PROPHYLACTIC ACTIVITY OF Diodia scandens CRUDE EXTRACTS ON SWISS ALBINO RATS

OLOWOKERE, VICTORIA BUKOLA

MCB/11/0344

A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF MICROBIOLOGY, FACULTY OF SCIENCE IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF SCIENCE (B.Sc.) IN MICROBIOLOGY.

DR S.K.S OJO

SUPERVISOR

ABSTRACT

The aim of this study was to evaluate the prophylactic activity of *Diodia scandens* on Swiss albino rats challenged with *Staphylococcus epidermidis*. Twenty (20) Swiss albino rats of both sexes weighing (120-200) were housed in polycarbonated cages at ambient environmental condition of 23±20C, 30-60% relative humidity. They were defasted for 4hour prior to treatment. Different concentrations of different extracts (50mg/kg and 100mg/kg) of *Diodia scandens* were given according to the weight of rats and were challenged with 0.5ml of 1×108 cfu/ml of *Staphylococcus epidermidis* in Mueller Hinton broth using 0.5 Mcfarland standards at the 4th day of the pre-treatment. The result showed aggressiveness, no fever or inflammation during the pre-treatment. After the organism challenge test it was observed that with some level of protection were offered by extract of *Diodia scandens* on the rats. The protection offered by *Diodia scandens* after organism challenged test has shown that the plant is potent, effective and had boosted the immunity of the rats against *Staphylococcus epidermidis*. It was concluded that 50mg/kg and 100mg/kg of *Diodia scandens* was effective during pre-treatment and was not toxic on the rats.