



EXPLORING THE VIABILITY OF MALUNGGAY (MORINGA OLEIFERA) LEAVES AS AN ORGANIC ELECTROLYTE FOR DUCK EGG INCUBATION

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ABSTRACT

Malunggay, scientifically known as Moringa Oleifera, is a Southeast Asian term for the Moringa tree, an ancient medicinal plant from the Moringaceae family. This fast-growing, drought-resistant tree is also capable of withstanding mild frost, which contributes to its widespread cultivation around the world particularly in the Philippines. In this study, the Moringa leaves played a vital role as an electrolyte to accelerate duck egg yield, growth, and survivability by the means of osmoregulation. With drying, filtration and incubation, the study was able to yield a viable solution for the duck eggs. The results show that the 50% concentration served the most vital effectiveness as the 80% concentration lacked efficiency due to a decline in the osmolarity of the egg. However, discrepancies are still evident as further testing is required to hatch the egg. A larger scale of development shall be fully utilized such as the nutritional value testing to determine the finest details of the effect of the Moringa leaves. All in all, the results pave a significant correlation to their significance.

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