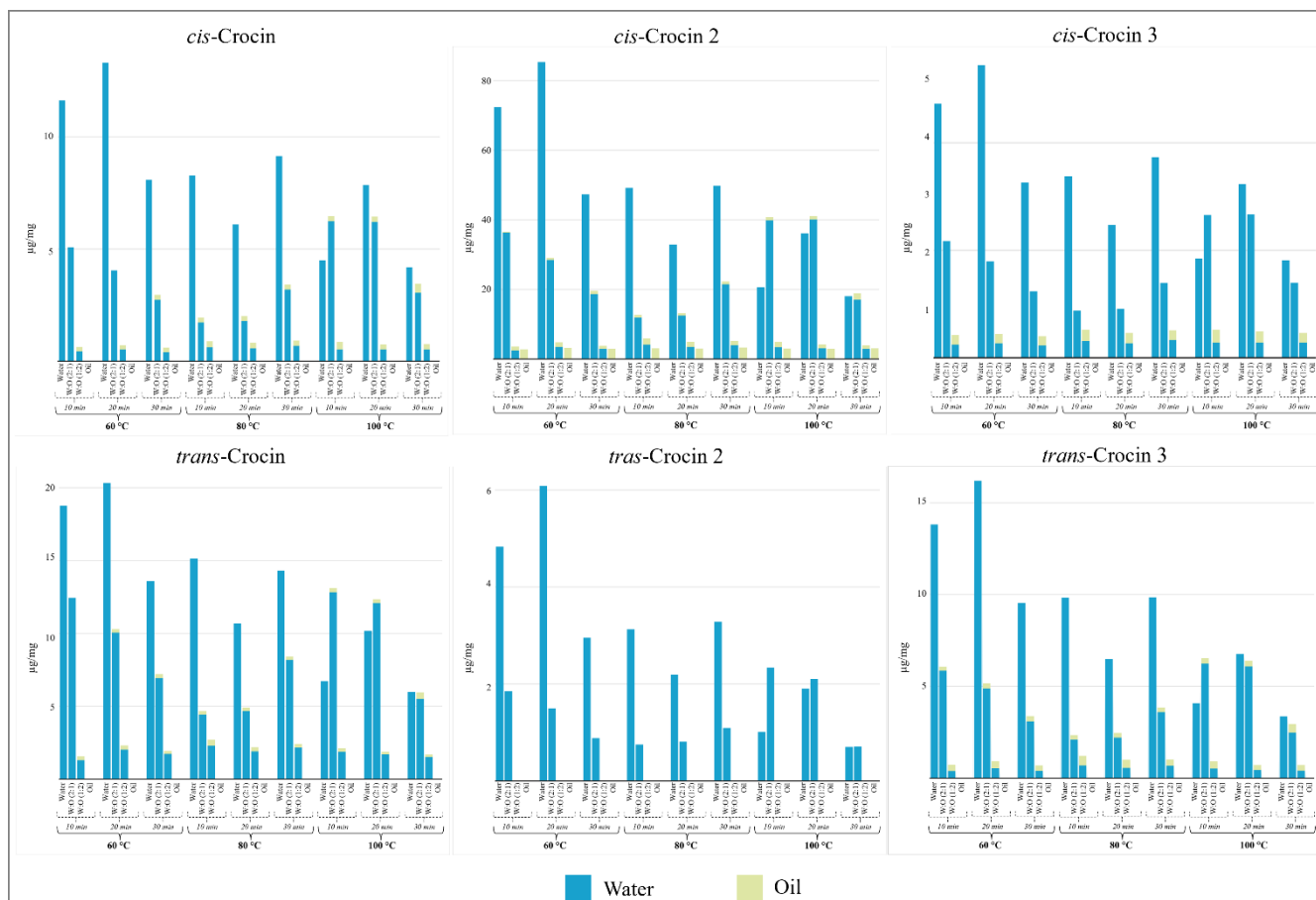


Figure S2. Concentration of crocin isomers (µg/mL) as a function of infusion time, extraction medium and temperature. Concentration variability was always below 15%.

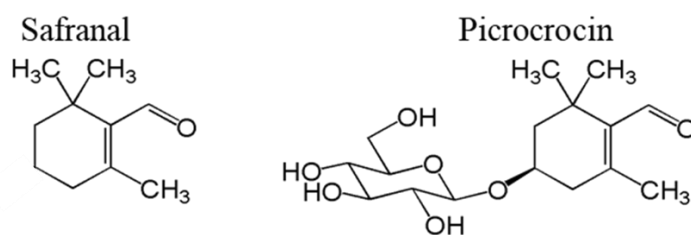


Figure S3. Chemical structure of picrocrocin and safranal.

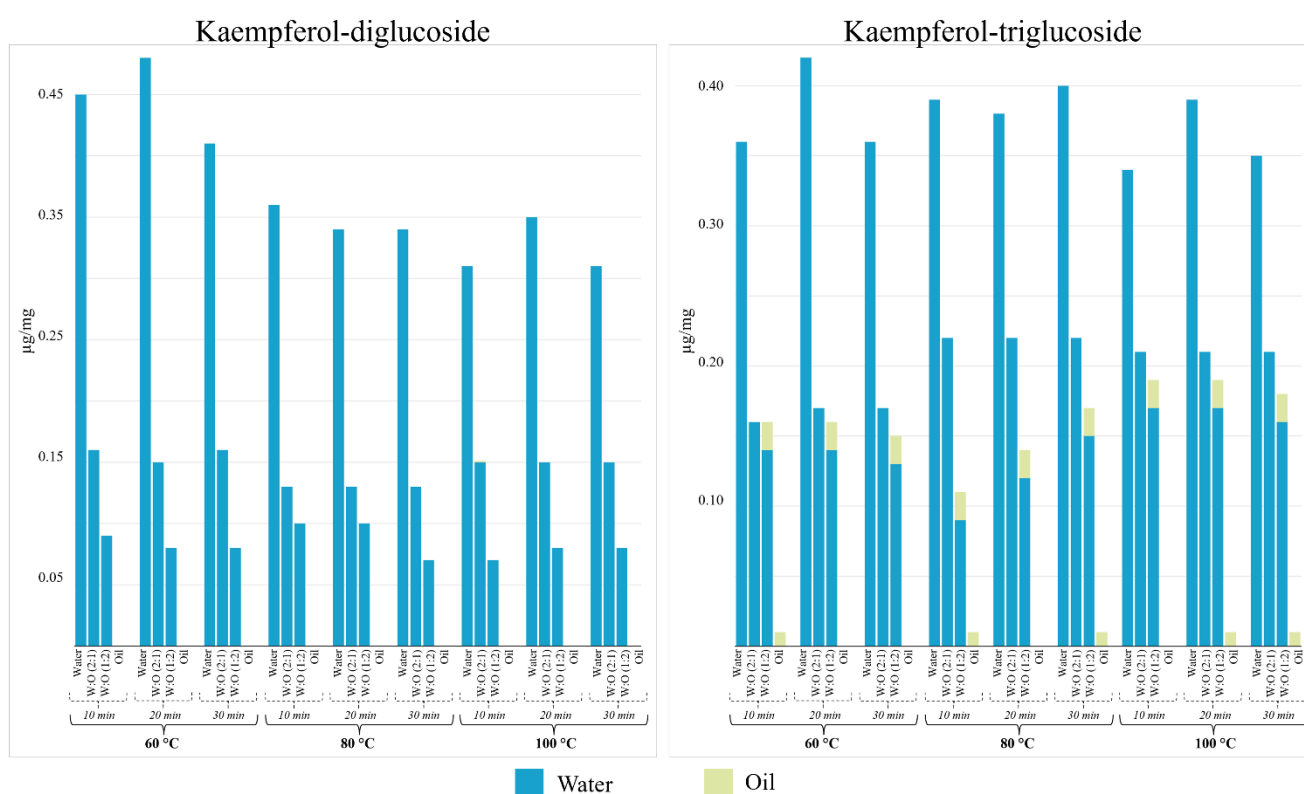


Figure S4. Concentration of kaempferol diglucoside and kaempferol triglucoside (µg/mL) as a function of infusion time, extraction medium and temperature. Concentration variability was always below 15%.

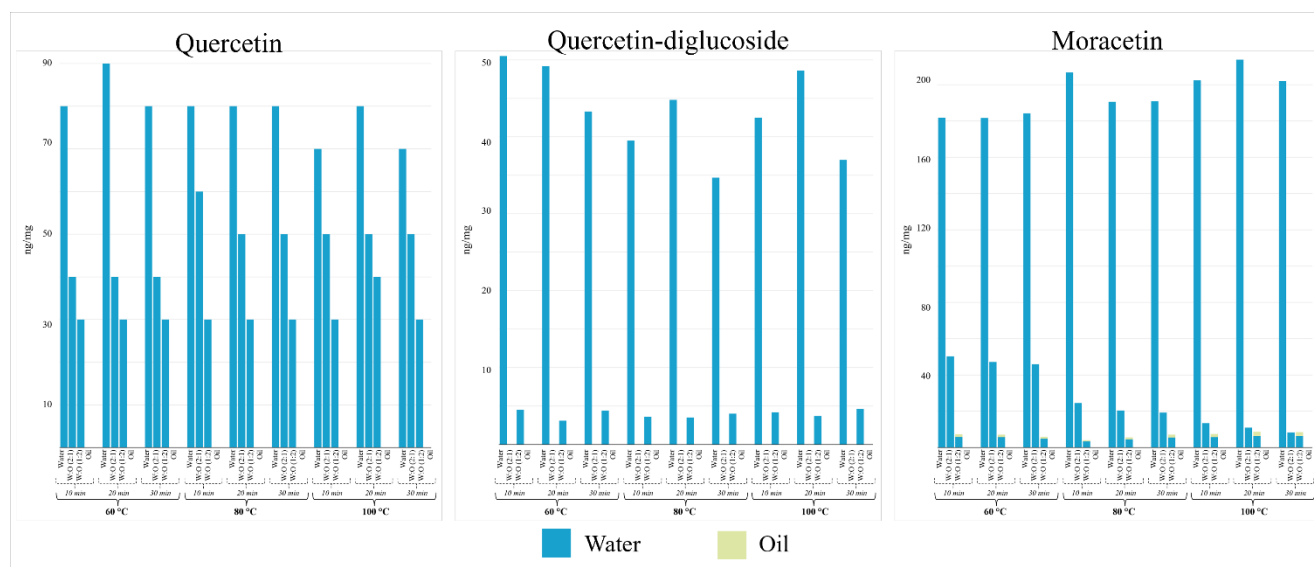


Figure S5. Concentration of quercetin and derivatives (µg/mL) as a function of infusion time, extraction medium and temperature. Concentration variability was always below 15%.

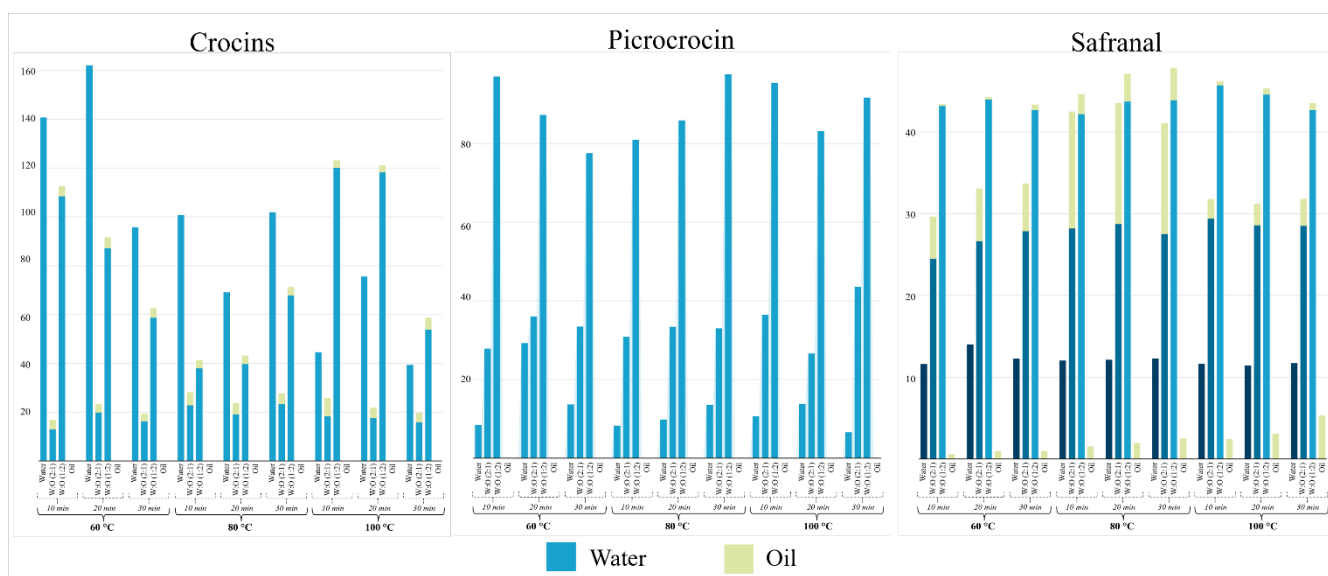


Figure S6. Determination of crocin, picrocrocin and safranal by the ISO-3632 method in saffron extracts as a function of infusion time, extraction medium and temperature. Concentration variability was always below 15%.