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The carotenoids of Pouteria campechiana (sinhala: *ratalawulu*)

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The common yellow *lavalu* has been identified as *Pouteria campechiana* (Sinhala: *Ratalawulu*). Samples were collected from, Kadawata, Kurunegala, Makola, Maharagama, Nawala and Peradeniya (Gampaha, Colombo, Kurunagala and Kandy districts). The carotenoids were dominated by neoxanthin. Total carotenoid content was high and varied from 1.9 to 23.5 $mg.g^{-1}$ dry weight (DW). Individual carotenoid concentrations varied markedly from specimen to specimen. (□-carotene, from traces to 156, æ-carotene, trace amounts, □-cryptoxanthin, from traces to 1106, violaxanthin, from <188 to 1151, neoxanthin, from 1594 to 19,270, unidentified I, from traces to 627, unidentified II, from 68 to 1162, ìg.g^{-1}DW). Due to the presence of a carbohydrate gum the normal extraction procedure

for carotenoids had to be modified. Identification was done after separating by open column chromatography (OCC) by using visible spectral data, chemical tests, thin layer chromatography (Tlc) as well as high performance liquid chromatography (HPLC). Quantification was mainly carried out by HPLC using □-apo-8'-carotenal as the internal standard. Results showed two extremes of retinol equivalents (RE) in *Pouteria campechiana* (traces and 759 to 11,813 RE .100g^{-1} DW). These ranges as well as the varying shapes of fruit are indicators that the trees are extremely hybridized. However, its carotenoid profile and high colour intensity could give rise to antioxidant properties and also find use as a natural food colourant as it has an unusually high concentration of total carotenoids.

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