Table S1. Content of individual phenolic compounds present in *Brunfelsia grandiflora*. Results represent the mean ± standard deviation (n = 4). N.D.: not detected; d.w.: dry weight.

RT (min)	Proposed Compound	*Brunfelsia grandiflora* (mg/100 g d.w.)
HYDROXYCINNAMIC ACIDS and HYDROXYCINNAMATES		
4.7	5-Chlorogenic acid	3.13 ± 0.18
5.0	Caffeoylquinic acid	1.89 ± 0.07
5.1	Caffeoylquinic acid	0.70 ± 0.05
5.9	Caffeic acid	0.21 ± 0.01
8.0	*p*-Coumaric acid	0.10 ± 0.01
9.0	Ferulic acid	3.99 ± 0.10
9.4	Sinapic acid	0.31 ± 0.02
10.2	Dehydrodiferulic acid	7.62 ± 0.11
11.3	Caffeic acid-*O*-glucoside	533.86 ± 8.29
12.5	Coumaric acid-*O*-glucoside	57.57 ± 0.50
12.8	Coumaroylquinic acid	2.26 ± 0.10
13.0	Ferulic acid-*O*-glucoside	391.46 ± 17.08
13.1	Sinapic acid-*O*-glucoside	81.55 ± 1.66
13.4	Ferulic acid-*O*-glucoside	19.33 ± 1.00
13.4	Feruloylquinic acid	151.04 ± 4.07
13.5	Sinapoylquinic acid	6.54 ± 0.09
13.7	Feruloylquinic acid	7.51 ± 0.22
13.8	Ferulic acid-*O*-glucoside	64.22 ± 2.11
15.2	Sinapic acid-*O*-glucoside	8.76 ± 0.30
15.6	Coumaric acid-*O*-glucoside	1.61 ± 0.14
17.4	Coumaric acid-*O*-glucoside	1.48 ± 0.04
	TOTAL HYDROXYCINNAMIC ACIDS (mg/100 g) (%)	*1345.13 ± 36.16 (66.77%)*
	HYDROXYCOUMARINS	
3.7	Esculin	4.71 ± 1.16
5.7	Esculetin	21.49 ± 0.66
8.9	Scopoletin	286.77 ± 21.28
	TOTAL HYDROXYCOUMARINS (mg/100 g) (%)	*312.97 ± 23.11 (15.13%)*
LIGNANS		
8.8	Pinoresinol	0.77 ± 0.03
9.5	Matairesinol	2.45 ± 0.29
9.6	Hydroxysecoisolariciresinol isomer	5.19 ± 0.19
9.8	Secoisolariciresinol isomer	3.35 ± 0.20
9.9	Hydroxysecoisolariciresinol isomer	4.43 ± 0.10
11.3	Sesamol	55.36 ± 2.46
11.8	Secoisolariciresinol	2.42 ± 0.09
12.7	Cyclolariciresinol or Isolariciresinol	9.70 ± 0.57
12.9	Hydroxymatairesinol/Nortrachelogenin	15.23 ± 0.75
13.4	Sesamin	16.00 ± 0.47
15.2	Secoisolariciresinol isomer	2.95 ± 0.20
19.4	Episesamin	5.51 ± 0.13
	TOTAL LIGNANS (mg/100 g) (%)	*123.36 ± 5.48 (6.12%)*
FLAVONOLS		
4.9	Kaempherol-*O*-rutinoside	3.97 ± 2.21
10.6	Isorhamnetin-*O*-rutinoside	8.09 ± 0.09
12.0	Kaempherol-*O*-galactoside-*O*-rhamnoside	7.62 ± 0.29
12.2	Isorhamnetin-*O*-glucoside-*O*-rhamnoside	94.51 ± 2.47
	TOTAL FLAVONOLS (mg/100 g) (%)	*114.18 ± 5.06 (5.67%)*
	PHENOLIC ACIDS	
2.3	Methoxy-hydroxybenzoic acid glucoside	2.86 ± 0.22
2.4	Dihydroxybenzoic acid glucose	2.16 ± 0.10
2.6	Dihydroxybenzoic acid glucose	2.80 ± 0.20
3.2	3,4-Dihydroxybenzoic acid (protocatechuic acid)	5.23 ± 0.25
4.8	3-Hydroxybenzoic acid	6.97 ± 0.15
4.9	3-Hydroxyphenylpropionic acid	3.99 ± 0.24
5.1	Dihydroxybenzoic acid	1.03 ± 0.04

RT (min)	Proposed Compound	*Brunfelsia grandiflora* (mg/100 g d.w.)
5.4	3,4-Dihydroxyphenylpropionic acid	3.81 ± 0.15
5.9	3-Methoxy-4-hydroxybenzoic acid (vanillic acid)	2.73 ± 0.16
6.1	4-Hydroxybenzoic acid	1.50 ± 0.02
6.4	Dihydroxybenzoic acid	1.22 ± 0.06
6.4	3-Methoxy-4-hydroxyphenylacetic acid (Homovanillic acid)	0.17 ± 0.01
6.5	4-Hydroxyphenylacetic acid	7.61 ± 0.09
6.7	Dihydroxybenzoic acid	0.59 ± 0.06
6.8	Methoxy-hydroxybenzoic acid	2.11 ± 0.06
8.0	Hydroxyphenylacetic acid	3.98 ± 0.07
8.1	Dihydroxybenzoic acid glucose	0.81 ± 0.02
8.4	3-Methoxy-4-hydroxyphenylpropionic acid	1.08 ± 0.05
8.7	4-Hydroxyphenylpropionic acid	2.73 ± 0.10
9.8	Methoxy-hydroxyphenylpropionic acid	1.85 ± 0.07
11.3	Methoxy-hydroxybenzoic acid	7.23 ± 0.24
	TOTAL PHENOLIC ACIDS (mg/100 g) (%)	*62.46 ± 2.38 (3.10%)*
GALLATES		
2.0	Gallic acid	0.97 ± 0.13
3.6	Methyl-gallate	0.66 ± 0.06
5.0	Galloyl-glucose	1.82 ± 0.13
6.3	Ethyl-gallate	3.99 ± 0.09
6.6	Methyl-gallate	2.89 ± 0.10
7.2	Ethyl-gallate	12.38 ± 0.38
9.4	Methyl-gallate	0.57 ± 0.06
11.4	Ethyl-gallate	19.92 ± 0.56
13.0	Ethyl-gallate	3.28 ± 0.10
	TOTAL GALLATES (mg/100 g) (%)	*46.48 ± 1.62 (2.31%)*
FLAVANOLS		
6.1	Gallocatechin	5.54 ± 0.12
14.2	Methyl-epigallocatechin	0.29 ± 0.02
	TOTAL FLAVANOLS (mg/100 g) (%)	*5.83 ± 0.14 (0.29%)*
FLAVANONES		
10.2	Eriodictyol	0.54 ± 0.05
12.1	Naringenin-*O*-glucoside	1.59 ± 0.06
12.3	Eriodictyol-*O*-glucoside	0.65 ± 0.02
15.9	Naringenin	0.06 ± 0.01
16.2	Eriodictyol-*O*-glucoside	1.00 ± 0.07
16.9	Hesperetin	0.09 ± 0.01
18.0	Naringenin-*O*-glucoside	0.37 ± 0.05
	TOTAL FLAVANONES (mg/100 g) (%)	*4.30 ± 0.27 (0.21%)*
	TOTAL PHENOLIC COMPOUNDS	***2014.71 ± 74.23 (100%)***

MATERIAL AND METHODS

Table S2. Parte of 2.9. Molecular assay by Real-Time PCR. Forward and reverse sequences for genes related to cell death, the inflammasome complex and antioxidant biomarkers:

BAX (Bcl-2-associated X protein)	*'CCCCCGAGAGGTCTTTTTCC' 'CCTTGAGCACCAGTTTGCTG'*
APAF1 (Apoptotic protease-activating factor 1)	'TCTTCCAGTGGTAAAGATTCAGTT' 'CGGAGACGGTCTTTAGC
BNIP3 (BCL2-interacting protein 3)	'CCTCAGCATGAGGAACACGA' 'GCCACCCCAGGATCTAACAC
NFκB (Nuclear factor kappa B)	'TTTTCGACTACGCGGTGACA' 'GTTACCCAAGCGGTCCAGAA'
NRF2 (Nuclear factor erythroid related factor2)	'CTGGTCATCGGAAAACCCCA' 'TCTGCAATTCTGAGCAGCCA
SOD (Superoxide dismutase)	'CCACTGCTGGGGATTGATGT' 'CGTGGTTTACTTTTTGCAAGCC'

RESULTS

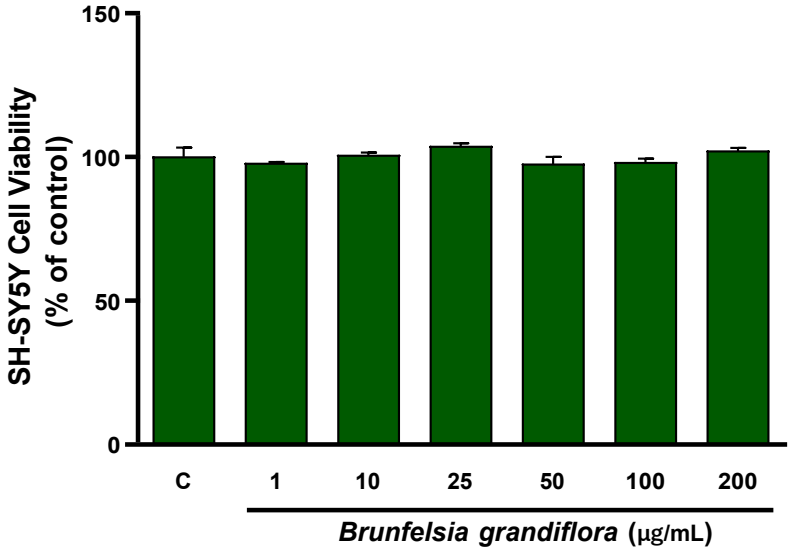

Figure S1. Effect of *B. grandiflora* extract on SH-SY5Y cell viability. There are no statistical differences between the groups analyzed.

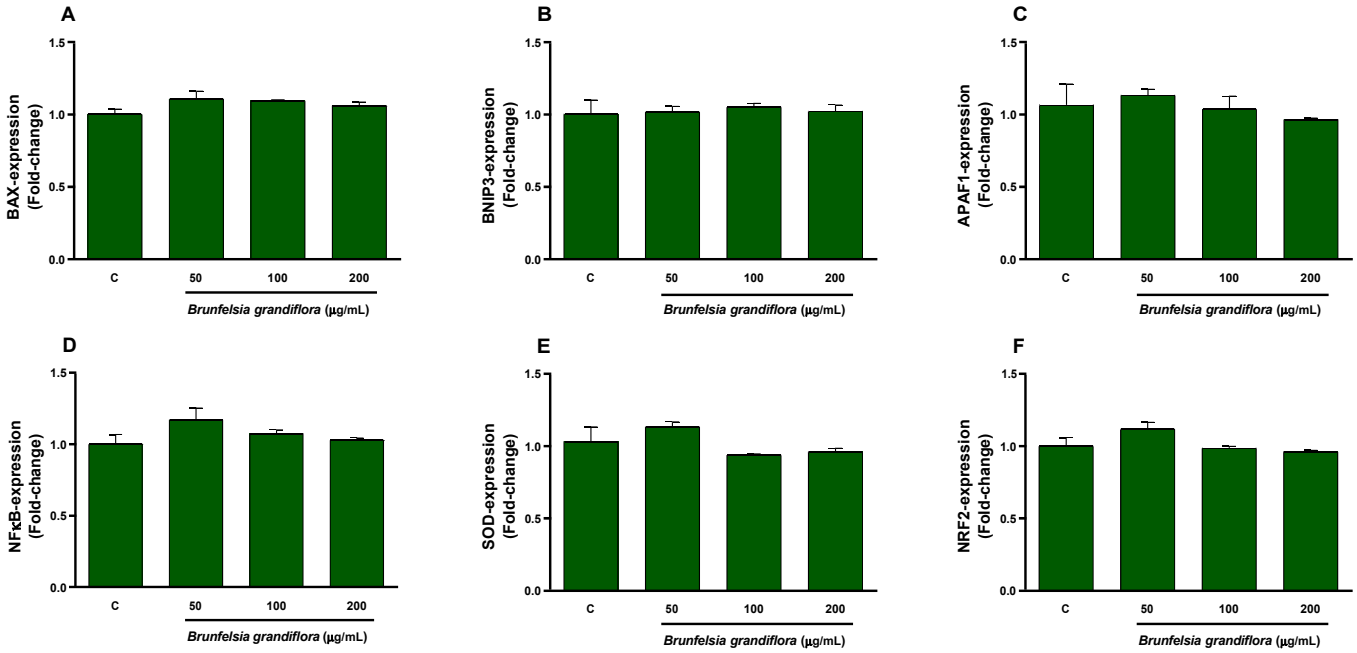

Figure S2. Part of Figure 4 and 5. Effect of *B. grandiflora* extract on molecular expression of cell death and oxidative stress biomarkers in SH-SY5Y cells. There are no statistical differences between the groups analyzed.