



INISIASI, OPTIMASI MEDIA DAN PERBANDINGAN PROFIL KROMATOGRAM SENYAWA GOLONGAN TERPENOID, ALKALOID, FLAVONOID KULTUR TUNAS DAN TANAMAN ARAL *Gynura* *Pseudochina* (Lour.) DC

Tjie Kok, Anna R., Poppy H., Artadana, Michael W.T, Aida N

Fakultas Teknobiologi, Departemen MIPA, Universitas Surabaya 60292

Email: tjie_kok@yahoo.com

ABSTRACT

Gynura pseudochina (Lour.) DC. is among medicinal plants predicted to have anticancer activity, therefore the plant is beneficial to be propagated in the form of tissue cultures. In this research, the inisiation of the culture was performed using Murashige Skoog + kinetin 4 ppm media and the best media for subculturing of the shoot was Murashige Skoog + Benzyl Adenin 3 ppm. In addition, from the research conducted, it was found that the shoot cultures of this plant aged one week prior to stationary phase has produced compounds of terpenoid, alkaloid and flavonoid groups. The terpenoid chromatogram profile of shoot cultures was similar to that of parent plant. It could be seen from the thin layer chromatogram of the extract, giving the same colour after being sprayed with anisaldehyde-sulfuric acid reagent. The shoot cultures of *Gynura pseudochina* (Lour.) DC. produced alkaloid compounds, developing orange color when the chromatogram of the extract was treated with Dragendorff, whereas the parent plant had not formed such compounds yet. The chromatogram profile of flavonoid compounds of shoot cultures and parent plant were also similar.

Key words: *Shoot cultures, Gynura pseudochina* (Lour.) DC., *thin layer chromatogram.*

PENDAHULUAN

Tanaman daun dewa [*Gynura pseudochina* (Lour) DC.] tergolong kedalam tanaman herba yang merupakan salah satu tanaman yang terdapat di Indonesia dan potensial sebagai sumber bahan bioaktif yang digunakan untuk pengobatan tradisional dalam bentuk jamu (Hembing, 1994). Manfaat yang penting pada saat ini adalah sebagai obat antikanker, obat penyakit kulit, dan penurun kadar gula dalam darah (Winarno dan Tim, 2004). Kandungan kimia yang sudah diketahui, antara lain : flavonoid, alkaloid, triterpen, saponin dan sterol. Berbagai senyawa kimia yang memiliki efek farmakologis ini merupakan metabolit sekunder yang