

**Exploring the Nutrient Potential of *Nymphaea alba* (Water lilly), For Use As Feed: A Case Study of Banka Dam in the Tolon District Of The Northern Region of Ghana**

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**Abstract**

The study aimed at finding the nutrient composition of *Nymphaea alba* in the Banka dam in the Tolon District of the Northern Region of Ghana as a case investigation to help control the growth of the aquatic plant as it hinders the livelihoods of people in fringing communities who use the dam for fishing and irrigation. The leaves, leaf stalks and flowers of *Nymphaea alba* were sampled two different times thus in October and December 2013 to determine the crude protein, fibre, the nitrogen free extract, ether extract, total ash and some minerals. The study revealed that, the leaf stalks of the plant has more ash than there is in the leaves and flowers, with the leaves richer in protein. Fibre concentration was highest in leaves with low levels of ether extracts in the entire plant. *Nymphaea alba* is rich in nitrogen free extract in all of its parts, thus the leaf stalks, leaves and flowers. Potassium and sodium were the dominant minerals with calcium, zinc, iron and copper equally present in *Nymphaea alba* in all of its parts investigated. The respective levels of crude protein, fibre, nitrogen free extract, lipids, ash and minerals are adequate for use as feed for animals including fish. However, utilization of the *Nymphaea alba* would depend on the palatability and digestibility of the aquatic plant. Therefore, further studies on the palatability and digestibility of *Nymphaea alba* is necessary to ascertain its potential for use in the preparation of feed. It is believed that if great use can be made of this plant and others occurring in the dam, the livelihoods can be restored as currently these are hampered by the presence of the weeds especially the plant under investigation.

**Keywords: *Nymphaea alba*, fibre, protein, ether extract. nitrogen free extract, mineral**