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Micro-algae as an Important Component in the Nutrition of Aquatic Fauna and Human Beans: Case of Burkina Faso/west Africa

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Abstract

Malnutrition constitutes a public health problem throughout the world and particularly in developing countries. In Burkina Faso, alimentary resources for population in quality are rare. Many people especially young ones do not dispose of a better alimentation in the country. Aquatic resources that are micro-algae, fishes and frogs are sometimes used as supplementary nutrition by population and scientists to resolve this problem.

Micro-algae have toward many of some of its species an important role in the nutrition of aquatic fauna and human beans. This situation is due to their richness in important nutrients and vitamins. In aquatic ecosystems community of micro-algae is composed by autotrophic organisms and constitutes the first link of the nutrition chain.

Then this component is used by many aquatic fauna as invertebrates (e.g. zooplankton) and vertebrates (tadpoles of some species of amphibians, fishes). In ecosystems inhabited by fishes or tadpoles, micro-algae and zooplankton constitute important nutritional resources of them. In Burkina Faso, fishes are included in the meals of the populations in the whole country and frogs are also eaten and appreciated by populations in some parts of the country in particular in the central and the eastern. However, overexploitation due to the increase in population can be a reason of their worldwide decline.

Moreover, *Spirulina platensis*, filamentous algae among Cyanophytes group is especially produced in many localities of the country (Loumbila, Koudougou, Ouagadougou, Ouahigouya, ...) for the nutrition of the population and the rehabilitation of undernourished children and sick persons. Indeed, some studies have been conducted on the nutrition rehabilitation of undernourished children and HIV-infected utilising *Spirulina*.

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