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QUANTIFICATION OF ASCORBIC ACID CONTENT IN *Ziziphus oenoplia* (L.) MILL. ("ERAMINIYA") SEEDS GROWN IN THE WET ZONE OF SRI LANKA

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Ziziphus oenoplia (L.) Mill., commonly known as"Eraminiya" in Sinhala, is a traditional medicinal plant found in the Wet Zone of Sri Lanka. This study quantified the ascorbic acid content in its seeds as part of broader research on the antioxidant properties of its fruit and seeds, highlighting their potential health benefits, such as enhancing immune function and reducing oxidative stress. A representative sample of 1 kg was collected, consisting of 150 g each of yellow-green and black fruits (four months post-flowering) from different districts in the Wet Zone. Seeds were separated from the fruits and the Indophenol dye method was used for quantification. Statistical analysis revealed a significant difference ($p < 0.05$) between ascorbic acid content in *Z. oenoplia* seeds (56.7 mg 100 g^{-1}) and the fruit (195 mg 100 g^{-1}). This value is lower than common fruits such as lemons (199.81 mg 100 g^{-1}) and oranges (141.34 mg 100 g^{-1}), possibly due to differences in antioxidant requirement between seeds and fruits, variations in biochemical compositions, and the specific plant part analysed. However, *Z. oenoplia* seeds have relatively higher ascorbic acid content than other seeds like pomegranate (12.5 mg 100 g^{-1}), orange (20 mg 100 g^{-1}), and watermelon (8.5 mg 100 g^{-1}) due to the plant's unique phytochemical composition and its adaptability to the Wet Zone climate in Sri Lanka. While the seeds are not typically consumed, their antioxidant properties suggest potential for use in dietary supplements. Further research could explore their application in the pharmaceutical industry.

Keywords: Antioxidants, Ascorbic acid, Indophenol method, Wet Zone, *Ziziphus oenoplia*