

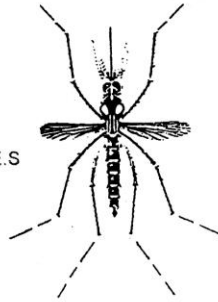
**MOSQUITO RESEARCH PROGRAMME**

**HEAD:-**

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November 21 .2008.

Hon. Maria Mutagamba  
Minister of water and environment  
P.O. Box 20026  
Kampala- Uganda

**RE: Photo –Biological Control of Mosquito Larvae**

This is in response to your request in your letter ADM/154/02 dated 20<sup>th</sup> November 2008. We have applied Photo –Biological control extract on the malaria vector Anopheles species mosquito larvae in small pools of water at Nakiwogo on the shores of Lake Victoria in Entebbe . This extract was introduced to us by Innovative Research and Development (Egypt) INRAD. The material is a natural plant extract, extracted from different plants anywhere and modified in the laboratory. Our finding from pilot field and laboratory trial are as follows:

- All Anopheles mosquito larvae in treated ponds died after exposure to sun light.
- In untreated ponds we found no larval mortality.
- Leeches, dragon flies larvae, predatory mosquito larvae and tadpoles were not killed by the extract in the treated ponds .
- Laboratory tests confirmed the above findings.

Commercial larvicides on the market:

Other commercial larvicides on the market such as Bti are not selective ; they kill non target organisms in the water such as mosquito larvae species which predate on mosquitoes which would be useful in biological control or in natural regulation of population size mosquitoes . The luwoko (Phytolacca ) is still being studied. It's extremely toxic almost to everything and because of this it cannot be recommended for mosquito control in its present form. Still more work needs to be done on it

Conclusion:

In conclusion, I find the Egyptian extract extremely efficient in killing mosquito larvae which can ingest particles of this extract and its strict selectivity for the target organisms (the mosquito larvae) makes it extremely environmentally friendly. However, more intensive field trials should be carried out on one of the islands in the Lake Victoria to assess its impact on Malaria prevalence. It looks like a very good product for communities to use in outdoor malaria control along with the indoor bed nets and residual insecticides control methods. Such an integrated approach is bound to reduce malaria cases significantly.

Your Sincerely,



Louis G. Mukwaya. Ph.D.

Assistant Director (Research)

**CC: Hon. Minister of state for environment**

**CC: Permanent Secretary Ministry of water and Environment**

**CC: Dr. Aryamanya Executive Director national Environments Management Authority**

**CC: Dr. Walid Ali (INRaD)**

**CC: Dr. Nambatya Grace (NCRL)**

**CC: Director General (MOH)**