Abstract

"Jawi" variety of garlic from central Java and local variety of shallot from Nusa Tenggara were freeze-dried or oven-dried at different temperatures and time periods. Dried products were analyzed for their antiplatelet aggregation activities, water contents, volatile reducing substances contents, gas chromatographic (GC) profiles and yields. Drying treatments reduced the antiplatelet aggregation activities. Methanol extracts of freeze-dried garlic and shallot had antiplatelet aggregation activity (D50) of 0.08 dan 0.30 mg/ml, respectively. The oven dried products obtained under optimal conditions (70°C, 10 hrs) had antiplatelet aggregation activities of 0.31 and 0.70 mg/mg, respectively. Elevated temperatures and extended drying periods decreased the activities of products. Freeze dried products had a lighter color than the oven dried ones and had a similar aroma and GC profiles to the fresh ones. The contents of volatile reducing substances (VRS) in the products positively correlated with their antiplatelet aggregation activities.