

APPENDICES

APPENDIX 1

Scavenging activity (%) of ascorbic acid and crude extracts *Ardisia crispa* on DPPH radical:

Scavenging activity (%) of ascorbic acid standard on DPPH free radical

Conc. Of ascorbic acid (mg/ml)	Reading 1	Reading 2	Average	Inhibition %
200	0.148	0.147	0.1475	94.17±0.0
100	0.157	0.142	0.1495	94.09±0.01
50	0.212	0.14	0.176	93.05±0.05
25	0.658	0.369	0.5135	79.72±0.20
12.5	1.721	1.75	1.7355	31.48±0.02
6.25	2.155	2.011	2.083	17.76±0.10
3.12	2.069	2.282	2.1755	14.11±0.15
1.56	2.408	2.451	2.4295	2.90±0.03

Scavenging activity (%) of fruits hexane extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Inhibition %
5	0.560	0.573	0.5665	80.28±0.01
4	0.682	0.696	0.689	76.01±0.01
3	0.731	0.771	0.751	73.85±0.03
2	0.857	0.922	0.8895	69.03±0.05
1	1.418	1.485	1.4515	49.46±0.05

Scavenging activity (%) of leaves hexane extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Inhibition %
5	1.563	1.552	1.5575	45.77±0.01
4	1.707	1.639	1.673	41.74±0.05
3	1.841	1.845	1.843	35.83±0.0
2	2.290	2.259	2.2745	20.80±0.02
1	2.659	2.515	2.587	9.92±0.10

Scavenging activity (%) of fruits chloroform extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	average	Inhibition %
5	0.733	0.695	0.714	75.14±0.03
4	0.816	0.870	0.843	70.65±0.04
3	0.901	1.069	0.985	65.70±0.19
2	1.260	1.270	1.265	55.95±0.01
1	2.107	2.214	2.1605	24.77±0.08

Scavenging activity (%) of leaves chloroform extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	average	Inhibition %
5	1.018	1.143	1.0805	62.38±0.09
4	1.467	1.447	1.457	49.27±0.01
3	1.482	1.509	1.4955	47.93±0.02
2	2.033	2.214	2.1235	26.06±0.13
1	2.799	2.799	2.799	2.540±0.0

Scavenging activity (%) of fruits methanol extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	average	Inhibition %
5	0.277	0.288	0.2825	90.16±0.01
4	0.294	0.323	0.3085	89.26±0.02
3	0.325	0.326	0.3255	88.67±0.0
2	0.332	0.344	0.338	88.23±0.01
1	1.368	1.262	1.315	54.21±0.07

Scavenging activity (%) of leaves methanol extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	average	Inhibition %
5	0.533	0.503	0.510	82.24±0.02
4	0.580	0.551	0.5655	80.31±0.02
3	0.667	0.583	0.625	78.24±0.06
2	0.740	0.714	0.727	74.68±0.02
1	2.107	2.370	2.2385	22.06±0.19

Scavenging activity (%) of fruits water extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	average	Inhibition %
5	0.524	0.536	0.530	81.54±0.01
4	0.633	0.655	0.644	77.57±0.02
3	0.735	0.732	0.7335	74.46±0.0
2	1.362	1.365	1.3635	52.52±0.0
1	1.487	1.420	1.4535	49.39±0.05

Scavenging activity (%) of leaves water extract on DPPH free radical

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Inhibition %
5	0.732	0.751	0.7415	74.18±0.01
4	0.82	0.712	0.766	73.32±0.08
3	1.256	1.265	1.2605	56.11±0.01
2	1.974	1.892	1.933	32.69±0.06
1	2.033	2.135	2.084	27.43±0.07

APPENDIX 2

Reducing power activity of BHA standard and crude extracts from *Ardisia crispa*:

Ferric reducing activity of BHA standard

Conc. of BHA (mg/ml)	Reading 1	Reading 2	Average
1	3.135	3.068	3.101±0.05
0.5	3.010	3.010	3.010±0.0
0.25	2.591	2.591	2.591±0.0
0.125	1.665	1.597	1.631±0.05
0.0625	1.026	1.022	1.024±0.0

Ferric reducing activity of fruits hexane extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	1.311	1.317	1.314±0.0
0.5	0.764	0.774	0.769±0.01
0.25	0.398	0.399	0.398±0.0
0.125	0.258	0.256	0.257±0.0
0.0625	0.180	0.185	0.1825±0.0

Ferric reducing activity of leaves hexane extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	0.565	0.523	0.544±0.03
0.5	0.369	0.366	0.367±0.0
0.25	0.268	0.248	0.258±0.01
0.125	0.201	0.203	0.202±0.0
0.0625	0.185	0.186	0.1855±0.0

Ferric reducing activity of fruits chloroform extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	1.129	1.131	1.130±0.0
0.5	0.730	0.744	0.737±0.01
0.25	0.345	0.355	0.350±0.01
0.125	0.214	0.227	0.220±0.01
0.0625	0.183	0.181	0.180±0.0

Ferric reducing activity of leaves chloroform extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	0.689	0.761	0.725±0.05
0.5	0.510	0.496	0.503±0.01
0.25	0.350	0.354	0.352±0.0
0.125	0.231	0.234	0.232±0.0
0.0625	0.157	0.161	0.159±0.0

Ferric reducing activity of fruits methanol extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	2.960	2.960	2.960±0.0
0.5	2.027	1.969	1.998±0.041
0.25	1.219	1.215	1.217±0.0
0.125	0.621	0.625	0.623±0.0
0.0625	0.476	0.477	0.476±0.0

Ferric reducing activity of leaves methanol extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	2.075	2.050	2.062±0.02
0.5	1.517	1.528	1.522±0.01
0.25	0.866	0.864	0.865±0.0
0.125	0.447	0.496	0.471±0.03
0.0625	0.342	0.325	0.333±0.01

Ferric reducing activity of fruits water extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	1.864	1.863	1.863±0.0
0.5	1.023	1.050	1.036±0.02
0.25	0.562	0.576	0.569±0.01
0.125	0.316	0.308	0.312±0.01
0.0625	0.210	0.219	0.214±0.01

Ferric reducing activity of leaves water extract

Conc. crude extract (mg/ml)	Reading 1	Reading 2	Ave.
1	1.995	1.990	1.992±0.0
0.5	1.078	1.080	1.079±0.0
0.25	0.658	0.650	0.654±0.0
0.125	0.341	0.346	0.343±0.0
0.0625	0.247	0.244	0.245±0.0

APPENDIX 3

Chelating ability (%) of EDTA standard and crude extracts from *Ardisia crispa* on ferrous (Fe^{2+}):

Chelating ability (%) of EDTA standard on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	0.068	0.072	0.070	96.76±0.0
0.5	0.218	0.378	0.298	86.24±0.11
0.25	0.358	0.361	0.3595	83.40±0.0
0.125	0.478	0.641	0.5595	74.16±0.12
0.0625	0.970	0.843	0.9065	58.14±0.1

Chelating ability (%) of fruits hexane extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	2.317	2.295	2.306	4.78±0.02
0.5	2.320	2.323	2.3215	4.15±0.0
0.25	2.333	2.340	2.3365	3.53±0.0
0.125	2.346	2.346	2.346	3.14±0.0
0.0625	2.350	2.355	2.3525	2.87±0.0

Chelating ability (%) of leaves hexane extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	2.260	2.260	2.260	6.69±0.0
0.5	2.290	2.295	2.2925	5.35±0.0
0.25	2.301	2.301	2.301	4.99±0.0
0.125	2.323	2.323	2.323	4.09±0.0
0.0625	2.336	2.337	2.3365	3.53±0.0

Chelating ability (%) of fruits chloroform extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	2.251	2.251	2.251	7.06±0.0
0.5	2.301	2.301	2.301	4.99±0.0
0.25	2.336	2.336	2.336	3.55±0.0
0.125	2.385	2.329	2.357	2.7±0.04
0.0625	2.396	2.396	2.396	1.07±0.0

Chelating ability (%) of leaves chloroform extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	2.244	2.244	2.244	7.34±0.0
0.5	2.276	2.276	2.276	6.03±0.0
0.25	2.325	2.325	2.325	4±0.0
0.125	2.363	2.345	2.354	2.81±0.01
0.0625	2.360	2.360	2.360	2.56±0.0

Chelating ability (%) of fruits methanol extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	1.822	1.826	1.824	24.07±0.0
0.5	1.945	1.947	1.946	19±0.0
0.25	2.027	2.022	2.0245	15.73±0.0
0.125	2.069	2.069	2.069	13.88±0.0
0.0625	2.114	2.110	2.112	12.09±0.0

Chelating ability (%) of leaves methanol extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	1.940	1.941	1.9405	19.22±0.0
0.5	1.960	1.965	1.9625	18.31±0.0
0.25	2.063	2.033	2.048	14.75±0.02
0.125	2.142	2.165	2.1535	10.36±0.02
0.0625	2.181	2.197	2.189	8.88±0.01

Chelating ability (%) of fruits water extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	1.284	1.287	1.2855	41.94±0.0
0.5	1.320	1.320	1.320	40.38±0.0
0.25	1.448	1.632	1.540	30.44±0.13
0.125	1.827	1.735	1.781	19.56±0.1
0.0625	2.045	1.989	2.017	8.9±0.04

Chelating ability (%) of fruits water extract on ferrous (Fe^{2+})

Conc. Of crude extract (mg/ml)	Reading 1	Reading 2	Average	Chelating %
1	1.454	1.298	1.376	37.85±0.11
0.5	2.016	1.856	1.936	12.55±0.11
0.25	2.023	2.027	2.025	8.57±0.0
0.125	2.128	2.128	2.128	3.88±0.0
0.0625	2.178	2.173	2.174	1.80±0.0

APPENDIX 4

Figure 1. Gallic acid calibration plot for determination of total phenolic content.

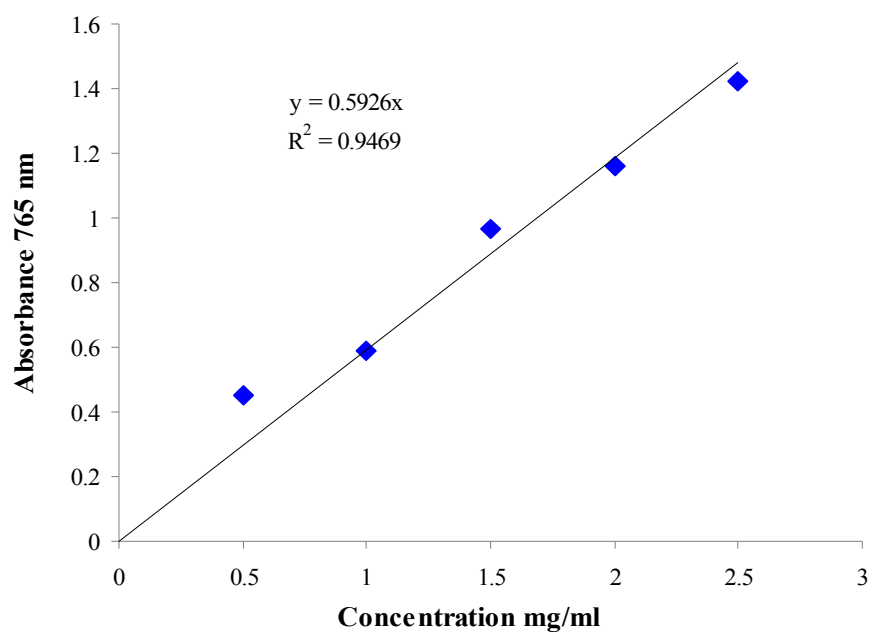


Figure 2. Quercetin calibration plot for determination of total flavonoid content.

