Combination Effect of Echinacea purpurea and Andrographis paniculata as Hepatoprotector in White Rat Exposed by Heat Stress

Abstrak :

ABSTRACT

Antioxidants contain of Andrographis paniculata and Echinacea purpurea have been proven to be beneficial to health. The purpose of this study was to determine whether the combination of the two plant extracts contains capable act as hepatoprotector against on heat stressed-rat. Thirty female rat with 2-3 month of ages used as animal model were divided into five groups; K- (negative control), P0, P1, P2, P3. They were given by a suspension containing the combination between Andrographis paniculata and Echinacea purpurea in several doses during 28 days before made to suffer from heat stress for 8 days as long as 30 minutes/day. Treatments consist of negative control which was not given by both treatments, P0 (0capsule/200gramBW/day), P1 (0,0252capsule/200gramBW/day), P2 (0,0504capsule/200gramBW/day), P3 (0,0756capsule/200gramBW/day) as long as 28 days advanced by heat stress treatment. The results of this study indicated that the combination of Andrographis paniculata extract and Echinacea purpurea is able to function as hepatoprotector by maintaining levels of SGOT and SGPT within normal limits. The effective dose are shown in group P1 and P2, with average SGOT and SGPT levels as low as K- obtained from the treatment, with average levels of SGOT of 46,83U/l -49,83U/l and SGPT of 24,67U/l-26,17U/l.

Keyword :
Andrographis paniculata, Echinacea purpurea, heat stress, SGOT, SGPT

Daftar Pustaka :
Syahrizal, D. Pengaruh Proteksi Vitamin C terhadap Enzim Transaminase dan Gambaran Histopatologis Hati Mencit yang Dipapar Plumbum . Universitas Sumatera Utara 2008 Medan
Ivanova, E Mechanism of the Extracellular Antioxidant Defend. Exp Pathol and Parasitol. 4: 49-59. 2010 India