

ASSESSMENT OF THE ANTIOXIDANT POTENTIAL OF WHITE, RED AND BLACK CURRANT (*Ribes*) SAMPLES

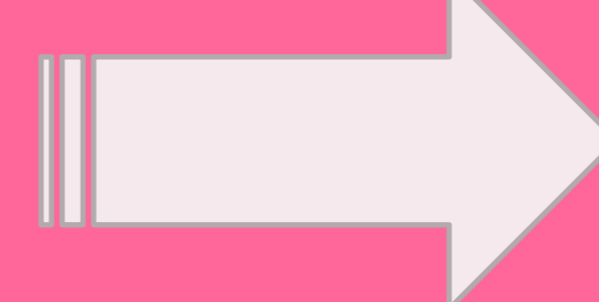
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In recent years, oxidative stress is one of the biggest causes of various pathological conditions like inflammation, cardiovascular and some neurological diseases. Numerous studies have shown that berry fruits which include white, red and black currants are a good source of bioactive compounds such as phenolic acids, tannins, anthocyanidins, flavan-3-ols, etc. These chemical compounds are also known as potent antioxidants and play a key role in quenching free radicals and protect cells from oxidative stress. In this study, the antioxidant activity of white, red and black currant fruits has been evaluated.



Extraction agents:
80% acetone and
acidified
(0.1% HCl)
methanol



Extraction and
measuring of the
antioxidant activity of
the samples by DPPH
radical scavenging
assay.

Table 1. Obtained results of antioxidant activity of the samples

| Samples | DPPH radical inhibition of acetone extracts | DPPH radical inhibition of acidified methanol extracts |
|---------------|---|--|
| white currant | 86.09% ± 0.47 | 86.22% ± 0.28 |
| red currant | 76.61% ± 0.76 | 86.90% ± 0.19 |
| black currant | 12.50% ± 4.37 | 84.34% ± 1.05 |



Based on the high values of antioxidant activity of the samples it can be concluded that the consumption of currant fruits may potentially have a beneficial effect on human health and protecting cells from oxidative stress.

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