

**IDENTIFIKASI SENYAWA NON-VOLATIL BUAH KEPEL  
(*Stelechocarpus burahol*) DAN PERUBAHANNYA SELAMA  
PENYIMPANAN SUHU RUANG**

**INTISARI**

**Oleh:**

**RADEN RORO ARDINTA FAJRINI SETIANINGRUM**  
**12/329514/TP/10303**

Buah kepel merupakan buah identitas Daerah Istimewa Yogyakarta yang termasuk ke dalam daftar tanaman langka. Buah kepel memiliki rasa yang manis, sedikit asam, dan sepat. Penelitian ini bertujuan untuk mengetahui senyawa non-volatil yang terdapat pada buah kepel dan perubahannya selama penyimpanan suhu ruang. Buah kepel disimpan selama 0,2,4,6 hari pada suhu ruang dan diukur konsentrasi gula, asam organik, dan total tanin. Gula dan asam diukur menggunakan *High Performance Liquid Chromatography* (HPLC), sementara tanin diukur menggunakan spektrofotometer UV-Vis. Hasil identifikasi gula pada buah kepel yaitu sukrosa, stakiosa, glukosa, arabinosa, dan galaktosa dengan sukrosa sebagai gula dominan mencapai 247,43 mg/g dengan nilai TAV sebesar 57,83 pada penyimpanan hari ke-4. Asam organik terdiri dari asam suksinat, sitrat, laktat, formiat, asetat, butirrat dengan asam suksinat sebagai asam organik dominan mencapai 37,1 mg/g dengan nilai TAV sebesar 349,06 pada hari ke-6. Konsentrasi tanin buah kepel matang sebesar 3,7321 mg/g. Konsentrasi gula dan asam cenderung meningkat selama penyimpanan, sedangkan tanin cenderung mengalami penurunan.

**Kata kunci: Kepel, gula, asam organik, tanin, penyimpanan.**

**IDENTIFICATION OF NON-VOLATILE COMPOUNDS IN KEPEL  
FRUIT (*Stelechocarpus burahol*) AND THEIR CHANGES DURING ROOM  
TEMPERATURE STORAGE**

**ABSTRACT**

**By:**

**RADEN RORO ARDINTA FAJRINI SETIANINGRUM**

**12/329514/TP/10303**

Kepel is known as the identity of Yogyakarta Special Region's fruit which included on the list of extinct plants. Kepel has a combination taste of sweetness, sourness, and astringency. The objective of this research is to know the non-volatile compounds of kepel fruit and their changes during the room temperature storage. Kepel was stored at room temperature for 0,2,4,6 days. Sugar and organic acid content were analysed by high performance liquid chromatography (HPLC) while tannin was measured by UV-Vis spectrophotometer. Sucrose, stachyose, glucose, arabinose, and galactose were identified as sugar on Kepel. Sucrose was the dominant sugar which had concentration of 247,43 mg/g and taste active value (TAV) of 57,83 on the fourth day of storage. The organic acids of Kepel were succinic acid, citric acid, lactic acid, formic acid, acetic acid, and butyric acid. Succinic acid was the dominant organic acid which had concentration of 37,1 mg/g and TAV of 349,06 on the sixth day of storage. Tannin had concentration of 3,7321 mg/g on ripe kepel fruit. Concentration of sugar and organic acid were tend to increase, while tannin was tend to decrease during storage.

**Keywords: Kepel, sugar, organic acid, tannin, storage.**