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Mineral Contents of Indonesian Seaweeds and Mineral Solubility Affected by Basic Cooking

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This experiment was carried out to study the mineral contents and profiles of several Indonesian green, brown, and red seaweeds, and to evaluate the solubilities of Ca and Mg as affected by boiling in different solutions (water, 1% sodium chloride and 0.5% acetic acid). The macromineral profiles were dominated by Ca, K, Na and Mg. The trace minerals Cu, Fe and Zn were found at low concentrations. Boiling in water and 0.5% acetic acid significantly increased the solubilities of Ca and Mg ($p < 0.05$), whereas boiling in 1% sodium chloride resulted in varying solubilities of Ca and Mg. Mainly soluble Ca was found in both low (MW < 10,000) and high (MW > 200,000) molecular weight fractions, whereas soluble Mg was found in the high (MW > 200,000) molecular weight fraction.

Keywords: [Ca](#), [boiling](#), [Indonesia](#), [Mg](#), [mineral](#), [seaweed](#), [solubility](#), [ultrafiltration](#)



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