

## Supplementary Data

# **Phytochemical characterization of *Dillenia indica* L. bark by paper spray ionization mass spectrometry and evaluation of its antioxidant potential against t-BHP-induces oxidative stress in RAW264.7 cells**

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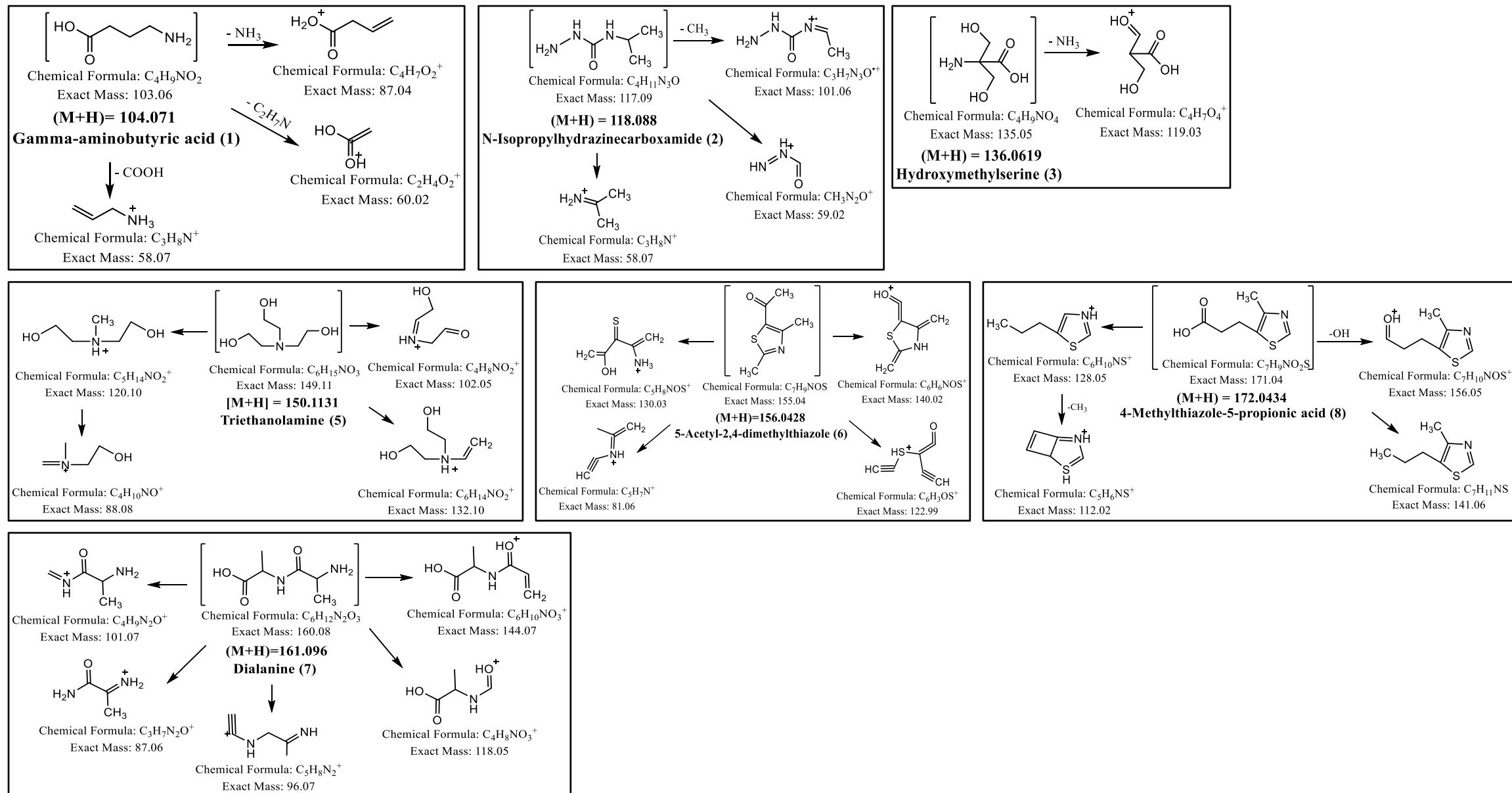


Figure S1: Mass fragmentation of Nitrogen compounds in *D. indica* bark extracts. (continued)

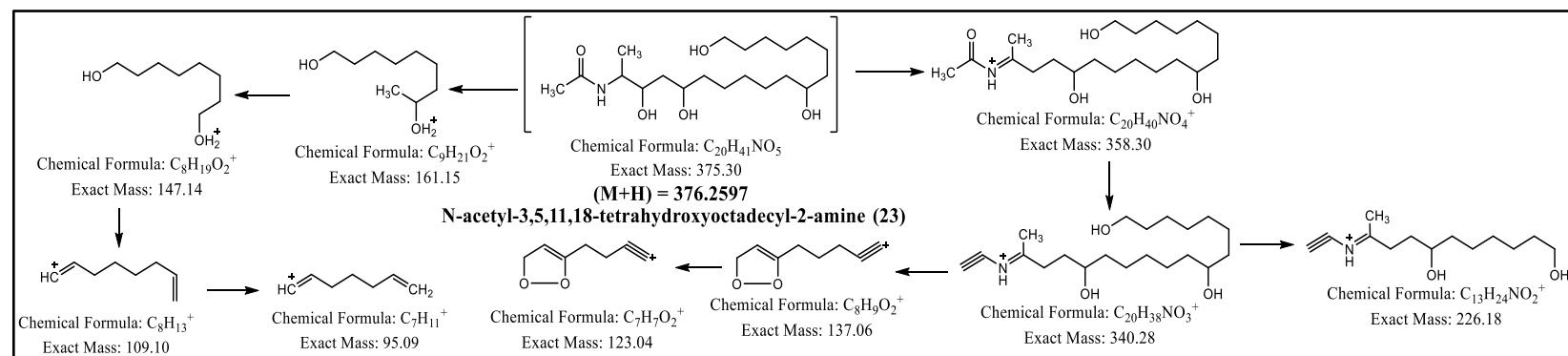
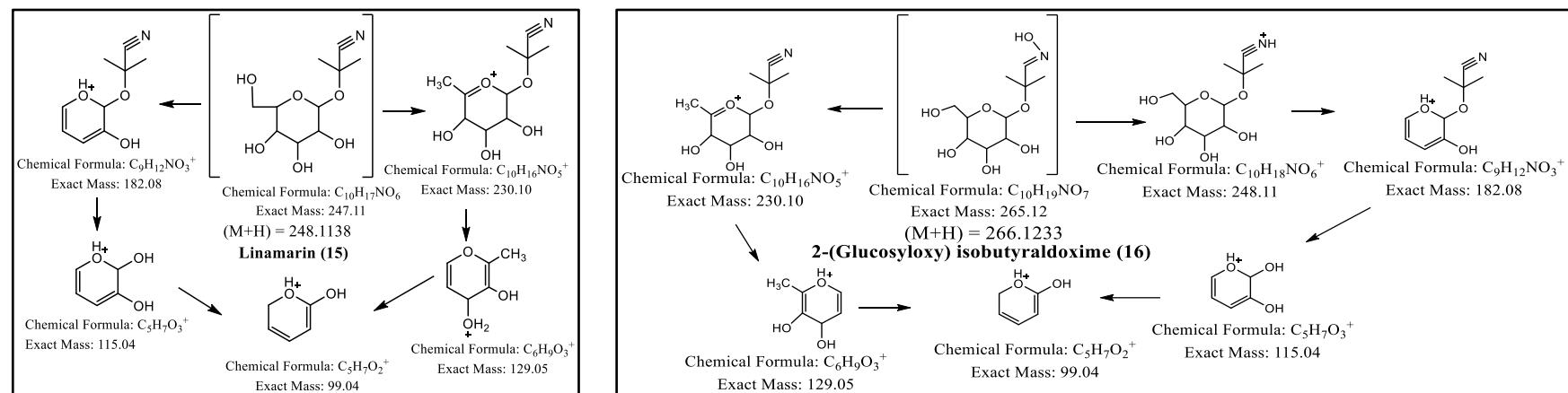
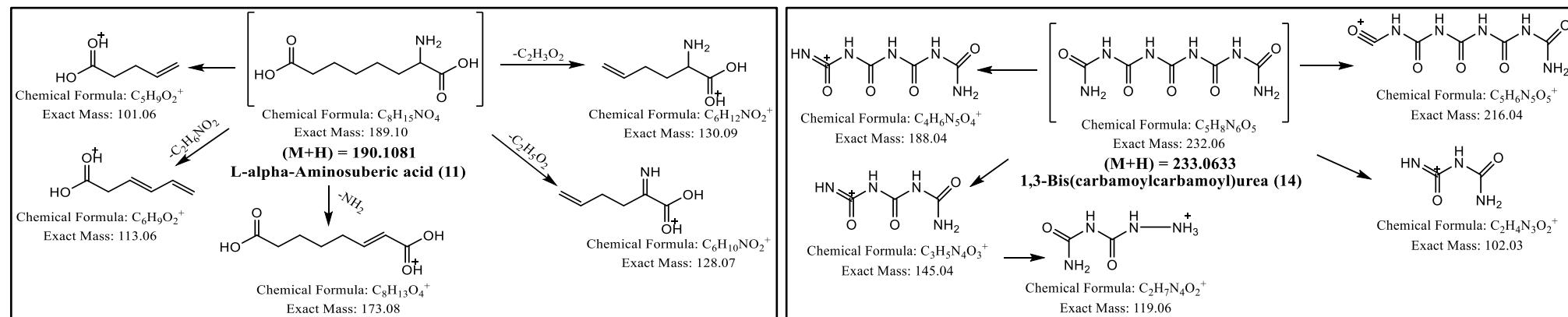


Figure S1: Mass fragmentation of Nitrogen compounds in *D. indica* bark extracts.

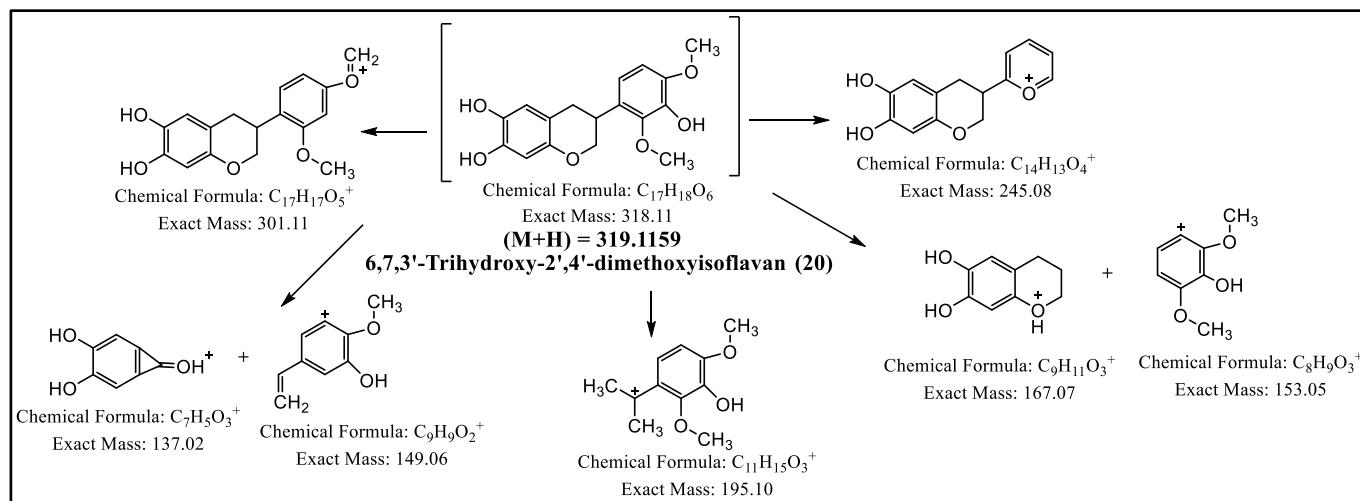
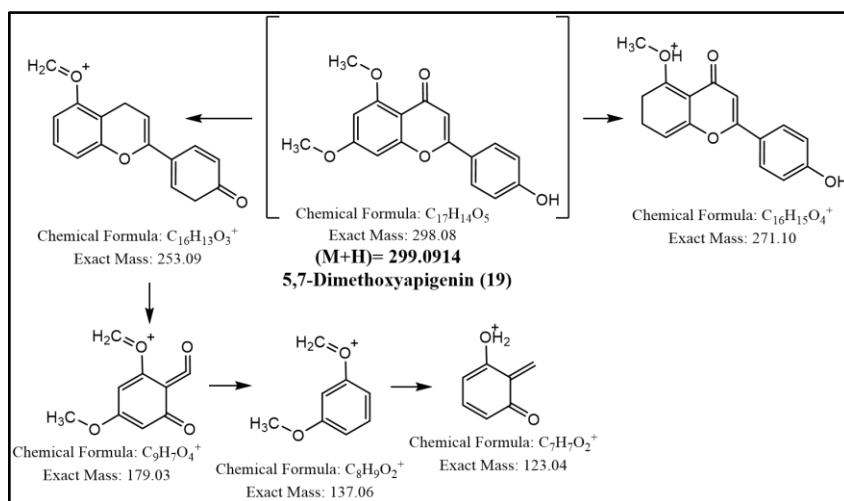
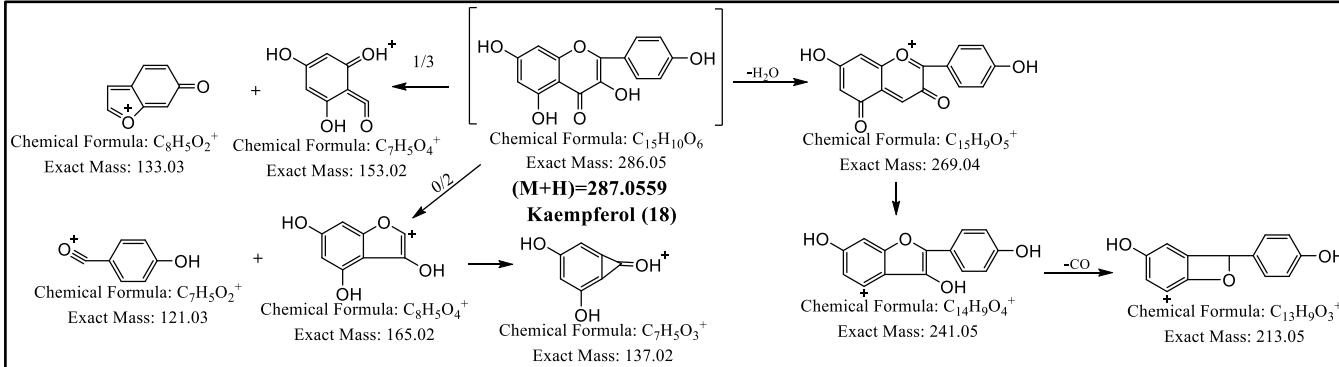
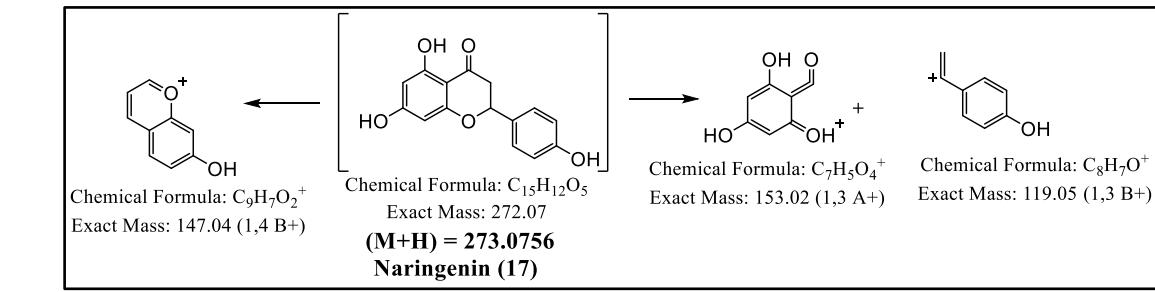


Figure S2: Mass fragmentation of flavonoids in *D. indica* bark extracts (continued).

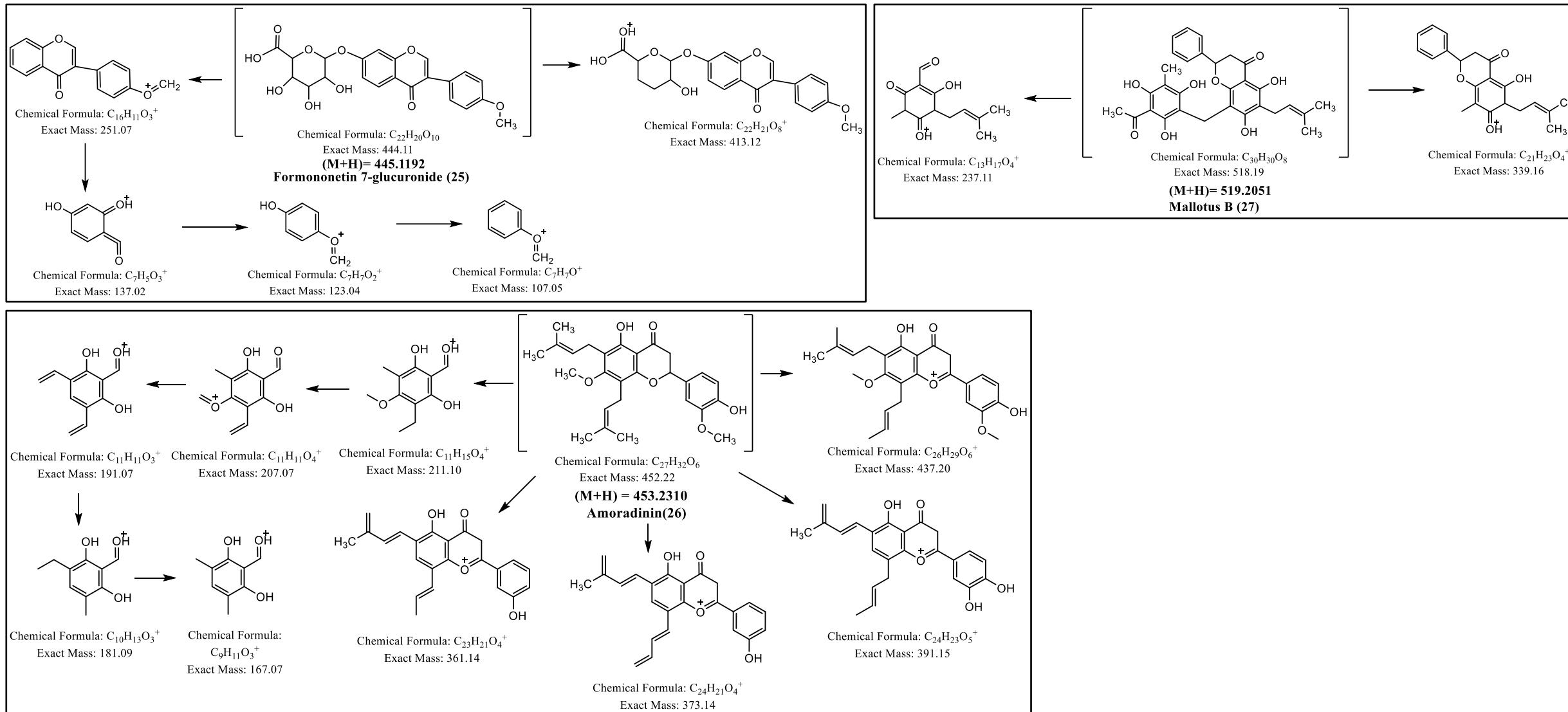


Figure S2: Mass fragmentation of flavonoids in *D. indica* bark extracts.

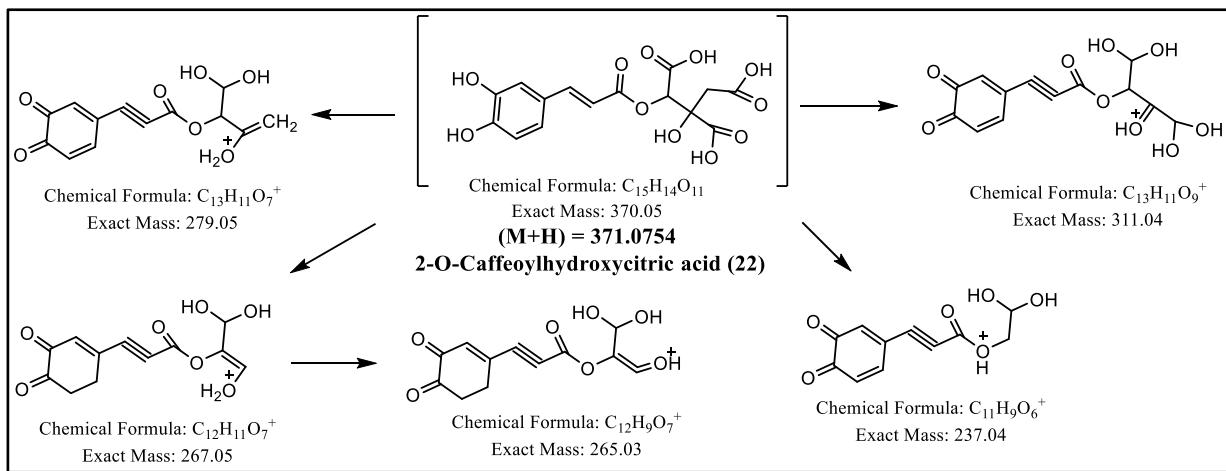
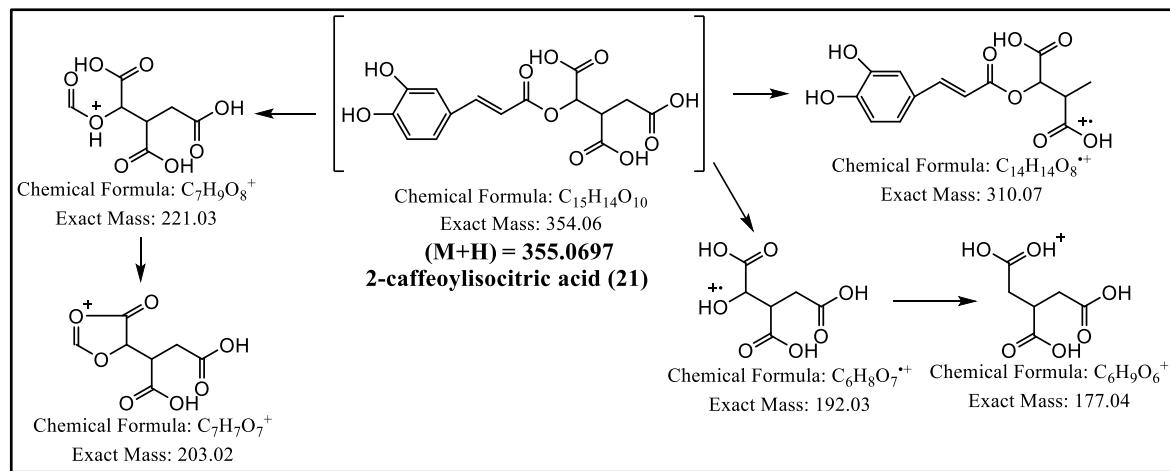
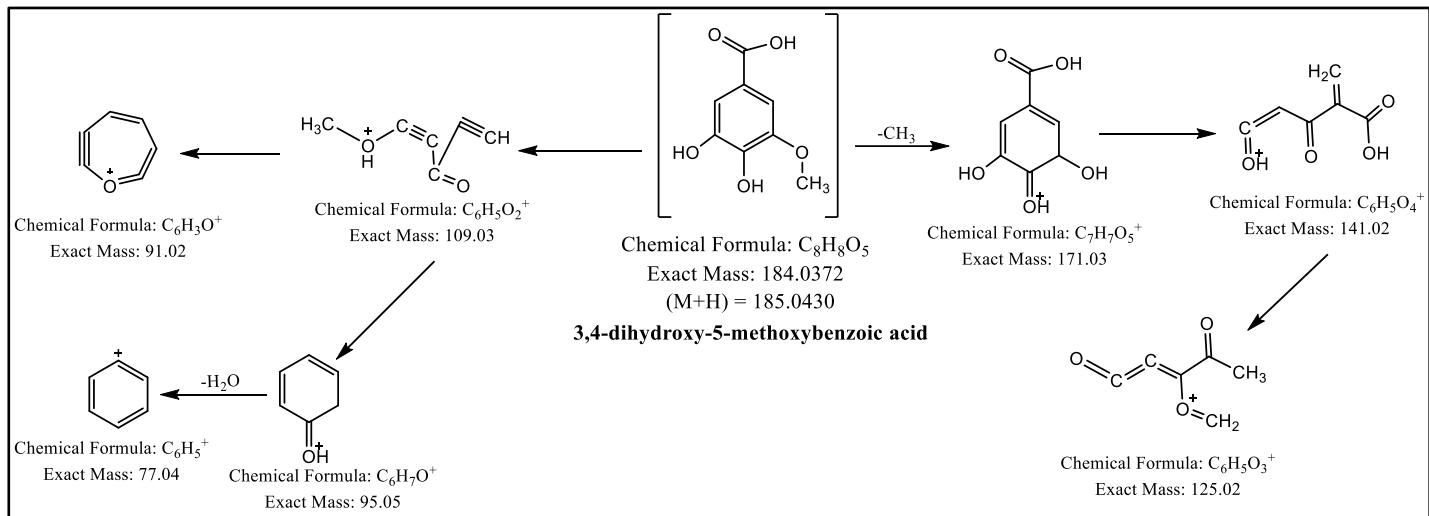


Figure S3: Mass fragmentation of phenolic acids in *D. indica* bark extracts.

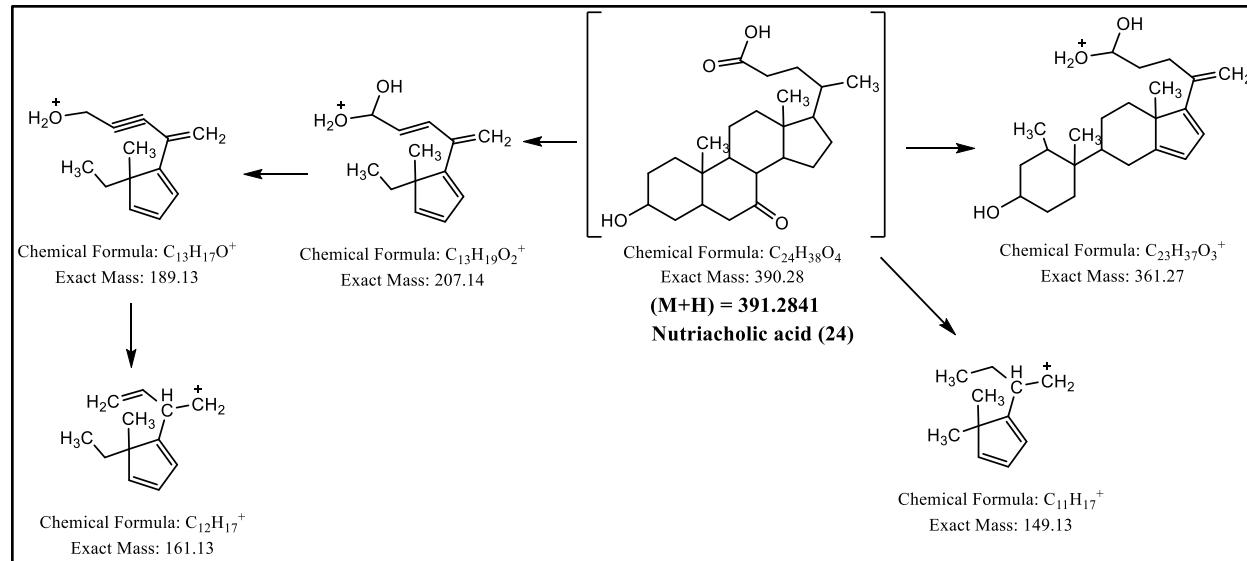
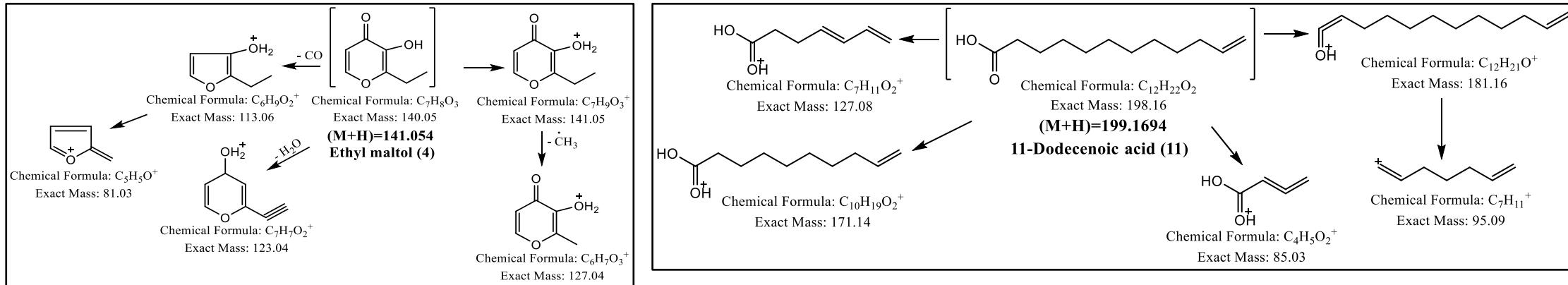


Figure S4: Mass fragmentation of ethyl maltol, 11-dodecenioic acid and triterpenoid nutriacholic acid in *D. indica* bark extracts.

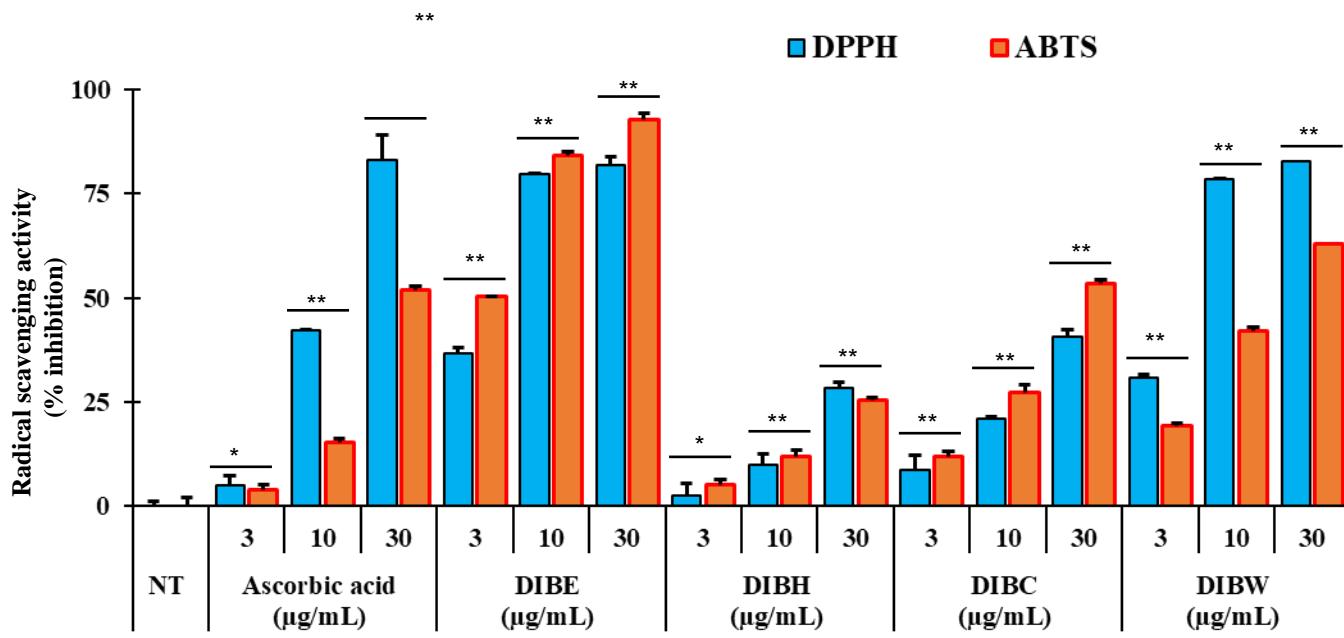


Figure S5: DPPH- and ABTS-radical scavenging activities of various organic and aqueous extracts of *D. indica* bark.  
 DIBE: ethanol extract; DIBH: hexane extract; DIBC: chloroform extract; and DIBW: aqueous extract of *D. indica* bark.  
 Values are expressed as the mean  $\pm$  SD (n = 3). \*p < 0.05 \*\*p < 0.01.

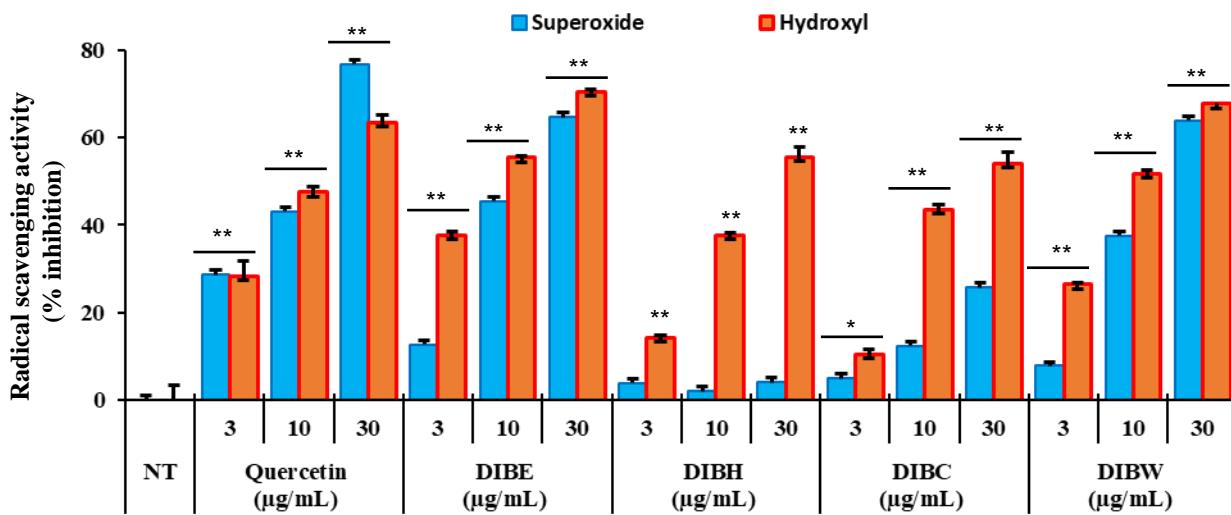


Figure S6: Superoxide- and hydroxyl-radical scavenging activities of various organic and aqueous extracts of *D. indica* bark.  
 DIBE: ethanol extract; DIBH: hexane extract; DIBC: chloroform extract; and DIBW: aqueous extract of *D. indica* bark.  
 Values are expressed as the mean  $\pm$  SD ( $n = 3$ ). \* $p < 0.05$  \*\* $p < 0.01$

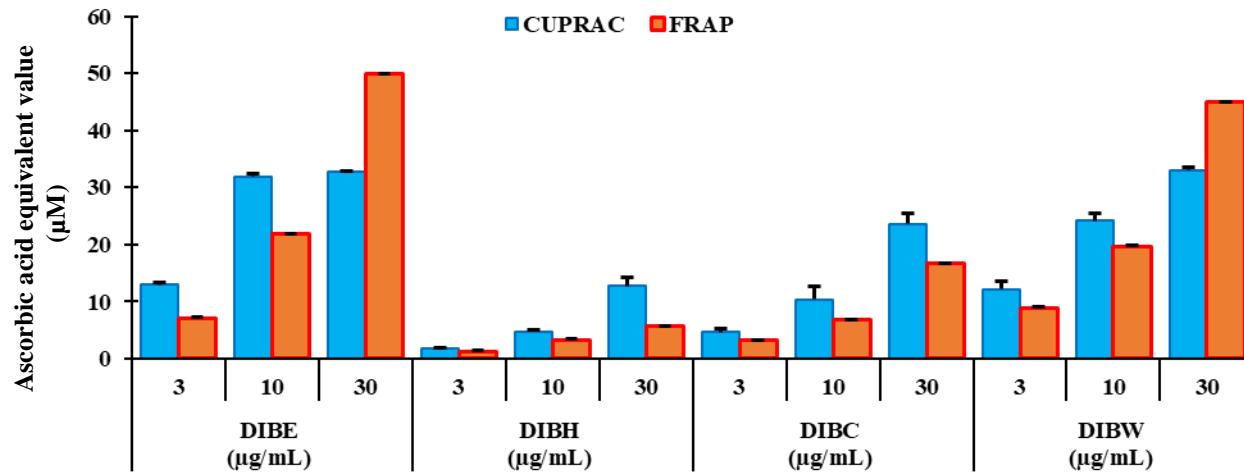


Figure S7: CUPRAC and FRAP activities of various organic and aqueous extracts of *D. indica* bark.

DIBE: ethanol extract; DIBH: hexane extract; DIBC: chloroform extract; and DIBW: aqueous extract of *D. indica* bark.  
Values are expressed as the mean  $\pm$  SD ( $n = 3$ ).

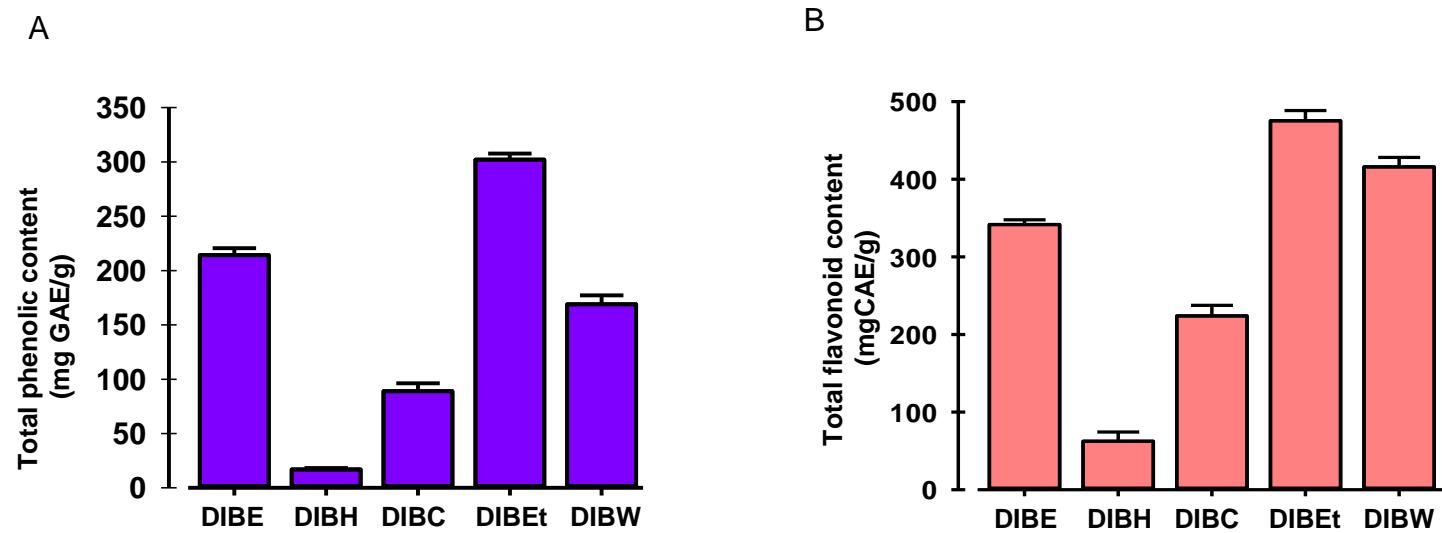


Figure S8: Total phenols (A) and flanovoids (B) content of various organic and aqueous extracts of *D. indica* bark.  
DIBE: ethanol extract; DIBH: hexane extract; DIBC: chloroform extract; DIBEt: ethylacetate extract and  
DIBW: aqueous extract of *D. indica* bark

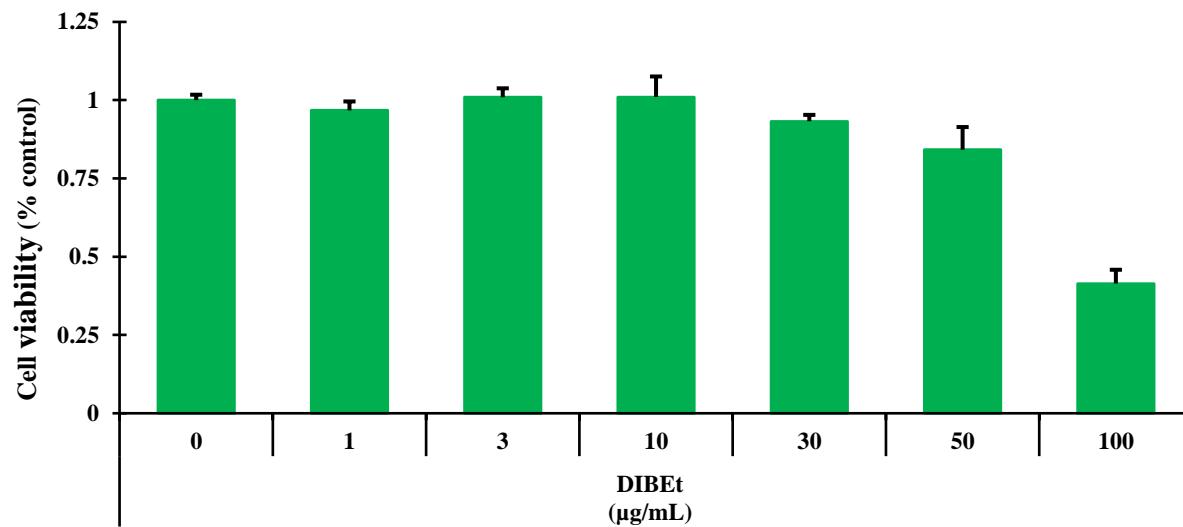


Figure S9: Cell viability of the ethylacetate fraction of *D. indica* bark (DIBEt)

Table S1: List of the primer sets used in this study.

Gene name		Sequences
<i>Sod1</i>	forward	AAGCGGTGAACCAGTTGTGT
	reverse	GCCAATGATGGAATGCTCTC
<i>Gpx1</i>	forward	ACACCGAGATGAACGATCTG
	reverse	ATGTACTTGGGGTCGGTCAT
<i>Catalase</i>	forward	CACCCACGATATCACCAAGATAAC
	reverse	GAAGACTCCAGAAGTCCCAGAC
<i>Hmox-1</i>	forward	ACGCATATAACCGCTACCTG
	reverse	TCCTCTGTCAGCATCACCTG
<i>Gapdh</i>	Forward	TTGTGATGGGTGTGAACCAC
	reverse	ACACATTGGGGTAGGAACA

**Table S2: List of the primary antibodies used in the study.**

Name	Catalog no.	Company	Antigen	Host	Dilutions	Membrane
Anti-SOD1	BS91268	Bioworld Technology, Inc.	SOD1	Rabbit	1:1000	Nitrocellulose membrane
Anti-catalase	BS90194	Bioworld Technology, Inc.	Catalase	Rabbit	1:1000	Nitrocellulose membrane
anti-GPx-1	MB9027	Bioworld Technology, Inc.	GPx-1	Mouse	1:1000	Nitrocellulose membrane
Anti-HO-1	sc-136256	Santa Cruz Biotechnology, Inc.	HO-1	Mouse	1:1000	Nitrocellulose membrane
Anti Nrf2	sc-81342	Santa Cruz Biotechnology, Inc.	Nrf2	Mouse	1:1000	Nitrocellulose membrane
Anti-Lamin B	BS3547	Bioworld Technology, Inc.	Lamin B	Rabbit	1:1000	Nitrocellulose membrane
Anti-p-p38	sc-166182	Santa Cruz Biotechnology, Inc.	p38	Mouse	1:1000	Nitrocellulose membrane
Anti-p38	BS3567	Bioworld Technology, Inc.	p38	Rabbit	1:1000	Nitrocellulose membrane
Anti-p-ERK1/2	sc-7383	Santa Cruz Biotechnology, Inc.	ERK	Mouse	1:1000	Nitrocellulose membrane
Anti-ERK1/2	BS 6472	Bioworld Technology, Inc.	ERK	Rabbit	1:1000	Nitrocellulose membrane
Anti-p-JNK	BS 4322	Bioworld Technology, Inc.	JNK	Rabbit	1:1000	Nitrocellulose membrane
Anti-JNK	sc-7345	Santa Cruz Biotechnology, Inc.	JNK	Mouse	1:1000	Nitrocellulose membrane
Anti- βactin	Sc-47778	Santa Cruz Biotechnology, Inc.	β-actin	Mouse	1:1000	Nitrocellulose membrane