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Effect of extraction process on the quality of phenolic compounds and antioxidants in dragon fruit skin (*Hylocereus polyrhizus*): a review

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Dragon fruit is a type of fruit that is rich in various nutrients and functional values both in flesh and skin. Dragon fruit skin has a fairly high portion, which is about 30-35% of the fruit weight, is generally only treated as waste. Dragon fruit skin is rich in phenolic compounds and antioxidants, of which the higher amount of antioxidants is in the skin. This compound is very easily damaged due to the extraction process especially if done incorrectly. Therefore, the extraction process must be done properly in order to retain the compounds. Based on the results of the review, it is found that the modern UAE extraction process provides better quality than the other various conventional and modern extraction processes. UAE is an extraction process that does not use a heating process in its extraction which can damage the phenolic compounds and antioxidants. The results of the analysis of phenolic compounds using the UAE system has found betacyanin 17.64 mg, phenolic compounds 65.16 mg, flavonoid compounds 195 mg and antioxidants 620 mol. Thus, the recommended treatment to do is to use UAE extraction.

Keywords: dragon fruit, phenolic compounds, antioxidants, extraction



CERTIFICATE

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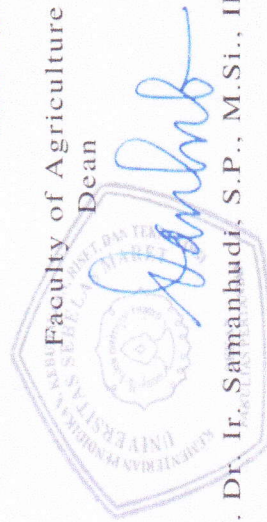
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