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## Phytochemicals and antioxidant capacities from *Dacryodes rostrata* fruits

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*Dacryodes rostrata* is an indigenous fruit found in Sarawak, Malaysia. The fruit is ovoid in shape, purple colour and rich in oil, protein and minerals and used as food by the local communities. In this work, antioxidant components and antioxidant capacities of the extracts of peel, pulp and seeds of *D. rostrata* were evaluated. Total phenolic (1007±24 mg/g GAE DW) and flavonoid contents (2550±37 mg/g QE DW) of the seed extracts were higher when compared to peel and the pulp extracts. In addition, 1, 1-diphenyl-2-picryl hydrazyl (DPPH) free radical scavenging activity of the seed extracts were higher (65%), compared to peel (52%) and pulp (19%). Ferric reducing antioxidant power (FRAP) values of the seeds (1.22 mM FeSo<sub>4</sub> equivalent) exhibited highest activity when, compared with peel (0.23 mM FeSo<sub>4</sub> equivalent) and pulp (0.10 mM FeSo<sub>4</sub> equivalent). Seed extract also showed highest total antioxidant capacity determined by phosphomolybdenum method. Liquid chromatography-mass spectra (LC-MS) of the seed extracts from *D. rostrata* revealed the presence of phytochemicals in the form of gallic acid, ellagic acid, epicatechin, kempferol and quercetin. Thus, *D. rostrata* seed extracts is having potent antioxidant capacity and could be used as a natural source of antioxidants.

### Biography

Prasad K N is a Senior Research Fellow at Chemical Engineering Discipline, School of Engineering, Monash University Malaysia. He obtained his PhD degree in Botany in India and worked as Post-Doctoral Researcher in China and in Malaysia. He has published over 50 international publications and 6 book chapters with h-index of 17. Currently, he has supervising Honours, Masters and PhD students. His research interest includes food chemistry, antioxidants, nutraceuticals, food processing and food composition.

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