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Extraction and identification of anthocyanin of Java Prune (*Kopsia pruniformis*) fruit peels

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Java Prune (*Kopsia pruniformis*) is a tropical plant which has dark purple color on the fruit peel indicated high anthocyanin content that had potency as source of safe natural colorant. The aims of this research were to determine the total anthocyanin content of Java Prune (*Kopsia pruniformis*), to compare several solvents that could extract highest anthocyanin and to identify kind of its anthocyanin. The total anthocyanin content was determined by pH differential method whereas the identification of anthocyanidin was based on the R_f value, maximum absorbance of the spots and time retention on HPLC with anthocyanidin standard. The results showed that the total anthocyanin content of java prune fruit peels was 3602.13 ± 43.15 mg/100g (based on fresh weight), the best solvent for extraction of anthocyanin was 1% tartaric acid which could extract 56.02% anthocyanin (about 2017.89 ± 86.95 mg/100 gr). It was found 4 kinds of anthocyanins in java prune fruit peels: Cyanidin-3-glucoside, Petunidin-3-glucoside, Pelargonidin-5-glucoside and Pelargonidin-3-rhamnoside in which the major was Cyanidin-3-glucoside.

Biography

Lydia Ninan Lestario has completed her PhD in Food Science from Gadjah Mada University, Yogyakarta, Indonesia and Postdoctoral studies from University of Arkansas, USA. She is a Senior Lecturer at Chemistry Department, Faculty of Science and Mathematics, Satya Wacana Christian University, Salatiga, Central Java, Indonesia. Her research interest is in food processing and using anthocyanin as food colorant and functional food. She has published more than 25 papers in national accredited and non accredited journals. She has also written some articles in national newspapers and done some community services to spread her knowledge to people in rural area in Indonesia beside her teaching and research activities.

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