

THE USE OF DIATOMS FOR MONITORING RIVER WATER QUALITY IN THE ZAMBEZI AND CONGO SISTER BASINS

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Diatoms are well known and often used indicators of water quality in Europe and other regions of the world. Recently diatom indices have been applied with some success in temperate southern Africa despite regional endemism within some communities. Rural communities in Zambia and the DRC are often almost entirely dependent on the local rivers and streams. These water resources are a source of drinking water, irrigation water for crops, nutrients during flooding and provide fish an essential source of protein for these communities. For this reason it is vital that water quality be maintained and in order to facilitate the necessary good management practices monitoring is needed. Diatoms provide an ideal and cost effective method for monitoring water quality, however, special challenges arise when monitoring the quality of subtropical rivers and streams. The Congo River and in particular the Zambezi River (and drainage basin) is particularly poorly investigated and little is known of the taxa which occur there. In addition there are comparatively few algologists and diatomists in Africa who could establish and maintain such a monitoring program. This poster will present some of the initial findings regarding species diversity from the Zambezi and Congo sister basins as well as discussing possible teaching tools and methods to establish local capacity in using diatom-based water quality monitoring techniques.