

'CONFIDENTIAL'



**NATIONAL BIOSAFETY AUTHORITY
(NBA)**

NBA BOARD PAPER

NBA BOARD/OM/2017/3/1

Application by Marcha-Research

This application has been long overdue as the application was reviewed in 2016. All the necessary missing documents and the Institutional Biosafety Committee were submitted. The applicant is proposing to use semi-field enclosures (“Mosquito Houses”) to gain a more realistic assessment of the effectiveness of *Serratia* to spread into mosquito populations using different mechanisms such as baiting methods. These will be tested to infect mosquitoes with the bacteria and mosquito populations will be started with various ratios of infection-to-non-infected mosquitoes to investigate the minimum introductory ratio for final spread to the entire population. Marcha is proposing to use a bacterium *Serratia* sp. That shall be modified by tagging it with a fluorescent protein gene to determine the ability to introduce such bacteria into mosquito populations in nature. The fluorescent protein gene emits different colour fluorescence when viewed with ultraviolet light. This application was reviewed by SAC and recommended for approval by the Board. The details of the summary risk assessments are attached herewith.

ACTION REQUIRED

The NBA is hereby requested to **Consider** the recommendation to **approve** the grant of permit for the research on the prospects for fighting malaria with engineered symbiotic bacteria from vector mosquitoes by Macha Research Trust.

Decision

Permit granted

