## HEPATOPATHOLOGICAL EFFECTS OF BACTERIAL BLIGHT RESISTANT RICE (BB RICE) TO

Rattus norvegicus (ALBINO RAT)

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## **ABSTRACT**

The study investigated the effects of bacterial blight resistant rice (IR-68) to the liver of albino rat (Rattus norvegicus) by determination of the gross morphological characteristics and hepatopathological effect by the appearance of hepatocytes, blood vessels, and hepatic sinusoids. Negative control (T0) is supplemented with normal rice whereas, the other treatments were supplemented with BB rice on varying concentration; T1= 25% BB rice and 75% normal rice; T2= 50% normal rice and 50% BB rice; T3= 75% BB rice and 25% normal rice. One liver out of six from T2 and two out of six from T3 showed change in color from bright red to dark red. Histopathological findings showed severe lesions mostly on T3. Seventy percent of the hepatocytes of T0 and 60% of hepatocytes from T1 showed signs of swelling but still retained cellular boundaries. Forty percent of the hepatocytes from T2 showed loss of their cellular outline and 20% in T3 of the slides loss their cellular outline. Pyknosis was also noted in T1 and T3 but the most prominent was found in T3. This only indicates that the cells from T3 are prone to necrosis already. Twenty to forty percent of the hepatic sinusoids in all of the treatments indicate moderate to severe congestion. This only indicates that all of the subjects have lesions which is a sign of irritation of the liver.



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