ABSTRACT

ALTERATION PROTEIN PROFILE of HUMAN SPERMATOZOA TREATMENT BY 70% ETHANOL EXTRACT of Justicia gendarussa Burm.f.

Justicia gendarussa Burm.f. as a new contraception for male must fulfill the requirement as an ideal contraception, one of it is non mutagenic. The purpose of this study is to observe and identify whether any changes occur in the protein spermatozoa profile on human, after treatment of extract ethanol 70% with two doses of Justicia gendarussa Burm.f. The two doses consist of: doze 1 (450.5 mg/700 mg capsule), doze 2 (300.0 mg/700 mg capsule) and placebo for 144 days (2 cycle of spermatogenesis) using SDS PAGE (Sodium Dodecyl Sulfate Poly Acrylamide Gel Electrophoresis) technique.

Twenty two subject randomize in a single blind, placebo controlled clinical trial to receive either 70% ethanol extract of Justicia gendarussa Burm.f. in capsule (each capsule contain 450.5 mg Justicia gendarussa 70% ethanol extract or 300.0 mg Justicia gendarussa 70% ethanol extract that contain 0.3593 % b/b of gendarusin A) or placebo once a day for 144 days. The result showed that samples after confirmed with electroforesis, in dose I (450.5 mg mg Justicia gendarussa 70% ethanol extract) and dose II (300.0 mg Justicia gendarussa 70% ethanol extract) profile protein was changed on 41.5 kDa and 38.0 kDa. In placebo, profile protein doesn’t change.

Key word: PCR, DNA, Hyaluronidase spermatozoa, Justicia gendarussa Burm.f.