ABSTRACT

*Campylopus umbellatus* (S. G.) Par. is one type of leaf moss plants are commonly found in Indonesia. Until now, information on the use of moss plants has not been reported yet. So it is necessary to conduct a research to identify the class of secondary metabolite composition in *C. umbellatus* extracts through the Thin Layer Chromatography (TLC) profile. The aims of this research were to find out the profile of Thin Layer Chromatography and group of secondary metabolites composition in *C. umbellatus* extracts. Extraction of *C. umbellatus* using the maceration method with Chloroform and ethanol 70%. Separation of secondary metabolites by Thin Layer Chromatography method with silica gel stationary phase GF254 and the mobile phase of chloroform: ethyl acetate (9: 1 v / v), ethanol: n-hexane (9: 1 v / v) and ethyl acetate (100%). Detection of secondary metabolite composition using Serium (IV) sulfate reagent, Dragendorff reagent, Lieberman Burchad reagent, FeCl3 reagent and vapor ammonia. Thin Layer Chromatography profile data and known types of chemical composition from spot sightings on TLC with specific reagents of certain compounds were analyzed descriptively. The results showed that *C. umbellatus* extract contain more nonpolar secondary metabolite compounds (alkaloids, steroids, terpenoids) with varying Rf values compared to polar ones (phenolic and flavonoid. From results, *C. umbellatus* extract contains alkaloid, steroids, terpenoids, flavonoids and phenolic compounds.

Keywords: *Campylopus umbellatus*, Thin Layer Chromatography (TLC), TLC Profiles, Phytochemical Screening