

## **Ascorbic Acid and Antioxidant Level of Ceylon Olive (*Elaeocarpus serratus*) as Affected by Variety, Stage of Maturity at Harvest and Different Methods of Preservation**

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There has been growing interest in the beneficial health effects of edible fruits as well as certain beverages. Their protective mechanisms against chronic-degenerative diseases are thought to be attributed to the presence of natural antioxidants, minerals and vitamins. In this study attempts were made to investigate the dynamics of changes in ascorbic acid, antioxidant activity, pH, titratable acidity and Total Soluble Solids (TSS) in two varieties of Ceylon Olive (*Elaeocarpus serratus*); *Pol weralu* and *Heen weralu* and to evaluate the quality of Ready to Serve (RTS) drinks prepared from both varieties. Ready to serve drinks made of olive have evaluated for sensory attributes. The level of ascorbic acid was measured using 2, 6-Dichlorophenol-Indopenol (DCPIP) method. Methanolic extracts of fruits and RTS drinks were analyzed by DPPH (1, 1-diphenyl-2-picrylhydrazyl) antioxidant assay. The highest content of ascorbic acid was detected in mature fruits of *Heen weralu* (66.15 mg per 100 g), while it was lowest (27.30 mg per 100 g) in *Pol weralu* at ripe. Ascorbic acid contents in RTS drinks *Pol weralu* and *Heen weralu* were 13.3 mg per 100 ml and 27.65 mg per 100 ml respectively as compared to 27.30 mg per 100 g and 43.40 mg per 100 g in ripe fruits. The highest value of TSS (17.05) and pH (4) was observed in full ripe *Heen weralu*. The IC<sub>50</sub> (inhibition concentration 50) which represent the antioxidant activity of the methanolic extracts of *Pol weralu* and *Heen weralu* were 6.68 and 5.54 mg/ml respectively. Result confirmed that among two varieties, *Heen weralu* was best in terms of antioxidant activity for both fruit and RTS drink. RTS drink (*Heen weralu*) was the best sample which showed the highest rank sum value for sensory attributes.

Key words: Ceylon Olive (*Elaeocarpus serratus*), Ascorbic acid, Antioxidant activity, IC<sub>50</sub> (inhibition concentration)