ABSTRACT

In this work, determination of phorbolesters in some parts that were stems, leaves and latex in *Jatropha curcas* grown in Chiang Rai, Thailand; Pak Chong 42 and Korat varieties, was performed by using reverse-phase high performance liquid chromatography (RP-HPLC). The conditions for the separation of phorbolesters by RP-HPLC were optimized. Acetonitrile (100 %) was used as the mobile phase. The column temperature at 30 °C was controlled. The absorbance of phorbolester was detected at 232 nm. The flow rate of mobile phase was 1.0 ml/min. The standard phorbolester peak appeared at the retention time of ~11 min. Method validation showed that the relative standard deviations (RSD) were in the rage of 0.38 to 3.57 %. The accuracy was tested by determination of recovery. Recoveries for phorbolester determination were found to be ranging from 32.23 to 107.99 %. The concentration of phorbolesters in the stem extracts from Pak Chong 32 and Korat samples were 21.75 and 24.63 ppm, respectively, whereas the phorbolesters concentrations in the leaf extracts were 26.81 and 31.10 ppm, respectively.