ABSTRAK

Tumbuhan jahe (*Zingiber officinale* Roscoe) merupakan salah satu tumbuhan yang digunakan sebagai ramuan rempah – rempah. Dalam penelitian ini menggunakan dua macam tumbuhan jahe yaitu: jahe dan jahe merah. Tujuan peneletian ini untuk mengetahui karakteristik fisik amilum dan metabolit sekunder pada jahe dan jahe merah. Metode yang digunakan, identifikasi karbohidrat (uji molish, uji benedict, uji iodium), karakteristik amilum, dan skrining fitokimia. Amilum jahe dan jahe merah memiliki kandungan karboihidrat berdasarkan pengujian. Hasil karakteristik amilum, (organoleptik) amilum jahe, memiliki bau khas amomatik, rasa sedikit pedas, bentuk serbuk halus, warna putih, pada amilum jahe merah bentuk serbuk halus, warna putih, agak kusam, rasa sedikit pedas, bau khas aromatik. Hasil mikroskop amilum jahe terdapat hilus, lamela, terbentuk gambar amilum, amilum jahe merah terdapat lamela dan terbentuk gambar amilum. pada adar air amilum jahe (5,01% ± 1,02) amilum jahe merah (6,02% ± 1,04). Hasil uji kompresibilitas amilum jahe (21,6264% ± 0,9392) dan amilum jahe merah (27,2773% ± 0,4349). Hasil uji pH amilum jahe (5,09% ± 0,04) dan amilum jahe merah (5,12% ± 0,01). Hasil uji sifat alir pada amilum jahe (1,0106g/detik ± 0,0306), amilum jahe merah (1,0204g/detik ± 0,0104). Hasil uji kelarutan amilum jahe dan jahe merah sukar larut air, larut dalam etanol 95%. Hasil uji susut pengeringan yaitu amilum jahe (9,43% ± 0,06), amilum jahe merah (9,39% ± 010). Hasil skrining fitokimia menunjukan pada amilum jahe dan amilum jahe merah dinyatakan tidak memiliki kandungan metabolit sekunder.

Kata kunci ; Jahe dan jahe merah, karakteristik fisik, metabolit sekunder.

ABSTRACT

The ginger plant (Zingiber officinale Roscoe) is a plant that is used as a spice herb. In this study, two types of ginger were used, namely: ginger and red ginger. The purpose of this study was to determine the physical characteristics of starch and secondary metabolites in ginger and red ginger. The method used was carbohydrate identification (Molish test, Benedict test, iodine test), starch characteristics, and phytochemical screening. Starch ginger and red ginger contain carbohydrates based on the test. The characteristic results of starch, (organoleptic) starch ginger, have a distinctive amomatic odor, slightly spicy taste, fine powder form, white color, fine powdered red starch, white color, slightly dull, slightly spicy taste, characteristic aromatic smell. The microscope results of starch ginger contained hilar, lamellae, an image of starch was formed, red ginger starch contained lamella and an image of starch was formed. in the water of ginger starch (5.01% ± 1.02) red ginger starch (6.02% ± 1.04). Compressibility test results for ginger starch (21.6264% ± 0.9392) and red ginger starch (27.2773% ± 0.4349). The results of the pH test of ginger starch (5.09% ± 0.04) and red ginger starch (5.12% ± 0.01). The results of the flow properties test on ginger starch (1.0106g / sec ± 0.0306), red ginger starch (1.0204g / sec ± 0.0104). The results of the solubility test of ginger and red ginger starch were difficult to dissolve in water, dissolved in 95% ethanol. The results of the drying shrinkage test were starch ginger (9.43% ± 0.06), red ginger starch (9.39% ± 010). The results of phytochemical screening showed that ginger starch and red ginger starch did not contain secondary metabolites.

Keywords ; Ginger and red ginger, physical characteristics, secondary metabolites.


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