

## Citronella Oil Treated Car Mosquito Net: An Intervention for Mosquito Prevention

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### ABSTRACT

Mosquito borne infectious disease is a common public health problem in tropical countries. To prevent for mosquito bite is an important preventive measure. There are many tools for prevention for mosquito bite. Here, the authors present on a new intervention for prevention for mosquito bite, citronella oil treated car mosquito net.

**Key words:** mosquito net, car, citronella oil

### INTRODUCTION

Mosquito borne infectious disease is a common public health problem in tropical countries. To prevent for mosquito bite is an important preventive measure. There are many tools for prevention for mosquito bite. Personal protective measures against mosquito are important ones [1]. Here, the authors present on a new intervention for prevention for mosquito bite, citronella oil treated car mosquito net.

### INTERVENTION

#### Concept

The intervention is citronella oil treated car mosquito net. The concept for development is the environmental friendly, without hazardous chemical, net that can prevent mosquito bite for one who is in the car.

#### Materials

The materials for development of intervention is citronella oil treated car mosquito net include polyester net, spindle, sewing needle for composing of the net and citronella, water, boiler for composing of citronella oil.

#### Developmental Process

First, the standard sewing process is done in order to form a mosquito net. The size and shape of the net is according to the measured size and shape of window of the car, which is adjustable to different kinds of car. For preparation of citronella oil, the standard hear water extraction process is used. After derive

the mosquito net and citronella oil, the incubation process via oven system is performed in order to get the final Citronella oil treated car mosquito net.

#### Using

The Citronella oil treated car mosquito net is usable by direct applying to cover the window of the car.

### DISCUSSION

Primary prevention for mosquito borne infectious disease is necessary in public health. The simplest concept is to prevent for mosquito bite. This process is difficult. Basically, one should avoid travel or live in the area with mosquito. However, if it is not possible, the preventive tool should be applied. The mosquito net is a simple instrument for prevention of mosquito bite that has been used in tropical countries for centuries. The bed net has been modified in several ways. The chemical treated bed net is interesting. The good example is permethrin treated bed net which is proven effective in mosquito prevention. Nevertheless, there is a great concern is possible health adverse effect due to permethrin exposure and induction of insecticide resistance [2 - 3]. In the present report, the authors use an alternative natural derived substance from citronella. Indeed, citronella is a well - known plant that has been used by local people in tropical countries for insect prevention [4 - 6].

Due to the new coming of new things, including to car, the intervention of applied mosquito net

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that can be presently applicable is necessary. In the present intervention report, the authors successfully develop citronella oil treated car mosquito net. The bed net is applicable to the car window. It can help prevent car driver and others one in car from mosquito bite. It is useful in case that one plans to drive and park the car for sleeping in the area with many mosquitoes. The citronella oil is a natural product derived from an eatable vegetable. It is considered safer than permethrin.

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